



NMDC LIMITED

(A Government of India Enterprise)
Khanij Bhavan, Castle Hills,
Masab Tank, Hyderabad- 500028, INDIA.

TENDER DOCUMENT

FOR

Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years

VOLUME – I

(TECHNO-COMMERCIAL)

Tender Enquiry No: HO (Contracts)/ Rooftop Solar/Kirandul/2021/214 dated 14/10/2021



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PRESS NOTIFICATION

NMDC LIMITED
(A Government of India Enterprise)
'Khanij Bhavan', 10-3-311/A, Castle Hills, Masab Tank, Hyderabad -500 028
Corporate Identity Number (CIN) - L13100TG1958GOI001674

E-Tender Notice (Open Tender Enquiry for Domestic Bidding)

CONTRACTS DEPARTMENT/ENGINEERING & PROJECTS DIVISION

Tender Enquiry No: HO (Contracts)/ Roof Top Solar/Kirandul/2021/214 Dated 14/10/2021.

[MSTC Ref. No.: NMDC/HO/61/21-22/ET/278]

NMDC invites bids in e-tender mode on MSTC website (NMDC's e-tender service provider): <http://www.mstcecommerce.com> for the work of **“Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years”**

For viewing / downloading the schedule of e-bidding and the detailed NIT along with pre-qualification requirements and tender document, prospective bidders may visit MSTC web site link: <http://www.mstcecommerce.com/eprochome/nmdc/> and register on-line as 'New Vendor'. For further help, the 'Vendor Guide' given therein may be referred. Link to MSTC e-tender platform is also available through NMDC website www.nmdc.co.in. The tender documents can also be accessed from NMDC website: www.nmdc.co.in and CPP Portal <http://eprocure.gov.in>

Any corrigendum to the tender will be uploaded only in above mentioned websites. Prospective bidders should visit these websites from time to time to take note of corrigendum, if any.

For further clarification, GM(Contracts), NMDC Ltd., Hyderabad can be contacted on fax: **040 23534746**, Tel: **040- 2353 2800**, email: contracts@nmdc.co.in

General Manager (Contracts)

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Notice Inviting Tender (NIT)

1. NMDC Limited is a public sector company under the Ministry of Steel, Government of India. Primarily engaged in the business of exploring minerals and developing mines to produce raw materials for the industry, it is also expanding its activities towards steel making and other value added products. It has been conferred "**Navratna**" status by Government of India.
2. NMDC Limited, Hyderabad hereinafter referred to as "**Employer**", invites **online** bids (also called as tender) in **two bid system** from eligible domestic bidders for carrying out the work of "*Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years.*
3. Interested Bidders also called as Tenderers may obtain further information from the office of NMDC Limited at the following address;

General Manager (Contracts),
NMDC Ltd,
Contracts Department,
4th Floor, 10-3-311/A,
Khanij Bhavan, Castle Hills,
Masab Tank, Hyderabad – 500 028
Ph: +91 – 40 2359 2800
Fax: +91 – 40 2353 4746
E. Mails: contracts@nmdc.co.in

4. The complete set of Bid documents can be viewed and downloaded from the following website links from 14/10/2021 to 15/11/2021.

NMDC Limited:

<https://www.nmdc.co.in/nmdctender/default.aspx>

Central Public Procurement Portal:

<https://www.eprocure.gov.in/epublish/app>

MSTC Limited:

https://www.mstcecommerce.com/eprochome/nmdc/buyer_login.jsp

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Bid documents and/or corrigendum downloaded from NMDC website /Central Public procurement portal/ MSTC website shall only be considered as authentic. Bid documents downloaded from any other source / website is/are liable for rejection.

- 4.1 The Bidder shall download the “Bidding Document” available in the website in totality.
- 4.2 It shall be the responsibility of the prospective bidders to ensure that the Bids have been submitted in the formats and as per the terms and conditions prescribed in the bidding document and website and no change is made therein. The documents placed in website along with this detailed Notice Inviting Tender (NIT) forms the complete bidding document. All the documents along with detailed NIT as placed in the website are final including clarification, drawings, corrigendum, addendum, pre-bid meetings, if any. On verification, at any time, whether the Bidder is successful or not, if any of the documents submitted by the Bidder including the documents downloaded from Employer’s above mentioned websites / issued are found tampered/ altered / incomplete, they are liable for rejection, cancellation & termination of the Contract, debarring, banning etc. as per the rules of the Company. In case of any discrepancies between tender documents downloaded from the website and the master copy available in our server, the master copy shall be considered authentic and shall be binding on the Bidder. No claim on this account from the Bidders will be entertained.

5.0 Manner of Preparation of Bids:

Bids shall be prepared in two parts i.e. Part -1 & Part – 2 (Refer Clause no.8.0 of ITT)

6.0 Manner of submission of Bids shall be as follows;

Part – 1 and Part – 2 of the bids shall be submitted online through MSTC website. Bidder has to upload the documents in MSTC portal. Before uploading the documents, the bidder is requested to arrange the soft copies of all the documents as per the documents list given in clause No. 8 of ITT. It may please be noted that there is a data limit for upload. Each upload document size shall not be more than 5MB. The documents more than 5MB are not accepted by the system. Bidders are requested to check beforehand that all their files size are complying to above data size. Further, bidders are requested to upload only relevant documents as sought in the tender and

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avoid uploading unnecessary documents.

For submitting online bid, the prospective bidder is requested to visit the following M/s MSTC Limited website link;

https://www.mstcecommerce.com/eprochome/nmdc/buyer_login.jsp

Before proceeding to submit online bid, bidders are requested to go through 'Vendor Guide' given in the above link. Bidders are to get themselves get registered and obtain Digital signature as mentioned in the Vendor Guide. The details given in the MSTC Vendor Guide are binding and are considered as part of Tender document. After filling the preliminary information, the bidder shall proceed to submit the bid in two parts as follows;

After uploading the documents related to Part-1 offer, the bidder shall proceed to upload the documents related to Part – 2 of offer. **The documents shall be uploaded well before the closing time of submission of offer.** With respect to Part-1 of offer, the bidder is requested to Note the following;

Important Note:

The bidder shall submit the scanned copies of Part-1 documents online in MSTC portal.

After submission of all documents of Part-1 offer online, the bidder shall proceed to submit the Part-2 (Price Bid) as follows –

Price Bid to be submitted as follows in the MSTC website;

1. From the MSTC website, Click on the relevant event no. and click 'Download Price' and download the Price Schedule (Excel Document)
2. Bidder needs to fill up price in the Excel sheet(s) offline and save the file without renaming the file name. Please note System will not accept the renamed file.
3. Click on 'Upload Price' Button to upload the filled up excel file for submitting the price bid.

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4. Click on 'Final Submission' to submit the tender.

Price bid will be opened electronically of only those bidder(s) whose Part 1 offers are found to be acceptable to NMDC Ltd. Such bidder(s) will be intimated the date of opening of Part-2 (Price Bid), through valid email confirmed by them.

The evaluation will be based on tender stipulations. If the bidder does not accept the correction of errors, their bid will be rejected.

Note:

- The Bidders are advised to offer their most competitive prices while submitting the price bid.
- **Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable.**
- **If the Price schedule file is found to be modified by the bidder, the bid will be rejected.**

7.0 Bid submission Acknowledgement

The bidder should complete all the process and steps required for Bid submission. The successful bid submission can be ascertained once acknowledgement mail is received in their registered email id against tender after final submission.

The acknowledgement is the only confirmation of submission of bid, which the bidder can show as a proof of participation in the tender. Other than this acknowledgement, no proof will be considered as a confirmation to the submission of a bid. If the bidder fails to produce this acknowledgement required for verification in case of dispute, his claim for submission of bid may not be considered.

Before uploading the documents, the bidder is requested to arrange the soft copies of all the documents as per the documents list given hereunder. It may please be noted that there is a data limit for upload. Each upload document size shall not be more than 5MB. The documents more than 5MB are not accepted by the system. Bidders are requested to check beforehand that all their files size are complying to above data size. Further, bidders are requested to upload only relevant documents as sought in the tender and avoid uploading unnecessary documents.

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Bidders have the option of 'deleting' the offer and re-submitting before the due date of offer. For detailed Guidelines for online submission of Bid, please refer to Annexure-9 to ITT.

- 8.0 If the date and time for any activity indicated in the tender document happens to be a holiday or a non-working day, for any reason, then the next working day and time will be automatically taken as the date and time for such activity.
- 9.0 Each Tenderer shall submit only one bid in compliance with the requirements of the bidding documents. Alternatives will not be considered. Submission of more than one bid will cause all the proposals with the Tenderer's participation to be disqualified.
- 10.0 The tender document consists of: -

Section – I: Standard Bidding Document (Turnkey) – consisting of following sections;

- (i). Notice Inviting Tender (NIT)
- (ii). Special Conditions of Contract (SCC)
- (iii). Instruction to Tenderer (ITT) with Annexure 1 - 16
- (iv). Form of Contract Agreement with Appendices 1 – 5 including Price Schedule
- (v). General Conditions of Contract (GCC) with Annexure A to H.
- (vi). Safety Code for Contractors

Section – II as different volume covering -

Technical Specifications and Scope of work

- 11.0 The project/subject work is of prime importance and the bid is to be finalized within shortest possible time. As such, Tenderer is requested to furnish an exhaustive and complete offer so that need for clarifications/ discussions can be minimized.
- 12.0 **Site Visit for the subject tender is mandatory:** The tenderers shall visit the site and acquaint themselves of the prevailing local conditions before submitting their bid. Tenderers have to enclose a certificate issued by the departmental head of NMDC, BIOM, Kirandul Complex for having visited the site or else the offer may be liable for rejection.

For visiting the site, the tenderer shall contact the following officer: -

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Executive Director,
NMDC Limited, BIOM Kirandul Complex
PO: Kirandul, Dist: South Bastar Dantewada, Chhattisgarh-494556
Phone No. 07857-255222, Fax No. 07857-255227

Note: Wednesday is scheduled weekly off day.

13.0 Void.

14.0 Tenderers, who are associated for this tender with the Consultant or any of its associates that have been engaged by the Employer to provide Consultancy Services for the preparation of Design, Specifications & other documents to be used for procurement of the facilities to be purchased and installed under this Invitation are ineligible to bid for this tender.

15.0 Tenderers shall not directly or indirectly, take any service or assistance from the above referred Consultant for the above work and for any work related to the Employer, if he becomes successful Tenderer.

16.0 Validity of the bid

The bid shall be kept valid for a period of **180 days** from the date of opening of the Part-1 bid.

17.0 The Employer reserves the right to accept or reject any bid or to annul the Bidding process and reject all bids at any time prior to award of the Contract without assigning any reason whatsoever and without thereby incurring any liability whatsoever to the affected Tenderer(s). Mere downloading of tender document and submission of tender shall not mean fulfilment of requirements of eligibility of the Tenderer(s).

18.0 Void.

19.0 Salient features of the bid:

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(1)	MSTC Tender Event No.	NMDC/HO/61/21-22/ET/278

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(2)	Name of work	<i>Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years.</i>
(3)	Package No.	Not Applicable
(4)	Scope of work	As detailed in Technical Specification, General Specification & Price Schedule/BOQ.
(5)	Name of Consultant	Not Applicable
(6)	Eligibility Criteria	Refer Bid Data Sheet (BDS) to NIT
(7)	Bids with Consortium	Not Applicable
(8)	Integrity Pact	Applicable
(9)	Tender Fee	NIL / Not Applicable
(10)	Viewing/ Downloading of Tender Documents	Start Date & Time: 14/10/2021 (11.00 hrs. IST) Close Date & Time: 15/11/2021 (15.00 hrs. IST) Start of online bidding : 05/11/2021 (11.00 hrs. IST)
(11)	Pre – Bid meeting	Considering the spread of Covid-19 Pandemic, there will be no Pre-Bid Meeting for this work. However, queries if any, shall be submitted by the prospective bidders through email to contracts@nmdc.co.in within 10 days from the date of tender/issue of NIT. The intending bidders shall forward the editable soft copy of the queries in MS WORD or EXCEL format to NMDC Limited to contracts@nmdc.co.in within the above timeline. Clarifications including amendment/corrigenda if any, issued prior to submission of bids would be uploaded in MSTC's e-tender site https://mstcecommerce.com

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			<p>besides NMDC's website www.nmdc.co.in and Central Public Procurement (CPP) portal www.eprocure.gov.in for the purpose of downloading by all the prospective bidders. All such clarifications shall form part of bid documents.</p> <p>The prospective bidders have to check the website(s) for any amendment/corrigenda/clarifications periodically. All prospective bidders are presumed to have examined all amendments/corrigenda/ clarifications published on the website and have submitted their bids accordingly. In case any queries remain unreplied, it shall be construed that in respect of those queries, the respective stipulations of the bidding documents shall continue to apply and/or no new stipulations are made with respect to those queries.</p> <p>No extension of time for submission of queries will be granted on account of Bidder's request for interpretation/clarifications. Queries received after the above-mentioned time line will not be entertained.</p>
(12)	Manner Preparation Tender	of of	Refer clause no. 8.0 of ITT
(13)	Manner Submission Tender	of of	Refer Clause No. 6 of NIT and Annexure-9 to ITT for Guidelines for online submission of online Bid.
(14)	Opening of Part – I Bid (Techno-Commercial offer)		<p>Part – I of the online bids will be opened on 15/11/2021 at 15.30 Hrs.</p> <p>As per the manner and in the form specified in clause no. 8.0 of ITT and Clause no. 9.0 of NIT, the bidder has to submit the Part-I (Techno-Commercial) documents online in MSTC Platform. If the 'Bid Security Declaration' (BSD) is not submitted online in the Part-I bid, the bidder shall be considered as non-responsive, their bid will be rejected and such unresponsive bid will not be considered for further evaluation.</p> <p>Part-I of all other bidders, which are otherwise found responsive, except for any discrepancies such as typographical errors / omissions / deletions/ page(s) not</p>

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		signed etc. in Part-I of documents, will be considered for evaluation. However, in case of any discrepancies in Part-I documents, the bidder shall submit the revised / corrected documents on intimation by Employer /Consultant failing which their tenders are liable for rejection.
(15)	Opening of Price Bid (Part – II)	After evaluation of Part-I (techno-commercial) offers, the price bids of the techno-commercially qualified bidder(s) shall be opened. The date and time of opening of price bids (online price bids) shall be intimated at a later to such qualified bidders.
(16)	Bid Security Declaration	The bidder shall submit Bid Security Declaration (BSD) as per ‘Annexure-1’ of ITT [in bidder’s letter head].
(17)	Time for Completion of the Works.	05 (five) months [upto commissioning] from the effective date of contract. The completion period is inclusive of monsoon period. The Comprehensive Annual Maintenance Contract (CAMC) for a period of 5 (five) years will commence following the completion of guarantee period of 24 months from the date of successful commissioning as detailed in Vol-II (Scope of Work & Technical Specifications) of the tender document.
(18)	Validity of Bid	180 days from the date of opening of Part-I Bid.

20.0 The Tender Documents are non-transferable and shall be used by the tenderer who have downloaded the tender document from NMDC’s website / CPP Portal / MSTC Portal only and for the specific purpose for which the Tender document have been issued / uploaded on Employer’s website.

21.0 This Notice Inviting Tender will form part of the Tender document.

For and on Behalf of NMDC Limited

General Manager (Contracts)

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BID DATA SHEET (BDS)

The following bid-specific data for the facilities including plant and equipment to be procured, installed & commissioned, shall amend and/or supplement the provisions in the Notice Inviting Tender (NIT) and Instructions to Tenderer (ITT). Whenever there is a conflict, the provisions herein shall prevail over those in the NIT and ITT.

1	Name of Facilities ITT clause 2.0	<i>Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years</i>
2	Name of Employer	NMDC Limited, Hyderabad
3	Consultant	Not Applicable
4	Employer mailing address for Clarification ITT 5.2	General Manager (Contracts) NMDC Limited, Contracts Department, 4 th Floor, 10-3-311/A, Khanij Bhavan, Masab Tank, Hyderabad - 500028 Ph No- 040-23532800, email: contracts@nmdc.co.in .
5	Language of Bid ITT 7.1	Language of bid shall be in English language. In case any document is submitted by Bidder in other than English language, authenticated English translation of the same shall be submitted along with the bid complying with the requirements set forth given in the bidding document.
6	Consortium/Associate Requirement	Not Applicable
7	Eligibility / Qualification requirements for Bidders	Bidder (sole bidder) should fulfill the Technical and Financial eligibility requirements as detailed below: The Bidder having credentials of complying with the minimum eligibility criteria as stipulated herein below would be considered eligible in respect of this Tender for further evaluation of their Bids.

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		<p>I) Technical Requirements</p> <p>In the last 07 (seven) years, prior to the date of issue of Notice Inviting Tender (NIT), tenderer should have successfully completed either of the following:-</p> <p>a) One completed '<i>work</i>' of value not less than Rs 59 lakhs (OR)</p> <p>b) Two completed '<i>works</i>' of value not less than Rs 35 lakhs each (OR)</p> <p>c) Three completed '<i>works</i>' of value not less than Rs 25 lakhs each</p> <p>'Meaning of work' : '<i>Work</i>' means "Supply, Installation, Commissioning and satisfactory operation / maintenance for a period of one year after commissioning" of a grid interactive roof top solar power plant of minimum 25kWp capacity, through a single Work Order/ Purchase Order/ Letter of Award of Contract.</p> <p>Notes:</p> <p>a) The above should be supported by relevant documentary evidence. Notarized copies of certificates issued by the organization shall form the basis for considering experience of work executed.</p> <p>b) In support of technical / experience credentials, bidder shall submit the list of projects commissioned along with their LOI/Work Orders, Commissioning certificate and certification of performance including operation / maintenance, as stipulated.</p>
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		<p>c) The offers of the tenderers not meeting the pre-qualifying requirements and not producing supportive documents are likely to be rejected and no correspondence whatsoever shall be entertained.</p> <p>d) NMDC reserves its right to verify the documents/information submitted or inspect the installation done. The tenderer shall provide necessary facilities for this purpose.</p> <p>II) Financial Requirements</p> <p>a) The average annual financial turnover of the bidder for the last three consecutive financial years ending with March 2020 should not be less than Rs. 30.00 Lakhs.</p> <p>Remarks:</p> <p>In case the tenders are having the bid closing date up to 30th September of the relevant financial year, and audited financial results of the immediate preceding financial year are not available, the bidder has an option to submit the audited financial results of the 3 years immediately prior to that. Wherever the closing date of the bid is after 30th sept. of the relevant financial year, bidder has to compulsorily submit the audited financial results for the immediate 3 preceding financial years.</p> <p>Gross turn over shall be considered for eligibility purpose.</p> <p>Audited Annual Reports including Profit and Loss statements for the last three consecutive financial years shall be submitted by the bidder in support of their financial credentials.</p>
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		<p>In case of non-availability of Audited Annual Reports for any genuine reasons, as an alternative, with reasoned proof, the bidder may submit Certified Annual Turnover for last three (3) consecutive financial years from a practicing Chartered Accountant, duly notarized, in support of their financial credentials, in lieu of the Annual Reports.</p> <p>In case of non-availability of annual turnover during last 3 preceding years, the aggregate of the available years shall be divided by 3 for calculating average turnover.</p> <p>b) Bidder Should be Solvent for a value not less than Rs. 25.00 Lakhs. (Rupees twenty five lakhs only)</p> <p>Bidder to submit Original Solvency Certificate from any Indian Nationalized bank / scheduled commercial bank including a foreign bank having a branch in India and the certificate should be dated not earlier than three months from the due date of submission of Bid. The pro-forma for solvency certificate is given in Annexure -12 to ITT.</p> <p>Bidder may also submit Original Line of Credit in lieu of Solvency certificate as per format given in Annexure-12 to ITT from any Indian Nationalized bank / scheduled commercial bank including a foreign bank having a branch in India.</p> <p>c) No default by the Bidder: The bidder should not be in default to any banker/financial institution as per the audited annual report for the immediate preceding financial year. The bidder shall submit the audited annual report for the immediate preceding financial year (2019-20). However, the firms who do not have audited annual report, certificate in this regard shall be obtained from Chartered Accountant and copy of the same shall be submitted.</p>
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8	Spares	As given in the Tender Document
9	Alternative Bids	Not Applicable
10	Bid Prices ITT 10.4	The Tenderer shall complete the Bid Forms and appropriate Price Schedules furnished in the Bidding Documents in the manner and detail indicated therein and submit the same with its bid online. Detailed price format in which price for each item and each entry is to be filled by Tenderer as given at Appendix-1. Tenderer shall ensure that price against each entry is filled.
		The Bidder must quote for all the items as specified in the Appendix-1, failing which their Bid will be liable for rejection. Further, Bidder quoting rates on units different from those prescribed in the Price Schedules will also be liable to rejection.
		Bidders are required to quote price breakup in all the applicable tables of Price Schedule. Bidders are also required to indicate Po values as on base date.
		Bidder to quote their prices in INR only.
		Bidders shall quote for the entire scope of works on a “single responsibility” basis such that the total bid price covers all the Contractor’s obligations mentioned in or to be reasonably inferred from the bidding documents in respect of handing over the completed works to the Employer. Items against which, no price is entered by the Bidder, will not be paid for by the Employer when executed and shall be deemed to be covered by the prices for other items.
11	Bid Security / EMD ITT 11.1	The bidder shall submit Bid Security Declaration (BSD) as per ‘Annexure-1’ of ITT [in bidder’s letter head].
12	Bid Validity Period ITT 12.1	Bid shall be valid for 180 days from the date of opening of Part-I tender.

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13	Bid Opening ITT 15.4 & 18	Online Bids shall be opened on 15/11//2021 at 15.30 Hrs. (IST)
14	Deviations quoting with withdrawal price	Not Applicable
15	Technical Evaluation of Bid	Technical evaluation shall be carried out in accordance with the requirements set forth in Technical Specification included in the bidding document.
16	Price Bid Evaluation ITT 25.3	The following criteria will be used in the evaluation in the manner stated below: It may be noted that Bid Evaluation shall be done on effective price basis i.e. Landed Cost to the Employer inclusive of all the taxes, duties, levies, cess, GST etc. as on base date.
17	Price Bid Evaluation ITT 25.5 (c)	Not Applicable.
18	Amount of Performance Security (Performance Bank Guarantee) ITT 33	1.0 <u>CPG for Main Contract (i.e. towards turnkey work execution)</u> 1.1 <u>1st CPG - for Main Contract:</u> Three percent (3%) of the total contract price for the turnkey work execution (<i>i.e. @ 3 % of total contract price excluding the 5 year CAMC price</i>) <i>[i.e. minimum initial validity of the 1st CPG for main contract = Project completion time upto commissioning (= 05 months) + guarantee period (24 months) + 03 months = 32 months]</i> 1.2 <u>Extended Performance Guarantee for Solar PV Modules (i.e. 2nd CPG -for main contract):</u> Three Percent (3 %) of total cost of supply of PV modules

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		<p>2.0 <u>CPG for Comprehensive Annual Maintenance Contract (CAMC) for 5 years after the guarantee period (i.e. the 3rd CPG):</u></p> <p>Three Percent (3 %) of total CAMC charges of 5 years,</p>
19	Risk Purchase Action ITT 34.1	Failure of the successful Bidder to comply with the requirements of ITT Clause 32 or Clause 33 shall constitute sufficient grounds for the annulment of the award, take action as per the Bid Security Declaration and execution of facilities at the risk and cost of the successful bidder.
20	Integrity Pact ITT 37	Integrity Pact to be signed and submitted.



INSTRUCTIONS TO TENDERERS (ITT)

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Tender Enquiry No: HO (Contracts)/ Rooftop Solar/Kirandul/2021/214 dated 14/10/2021



20.	Preliminary Examination of Bids
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31.	Notification of Award
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34.	Risk Purchase Action
35.	Effective Date of Contract
36.	Funding by Bidders
37.	Integrity Pact
38.	Compliance with Company Law
39.	General
40.	Banning of business dealings with Agencies

Tender Enquiry No: HO (Contracts)/ Rooftop Solar/Kirandul/2021/214 dated 14/10/2021



- Annexure – 1: Bid Security Declaration
- Annexure – 2: Letter of Undertaking by the bidder
- Annexure – 3: Information about the Bidder
- Annexure – 4: Pro forma for filling details of work done as per eligibility requirements
- Annexure – 5: Deviations to the Tender clauses
- Annexure – 6: Proposed Organizational set up at Project site
- Annexure – 7: Letter of undertaking by the bidder who do not possess PF code
- Annexure – 8: Details of works in hand at present
- Annexure – 9: Important Instructions for E Procurement through MSTC Portal
- Annexure – 10: Integrity Pact
- Annexure – 11: Details of Turnover
- Annexure – 12: Proforma for Solvency Certificate /Line of Credit
- Annexure – 13: Check List for submission of Bid.
- Annexure – 14: Grounds for Banning of Business Dealings and the Banning Period
- Annexure – 15: Declaration on local content.
- Annexure – 16: Self-Certification regarding compliance as per Rule 144 (xi) of the GFR 2017.



INSTRUCTIONS TO TENDERERS

1. Eligible Bidders

- 1.1 This Notice Inviting Tender (NIT), issued by the Employer, is for the **Domestic Bidders** meeting the eligibility criteria.
- 1.2 Bidders who are associated for this Tender with Consultant or any of its associates that have been engaged by the Employer to provide Consultancy Services for the preparation of design Specifications & other documents to be used for procurement of the Facilities to be purchased and installed under this Invitation are ineligible to bid for this tender.
- 1.3 Bidder shall not directly or indirectly, take any service or assistance from the above referred Consultant for the above work, if he becomes successful Bidder.
- 1.4 The Employer's Consultant (s) for the Facilities shall not be eligible to submit their bid.

2. Facilities - Plant, Equipment & Services

- 2.1 For the purposes of these Bidding Documents, the word “Facilities” means the plant and equipment, structures to be designed, manufactured, supplied and installed/commissioned as per scope of Bidding Document, under the Contract. The words “plant & equipment, structures” etc., shall be construed in accordance with the respective definitions given to them in the General Conditions of Contract.

3. Cost of Bidding

- 3.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Employer will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

4. Content of Bidding Documents

- 4.1 The Facilities required, bidding procedures, Contract terms and technical requirements are prescribed in the Bidding Documents. The Bidding Documents include the following sections:

Section – I (Volume 1): consisting of following sections;

- (i). Notice Inviting Tender (NIT) with Bid Data Sheet
- (ii). Special Conditions of Contract (SCC)
- (iii). Instruction to Tenderer (ITT) with Annexures 1 – 16

Annexure – 1: Bid Security Declaration

Annexure – 2: Letter of Undertaking by the bidder

Annexure – 3: Information about the Bidder



- Annexure –4: Pro forma for filling details of work done as per eligibility requirements
- Annexure – 5: Deviations to the Tender clauses
- Annexure – 6: Proposed Organizational set up at Project site
- Annexure – 7: Letter of undertaking by the bidder who do not possess PF code
- Annexure – 8: Details of works in hand at present
- Annexure – 9: Important Instructions for E Procurement through MSTC Portal
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- Annexure – 12: Line of Credit
- Annexure – 13: Check List for submission of Bid.
- Annexure –14: Grounds for Banning of Business Dealings and the Banning Period
- Annexure – 15: Declaration on local content.
- Annexure – 16: Self-Certification regarding compliance as per Rule 144 (xi) of the GFR 2017.

(iv). Form of Contract Agreement with Appendices 1 – 5

- Appendix – 1: Price Schedule
- Appendix – 2: Time Schedule
- Appendix – 3: Terms of Payment
- Appendix – 4: Price Adjustment due to Variation in Price Indices
- Appendix – 5: Performance Guarantees

(v). General Conditions of Contract (GCC) with Annexure A to H.

- Annexure A - Performance Bank Guarantee



- Annexure B - Bank Guarantee for release of payment against Commissioning Certificate; Performance Guarantee Certificate; Final Acceptance Certificate
- Annexure C - Form for Custody cum Indemnity Bond
- Annexure D - Form of Preliminary Acceptance Certificate
- Annexure E - Form of Commissioning Certificate
- Annexure F - Form of Performance Guarantee Certificate
- Annexure G - Form of Final Acceptance Certificate
- Annexure H - Form of Change Order

- (vi). Safety codes for contractor
MoU for safe execution of Contract work
General Terms & Conditions for Safety

Section – 2 (Volume – II)

- (vii). Technical Specifications

4.2 The Bidder is expected to examine all instructions, forms, terms, specifications and other information in the Bidding Documents. Failure to furnish all information required by the Bidding Documents or submission of a bid not substantially responsive to the Bidding Documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

5. Clarification of Bidding Documents

- 5.1 The Bidder is required to carefully examine the Bidding Documents, terms & conditions of Form of Agreement, drawings and other details relating to work given in the Bidding Documents and fully acquaint himself as to all conditions and matters which may in any way affect the work or the cost thereof. Bidder is deemed to have known the scope, nature and magnitude of the work and the requirements of materials, labour involved, site conditions etc.
- 5.2 A prospective Bidder requiring any clarification of the Bidding Documents may notify the Employer in writing or by telefax or e-mail at the Employer's mailing address indicated in the NIT. In particular, if a Bidder desires to seek any clarification on the documents including those listed



in ITT Sub-Clause 20.2, such a clarification should be raised at this stage. The Employer will respond in writing to any request for clarification or modification of the Bidding Documents that it receives within 10 days from the date of publication of tender/issue of NIT.

Any clarification issued prior to submission of Bids would be put on the Employer's web site as given in the NIT. All prospective Bidders including those who have downloaded bidding document would be presumed to have examined all clarifications on the website & have submitted their bids accordingly. In case any queries remain un-replied, it shall be construed that in respect of those queries, the respective stipulations of the Bidding Documents shall continue to apply and/or no new stipulations are made with respect to those queries.

- 5.3 The Bidder and any of its authorized personnel or representative will be granted permission by the Employer to enter upon its premises and lands for the purpose of inspection, but only upon the condition that the Bidder, its personnel and representative will release and indemnify the Employer and its representatives from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of the inspection.
- 5.4 The Bidder shall be deemed to have acquainted itself of local/ Government taxes, duties, laws, statute, regulations, levies and other charges relating to supplies to be made, services to be rendered and works to be done at site as applicable at the work site.
- 5.5 Any neglect or omission or failure on the part of the Bidder in obtaining necessary and reliable information or on any other matter affecting the Bidder, shall not relieve the Bidder from any risk or liability or the entire responsibility for completion of the work in accordance with the Bidding Documents.

6. Amendment of Bidding Documents

- 6.1 Before the deadline for submission of bids, the Employer may, for any reason, whether at its own initiative, or in response to a clarification requested by a bidder, amend the Bidding Documents.

The amendments shall be hosted on the Employer's websites given in the NIT for viewing / downloading by the other prospective bidders who have downloaded tender documents from such websites.
- 6.2 The amendments to bidding documents shall be issued as addenda / corrigenda. Any addendum / corrigendum thus issued shall form part of the Bidding document. Before the due date of submission of tender, the prospective bidders on regular basis are required to visit the Employer's websites for viewing / downloading addenda / corrigenda. All the prospective bidders would be presumed to have examined all amendments & have submitted their bids accordingly.



- 6.3 In order to afford bidders reasonable time to take the amendment into account in preparing their bid, the Employer may, at its discretion, extend the deadline for the submission of bids in which case the extended date will shall be put on the Employer's web-site also.

7. Language of Bid

- 7.1 The bid prepared by the Bidder and all correspondence & documents related to the bid exchanged by the Bidder and the Employer, shall be written in the English language. Bid submitted in any other language is liable to be rejected. In case any printed literature furnished by the Bidder, is written in another language, it must be accompanied by a translation of its pertinent passages in the English language and for the purposes of interpretation of the bid, such translation shall govern.

- 7.2 In case any printed literature/ any documents furnished by the Bidder, is written in another language, it must be accompanied by a translation of its pertinent passages in the English language, duly authenticated/ certified by a notary/ local chamber of commerce/ any legal authority of the bidder's country/ authorized representative of Indian Embassy/ consulate in bidder's country and for the purposes of interpretation of the bid, such translation shall govern.

8. Documents Comprising the Bid

The bid / Tender shall be submitted in two parts and shall comprise of following documents; Part – 1 and Part – 2 of the bids shall be submitted online through MSTC website. Bidder has to upload the **scanned documents in MSTC portal**. Before uploading the documents, the bidder is requested to arrange the soft copies of all the documents. It may please be noted that there is a data limit for upload. Each upload document size shall not be more than 5MB. The documents more than 5MB are not accepted by the system. Bidders are requested to check beforehand that all their files size are complying to above data size. Further, bidders are requested to upload only relevant documents as sought in the tender and avoid uploading unnecessary documents.

8.1 Part - I: The following documents comprising Part – 1 of the Bid -

- 8.1.1 **Bid Security Declaration:** This shall be submitted by the tenderer in the prescribed pro-forma as per Annexure –1 of ITT.
- 8.1.2 Letter of Undertaking: As per Annexure – 2 to ITT
- 8.1.3 Integrity Pact: The Tenderer **shall** submit the Integrity Pact duly signed as per Annexure-10 [Ref Clause no. 37.0 of ITT of Bidding Document].



- 8.1.4 Full information about the Tenderer: This shall be furnished in the prescribed pro-forma as per Annexure – 3 to the ITT, including details regarding financial soundness, Constitution or legal status of Bidder (Attach Copy)
- 8.1.5 Power of Attorney (dated not earlier than six months from the due date of submission of bid)
A power of attorney, duly authenticated by a Notary Public, indicating that the person(s) submitting the bid have the authority to submit the bid and thus that the bid is binding upon the Bidder during the full period of its validity, in accordance with ITT Clause 12.

In case the bidder is a limited company, a copy of resolution passed by the Board of Directors of that company authorizing that person to file the bid on behalf of the company. The copy of the said resolution should have the common seal of the company and be attested either by the company secretary or its Director.
- 8.1.6 Void.
- 8.1.7 Documents in support of fulfilment of Eligibility Criteria as mentioned in Bid Data Sheet (BDS) – Section 1 with details of the works to be filled as per Annexure-4 to ITT.
- 8.1.8 Details of Turnover as per Annexure – 11 to ITT. The average annual Financial Turnover of the bidder shall be as specified in the Bid Data Sheet of Section – 1.
- 8.1.9 Original Solvency Certificate from any Nationalized Indian Bank/scheduled commercial bank including a foreign bank having a branch in India for a value not less than **Rs. 25 Lakhs** and dated not earlier than 3 months from the due date of submission of the tender (as per Annexure-12 to ITT).
- 8.1.10 **No default by the Bidder:** The bidder should not be in default to any Audited annual report of the firm for the immediate preceding financial year (2019-20) OR certificate from Chartered Accountant for not been in default to any banker/financial institution during the financial year (2019-20), in case audited annual report is not available.
- 8.1.11 Void.
- 8.1.12 Void.



8.1.13 Deviations

Bidders are required to quote strictly as per Bidding Documents. However, if they strongly feel that some minor deviation will improve their bids, such deviations, if any, from the terms & conditions or Technical Specifications shall be listed in Annexure – 5 to ITT (Technical & Commercial Deviation to be given separately) to the Bid only and nowhere else. If specified in Bid data sheet, the Bidder shall also provide in the price bid, the additional price, if any, for withdrawal of the deviations pursuant to ITT Sub-Clause 10.2.

Bidders shall give details of deviations, objections or reservations, other than alternative bids, from the requirements of the Bidding Documents, that they would like the Employer to consider during the clarification meeting with the Bidder, pursuant to ITT Clause 23.

However, the attention of the Bidders is drawn to the provisions of ITT Sub-Clause 20.2 & 20.3 regarding the rejection of bids that are not substantially responsive to the requirements of the Bidding Documents.

8.1.14 Alternative Bid: Not applicable for this tender.

8.1.15 Photocopy of Permanent Account Number (PAN) issued by IT department.

8.1.16 Copy of PF Registration Certificate indicating P.F. code number allotted by any Regional Provident Fund Commissioner. Copy of Latest P.F Challan or documentary evidence in support of remittances made towards P.F shall also be submitted.

In case the bidder does not possess valid PF code number, then the bidder has to give an undertaking as per Annexure- 7 to ITT on a non-judicial stamp paper of value not less than Rs. 100/- stating that within one month from the date of issue of Letter of Award of Contract he shall obtain PF Code number.

8.1.17 Copy of GSTN registration certificate.

8.1.18 Bank Account details in order to facilitate payments through e-payment mode (attach Cancelled cheque).



- 8.1.19 Organization set up proposed at the site of work: This shall be furnished in the prescribed pro-forma as per Annexure – 6 to ITT.
- 8.1.20 Time schedule in the form of BAR CHART / Network proposed by the Bidder for completion of the work within the time specified in Notice Inviting Tender (NIT).
- 8.1.21 List of Plant and Machinery proposed to be mobilized by the Bidder.
- 8.1.22 Dummy price sets to be submitted by the bidder without quoting the price but indicating “quoted”/ “not quoted” (as the case may be). Any footnotes, remarks etc. in the dummy price bid shall be considered only if they are in line with the bidding document otherwise such footnotes, remarks etc. are considered as deviations. Bidder, however, has to indicate the percentage rates of the taxes considered in the price bid.
- 8.1.23 Bidder to submit Valid Certificate of Registration of ‘A’ Class Electrical Contractor License from Chhattisgarh State Electrical Inspectorate where the works are being executed. In case the bidder does not possess the same, they shall give an undertaking that they shall obtain the same before commencement of work at site but at the latest within three (3) months from the effective date of contract.
- 8.1.24 Details of works in hand at present: This shall be furnished in the prescribed pro-forma as per Annexure – 8 to ITT.
- 8.1.25 Amendments/corrigenda/Addenda etc. for the work, if any, issued by the Employer, duly signed, by the tenderer.
- 8.1.26 Declaration by the tenderer in his letter head that the firm is not blacklisted by any PSU/Govt body. On verification if it is found that the tenderer has given misleading /false information, then his tender will be summarily rejected.
- 8.1.27 Tenderer must declare whether the Proprietor or any Partner of the firm or Director of their Company as the case may be, has any relation with any employee working in NMDC.



8.1.28 Declaration on Local Content as per Annexure – 15 to ITT.

8.1.29 Self-Certification regarding, compliance as per Rule 144 (xi) of the General Financial Rules (GFRS), 2017- As per 'Annexure-16' of ITT.

8.1.30 Checklist for submission of Bid as per Annexure – 13 to ITT.

8.1.31 Others, if any (Bidder to specify)

8.2 Part – II: Duly Filled Price Schedule

9. Manner of Submission of Bid

Bids (Part – I & Part – II) shall be submitted as per the manner and procedure given in the clause No. 6 to Notice Inviting Tender (NIT).

10. Bid Prices

- 10.1 Bidders shall quote for the entire facilities on a “single responsibility” basis such that the total bid price covers all the Contractor’s obligations mentioned in or to be reasonably inferred from the bidding documents in respect of the design, manufacture, including procurement and sub-contracting (if any), supply, construction, installation and completion of the facilities. This includes all requirements under the Contractor’s responsibilities for testing, pre-commissioning and commissioning of the facilities and, where so required by the bidding documents, the acquisition of all permits, approvals and licenses, etc.; the operation, maintenance and training services and such other items and services as may be specified in the bidding documents. Items against which no price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed to be covered by the prices for other items.
- 10.2 Bidders are required to quote the price for the commercial and technical obligations outlined in the bidding documents. If a Bidder wishes to make a deviation, such deviation shall be listed in Annexure – 5 to ITT. The Bidder shall also provide in the Price Bid the additional price, if any, for withdrawal of the deviations pursuant to ITT **Sub-Clause 8.1.13**.
- 10.3 Bidders shall give a break-up of the prices, as may be applicable to their bids, in the manner and detail called for in the Summary Price Schedule and Tables furnished in **Appendix-1** to the Form of Contract Agreement. For taxes and duties reference may be made to **Clause 14 of GCC**. Bidder must clearly mention their Income Tax Permanent Account Number (PAN) and Bank Account Number in the offer.
- 10.4 Bidders shall give the required details and a breakup of their prices as per the price schedule format.



Supply of goods and Services quoted in Indian Rupee shall be quoted on “at-Employer’s site” basis and shall comprise of price including all taxes, levies & duties and APPLICABLE GST as on Base Date.

10.5 Void.

11.0 Bid Security (EARNEST MONEY DEPOSIT- EMD)

11.1 The tenderer shall submit Bid Security Declaration (BDS) [in bidder’s letter head] in place of EMD/Bid Security in Part - I of the tender.

Any bid not accompanied by Bid Security Declaration in Part-I of the offer [as per the proforma Annexure-1 to ITT] shall be considered as unresponsive and rejected.

11.2 The tenderer/firm will be suspended for a period of two years for submission of bids for tenders/contracts with NMDC Limited, in case of any of the following situations:

- (a) The tenderer withdraws or modifies the bid during the period of validity (or)
- (b) The tenderer fails to enter into Contract Agreement (as applicable), in case of award of work (or)
- (c) The successful tenderer fails to submit Contract Performance Guarantee / Security Deposit before the deadline as specified in the bid documents.

11.3 In consideration of the Owner considering the Tender for purpose of award, the Tenderer shall keep his Tender valid for a period of 180 days from the date of opening of Part-I of the Tender, during which period the Tenderer agrees not to vary, alter or revoke his tender as a whole or in part. If the Tenderer, however, fails to keep his Tender valid for 180 days or varies it during the validity period then the Owner shall be entitled to suspend the bidder for a period of two years for submission of bids for tenders/contracts with NMDC Limited.

12. Period of Validity of Bid

12.1 Bids shall remain valid for the period indicated in the **Bid Data Sheet/NIT**. A bid valid for a shorter period shall be rejected by the Employer as being non-responsive unless extended.

12.2 The Employer may solicit the Bidders’ consent to an extension of the bid validity period. The request and responses thereto shall be made in writing. If a Bidder accepts to extend the period of validity, the bid security shall also be extended by the Bidder accordingly. A Bidder may refuse the request without forfeiting its bid security. A Bidder accepting such request, shall not modify its bid on its own.

13. Void



14. Void

15. Deadline for Submission of Bids

15.1 Bids must be submitted to the Employer as per the manner and at the address specified in NIT / **Bid Data Sheet** and not later than the time and date (deadline) stated in the tender.

15.2 The Employer may, at its discretion, extend this deadline for submission of bids by amending the bidding documents in accordance with ITT **Sub-Clause 6.3**, in which case all rights and obligations of Employer and Bidders will thereafter be subject to such extended deadline.

16. Late Bids

Submission of bids after the deadline prescribed by the Employer in the SOT/NIT, will not be accepted in MSTC platform.

17. Modification and Withdrawal of Bids

17.1 A bid can be edited any number of times and documents can be uploaded before the final submission of bid (i.e. before clicking on Sign & Encrypt). Once the bid has been submitted by clicking on Final Submission, no further editing of bid or uploading of documents is possible.

17.2 Even after final submission, A bid can be deleted or withdrawn prior to the closing time of the event. However, in case of withdrawal of bid, no fresh bid can be submitted. On the other hand, if a bidder wishes to modify his bid after final submission, he may do so by clicking the “Delete Bid” button and re-submit his bid.

17.3 A bid can be submitted up to the scheduled closing time of the event. After the closing time of event has passed, no bid will be accepted by the system. Hence, bidders are advised to make final submission of their bids well in advance.

17.4 No bid shall be withdrawn in the interval between the bid submission deadline and the expiration of the bid validity period. Withdrawal of a bid during this interval may result in suspension of the firm/bidder for a period of two years for submission of bids for tenders/contracts with NMDC Limited.

18. Opening of Bids by Employer

Opening of Bids shall be as specified in NIT.

19. Clarification of Bids

19.1 During bid evaluation, the Employer may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing. While responding no change in the price or substance of the bid shall be sought, offered or permitted unless asked by Employer after completion of evaluation of bids.



20. Preliminary Examination of Bids

- 20.1 The Employer will examine the bids to determine whether they are complete, whether the documents have been properly signed and whether the bids are generally in order. Any bids found to be non-responsive for any reason or not meeting the minimum levels of the performance or other criteria specified in the Bidding Documents will be rejected by the Employer and not included for further consideration. The Employer will also carry out a preliminary examination of any alternative bids submitted by Bidders.
- 20.2 Prior to the detailed evaluation, the Employer will determine whether each bid is of acceptable quality, is complete and is substantially responsive to the bidding documents. For purposes of this determination, a substantially responsive bid is one that conforms to all the terms, conditions and specifications of the bidding documents without material deviations, objections, conditionalities or reservations. A material deviation, objection, conditionality or reservation is one:
- (i) that affects in any substantial way the scope, quality or performance of the Contract;
 - (ii) that limits in any substantial way, inconsistent with the bidding documents, the Employer's rights or the successful Bidder's obligations under the Contract; or
 - (iii) whose rectification would unfairly affect the competitive position of other Bidders who are presenting substantially responsive bids.
- 20.3 In particular, bids with deviations from, objections to or reservations about critical provisions such as those concerning Bid Security (ITT Clause 11), Governing Law (GCC Clause 5), Taxes and Duties (GCC Clause 14), Performance Guarantees (GCC Clause 27), Defect Liability (GCC Clause 30), Patent Indemnity (GCC Clause 31) or Limitation of Liability (GCC Clause 32), as well as provisions specified in the Bid Data Sheet, if any, that the Bidder is not prepared to withdraw aforesaid deviations, objections or reservations at a withdrawal price, will be treated as non-responsive. The Employer's determination of a bid's responsiveness will be based on the contents of the bid itself without recourse to extrinsic evidence.

21.0 Techno-Commercial Evaluation of Bid

- 21.1 The Employer will carry out a detailed evaluation of the bids previously determined during preliminary examination of bids, to be substantially responsive, in order to determine whether the technical & commercial aspects are in accordance with the requirements set forth in the Bidding Documents. In order to reach such a determination, the Employer will examine and compare the technical and commercial aspects of the bids on the basis of the information supplied by the Bidders, pursuant to **ITT Clause 8**, and other requirements in the Bidding Documents.

22. Qualification



- 22.1 The Employer will ascertain to its satisfaction whether Bidders determined as having submitted responsive bids are qualified to satisfactorily perform the Contract.
- 22.2 The determination will take into account the Bidder's financial, technical and production capabilities, in particular its Contract, work in hand, future commitments, current litigation, if any, and past performance. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder during EOI/ tender stage, as well as such other information as the Employer deems necessary and appropriate.
- 22.3 Determination of techno-commercial eligibility may be done during techno-commercial discussions/ clarifications. However, affirmative determination of eligibility shall be pre-requisite for opening of price bid.

23. Clarification of Bids and Review of Bidders' Proposed Deviations & Alternative Solutions

- 23.1 The Employer may seek clarification and may conduct meetings with each or any Bidder to clarify any aspects of its bid that require explanation at this stage of the evaluation. During these meetings, the Employer may bring to the attention of the Bidder any matters, technical or otherwise, where for whatever reason, it requires clarification / details about the bid, to be provided to the bid. All such amendments or changes required by the Employer will be listed in the "Record Notes of Discussions (RND)/ Minutes of Meeting (MOM)".
- 23.2 The RND/MOM will contain the exceptions or deviations in the bid that are unacceptable and that are to be withdrawn and of such exceptions or deviations that the Employer finds acceptable.
- 23.3 The Bidder shall submit the balance clarifications, confirmations, documentations etc as recorded in the RND within the time stipulated in the Record Notes of Discussion
- 23.4 Taking into consideration, the Record Notes of Discussion and the clarifications submitted by Bidder pursuant to **clause 23.3** above, the Employer will carry out further evaluation of the technical and commercial bid in the manner outlined in **clause 21** hereof.
- 23.5 The Employer will also advise the Bidder whether the proposed alternative bid, if any, is acceptable, and will identify the degree (if any) to which such an alternative bid may be incorporated in the Bid.
- 23.6 After holding clarification meetings and at the end of evaluation, the Employer will either:
 - (i) advise the Bidder to confirm the validity of their original price bids, or
 - (ii) permit Bidder to submit updated price bid either as incremental/ decremental price with respect to the original price bid or as revised price bid, at a date informed to the Bidder by the Employer, OR
 - (iii) notify the Bidder that its Bid has been rejected on the grounds



- a) the bid is non responsive
- b) the Bidder does not meet the minimum eligibility requirements set forth in the bidding document
- c) the Employer determines that the technical bid do not meet his requirements

24. Updated Technical, Commercial and Price Bid

- 24.1 In the event, the Employer invites updated bid, the updated Technical, Commercial and Price bid shall be signed, sealed and submitted in the same manner specified for original bids.
- 24.2 The deadline for submission of updated bids and the required validity thereof shall be specified.
- 24.3 The Employer will carry out the technical and commercial evaluation of the updated bid in the manner outlined in **Clause 20** hereof.

25. Price Bid Evaluation

- 25.1 The Employer shall inform and communicate the date, time and venue of opening of price bids, to the Bidders whose offers are found to be techno-commercially acceptable.
- 25.2 The Employer shall open the price bid of the techno-commercially qualified bidders, at a date, time and venue communicated to the Bidders by the Employer. Such bidder can witness opening of price by login to online portal as given in NIT.
- 25.3 The evaluation shall be done based on the summary price table and detailed price schedules.

In case of a discrepancy due to arithmetic errors, corrected arithmetic total will be considered. If the Bidder does not accept the correction of errors, his bid will be rejected and action will be taken as per the Bid Security Declaration.

The comparison shall be “at Employer’s site” price of the facilities. The Employer’s evaluation will also include the costs resulting from application of the evaluation procedures described in ITT **Sub-Clause 25.5** and **Bid Data Sheet/ NIT**.

- 25.4 The Employer’s evaluation of a bid will take into account, in addition to the bid prices indicated in **Appendix-1**, the following costs and factors that will be added to each Bidder’s bid price in the evaluation, using pricing information available to the Employer, in the manner and to the extent indicated in ITT **Sub-Clause 25.5**.
 - (a) compliance with the time schedule called for in the Bidding Documents.
 - (b) the Performance Guarantees of the Facilities offered.
 - (c) the extra cost of work, services, Facilities, etc. required to be provided by the Employer or third parties.



- (d) any other relevant factors listed in the **Bid Data Sheet/NIT** or in the invitation for the Updated bid, or factors that the Employer deems necessary or prudent to consider.

25.5 Pursuant to **ITT Sub-Clause 25.4**, the following evaluation methods will be followed:

(a) **Contractual and Commercial Deviations**

The evaluation shall be based on the evaluated cost of fulfilling the Contractual compliance with all commercial, contractual and technical obligations under this bidding document. In arriving at the evaluated cost, the price for withdrawal of deviations shown in Annexure-5 of the bid will be used, if necessary. If such a price is not given, the Employer will make its own assessment of the cost of such a deviation for the purpose of ensuring fair comparison of bids. Such assessed costs of deviation shall be intimated to the accepted Bidders

(b) **Time Schedule (Program of Performance)**

The Facilities shall be commissioned within the period mentioned in the **Bid Data Sheet/NIT**

(c) **Performance Guarantees of the Facilities**

- (i) Bidders shall state the performance guarantees (e.g., performance, efficiency, consumption) of the proposed Facilities in response to the Technical Specifications. Plant and equipment offered shall have a minimum (or maximum, as the case may be) level of performance guarantees specified in the Technical Specifications.
- (ii) For the purposes of evaluation, the adjustment specified in the **Bid Data Sheet** will be added to the bid price for each drop (or excess) in the responsive performance guarantees offered by the Bidder, below (or above) either a norm of 100 or the value committed in the responsive bid with the most performing functional guarantees, as specified in the **Bid Data Sheet**.

(d) **Work, Services, Facilities etc., to be Provided by the Employer**

Where bids include the undertaking of work or the provision of services or Facilities by the Employer in excess of the provisions allowed for in the Bidding Documents, the Employer shall assess the costs of such additional work, services and/or Facilities during the duration of the Contract. Such costs shall be added to the bid price for evaluation.

(e) **Specific Additional Criteria**

The relevant evaluation method shall be detailed in the **Bid Data Sheet/NIT** and/or in the Technical Specifications. In addition, such method will be used where Bidders are required to provide the price for withdrawal of deviations, pursuant to **ITT Sub-Clause 10.2**. If such



a price is not given, the Employer will make its own assessment of the cost of such a deviation for the purpose of ensuring a fair comparison of bids.

25.6 The Employer at its own discretion shall have the right to open the initial original price bid submitted by the Bidder.

25.7 Any adjustments in price that result from the above procedures shall be added, for the purposes of comparative evaluation only, to arrive at the "Evaluated Bid Price." Bid prices quoted by Bidders shall remain unaltered.

26. Void.

27. Contacting the Employer

27.1 Any effort by a Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or Contract award decisions may result in rejection of the Bidder's bid.

28. Changes in Qualification Status

28.1 Prior to proceeding with the award of Contract, if circumstances have arisen that would change the Employer's opinion as to whether the Bidder is still qualified to satisfactorily perform the Contract, then Employer may reject the bid.

29. Award Criteria

29.1 Subject to ITT **Clause 28 & 30**, the Employer will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and to be the lowest evaluated bid.

30. Employer's Right to accept Any Bid and to reject Any or All Bids

30.1 The Employer reserves the right to accept or reject any First (Original) or Updated bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of grounds for the Employer's such action.

31. Notification of Award

31.1 Prior to the expiration of the period of Updated bid validity, the Employer will notify the successful Bidder in writing by registered letter or by telefax, to be confirmed by the Bidder in writing by registered letter, that its Updated bid has been accepted. If the award is without qualification / condition the notification of award will constitute the formation of the Contract. If the award is



made with some qualification / condition, then upon the Bidder's acceptance of such qualification / condition the Contract will be constituted.

32. Signing of Contract Agreement

32.1 After the Employer notifies the successful Bidder that its bid has been accepted, the Employer to facilitate signing of contract within 30 days of Letter of Award of Contract (LAC), shall provide the draft Contract agreement within 15 days of issue of LAC.

32.2 Within 15 (fifteen) days from the date of receipt of the draft Contract Agreement by the Contractor, the Contract Agreement will be signed. In the case of a consortium becoming the Successful Bidder, all the members of the consortium shall be signatories to the Contract.

33.0 Performance Security (Performance Bank Guarantee)

33.1 CPG for Main Contract (towards turnkey work execution)

33.1.1 1st CPG – for Main Contract:

Within thirty (30) days of issue of the Letter of Award of Contract (LAC)/LOI, the successful Tenderer, to whom the contract is awarded, shall furnish a Contract Performance Guarantee (CPG) in the form of EFT/Demand Draft/Bank Guarantee (BG) from a Nationalized Indian Bank/Scheduled Commercial Bank including a foreign bank having a branch in India, in the form attached as Annexure-A to the General Conditions of the Contract (GCC) in favour of the Employer. The Performance Guarantee amount shall be equal to **three percent (3%)** of the total contract price for turnkey work execution, excluding the price for 5 years CAMC and it shall guarantee the faithful performance of the contract in accordance with the terms and conditions specified in these tender documents. The Bank Guarantee towards the Performance Guarantee shall be initially be kept valid till the expiry of the guarantee period / defect liability period (of 24 months after successful commissioning i.e. commissioning cum final acceptance) plus three months.

[i.e. minimum initial validity of the 1st CPG for main contract = Project completion time upto commissioning (= 05 months) + guarantee period (24 months) + 03 months = 32 months]

However, if the Guarantee/Defects Liability Period has been extended on any part of the Facilities, the Contractor shall issue an additional Bank Guarantee in an amount proportionate to the Price of that part and shall be valid for further 12 months.

This CPG will be submitted at the office of Tender Receiving Authority of NMDC Ltd., for onward transmission to the Executing Authority of NMDC Ltd., after verification.

33.1.2 Extended Performance Guarantee for Solar PV Modules (i.e. 2nd CPG -for main contract):



The total solar PV modules supplied on turnkey basis, shall be under guarantee as follows [Ref. Specific Provisions on Warranty / Guarantee- Cl. 31.0 & Cl. 3.1 (A)-Annexure-II- Vol-II (Scope of Work and Technical Specifications) of Tender document]:

- (I). Against defects in material / manufacturing and workmanship for a period of 10 years (120 calendar months) commencing from the date of successful commissioning of the system; and
- (II). Towards guarantee of minimum 80% of the initial rated output at the end of 25 years.

The submission of extended CPG towards Cl. 33.1.2 above will be as under:

- (a) **The Contractor shall furnish an extended performance bank guarantee (i.e. the 2nd CPG under the main contract) equivalent to Three Percent (3 %) of total cost of supply of PV modules to the Executing Authority of NMDC Ltd., 3 months prior to the expiry of 1st CPG for main contract as per Cl. 33.1.1 above and this BG shall be initially valid for 2 year plus 3 months. This performance guarantee shall be renewable every 2 years till the end of total extended performance period of 25 years of Solar PV modules is reached, counted from the date of successful commissioning of the system.**

The BG shall be from a Nationalized Indian Bank / Scheduled Commercial Bank including a Foreign Bank having a branch in India in favour of the Owner in line with the prescribed format.

- (b) In case the 1st BG towards the extended guarantee for Solar PV modules (i.e. the 2nd CPG under the main contract) is not furnished to the Owner, at least 30 days prior to the expiry of validity of 1st CPG for the main contract as per Cl. 33.1.1 above, Owner shall be entitled to encash the 1st CPG of the main contract as per Cl. 33.1.1 above without any notice whatsoever.
- (c) Further, in case the BG for the succeeding time span (i.e. for ensuing time span of 2 years or as applicable as per requirement of contract) towards extended guarantee for Solar PV Modules is not furnished to the Owner, at least 30 days prior to the expiry of validity of the preceding performance BG for the purpose, Owner shall be entitled to encash the preceding performance BG without any notice whatsoever.

33.2 CPG for Comprehensive Annual Maintenance (CAMC) for 5 years after the Guarantee period (i.e. the 3rd CPG):

Regarding CPG for Comprehensive Annual Maintenance (CAMC), the contractor shall furnish a Contract Performance Guarantee (CPG) in the form of EFT/Demand Draft/Bank Guarantee (BG) from a Nationalized Indian Bank/Scheduled Commercial Bank including a foreign bank having a branch in India, in the form attached as Annexure-A to the General Conditions of the Contract (GCC) in favour of the Employer equivalent to **three percent (3 %)** of total CAMC charges of 5 years, to be submitted to the Executing Authority of NMDC Limited, 3 months prior to the expiry of the validity of the CPG for main contract (i.e. the 1st CPG).



The CAMC Performance BG shall be initially valid for **One (01) year with a claim period of 3 months**. The performance guarantee shall be renewable every year for a further period of 1 year, till the completion of total CAMC period of 05 years.

- 33.3** In case the contract performance guarantee for the CAMC is not furnished to the Owner at least 30 days prior to the expiry of validity of CPG for the main contract as per Cl. 33.1 above (*i.e. the 1st CPG*), the Owner shall be entitled to encash the CPG of the main contract without any notice whatsoever.

In case the yearly extension of the CAMC performance BG is not furnished to the Owner at least 30 days prior to the expiry of its validity period, the Owner shall be entitled to encash the CPG of the preceding year CAMC (i.e. the 3rd CPG) without any notice whatsoever.

Failure of the successful Tenderer to comply with the above requirements of submission of Performance Guarantee(s) shall constitute sufficient grounds for cancellation of the award of work and to take action as per the bid Security Declaration.

- 33.4 Return of Performance Bank Guarantee:** The Bank Guarantee shall be returned to the Contractor upon request after the expiry of the defects liability period and on certification of Engineer as 'no pending issues'.

34. Risk Purchase Action

- 34.1 Failure of the successful Bidder to comply with the requirements of **ITT Clause 32 or Clause 33** shall constitute sufficient grounds for the annulment of the award, take action as per the Bid Security Declaration and execution of facilities at the **risk and cost** of the successful bidder.

35. Effective date of Contract

- 35.1 The Effective Date of Contract shall be counted from the date of 30th day of issue of the Letter of Award of Contract (LAC)/LOI.

36. Funding by Bidder

- 36.1 If so, specified by the Employer in the Invitation for Bids, the Bidder should submit separately an independent proposal for arranging finance in the form of Multilateral / Bilateral Credit / Loan, Bidder's Credit, etc. for the supplies & services to be provided / rendered under the scope of work for the Facilities. The terms & conditions of credit / loan, like principal amount, currency for repayment if credit / loan is from overseas source(s), payment schedule, rate of interest, guarantee fee, commitment fee, management fee, agency fee, financial charges as may be required, etc. should be indicated. Sovereign Guarantee from the government of India shall not be available.

37 Integrity Pact

- 37.1 If required for the Contract and provided in Bid Data Sheet, the Bidders shall sign an integrity pact and attach the same with his Bid. The format for the integrity pact is attached along with the



documents (Annexure – 10 to ITT). The Integrity Pact has to be signed by the Proprietor /Owner/ Partner / Director or by their duly Authorized signatory. In case of failure to return the Integrity Pact along with offer/bid, duly signed by the authority as mentioned above, will disqualify the offer/bid.

37.2 Integrity Pact: NMDC is committed to fostering the ethical and corruption-free business environment. It values its relationship with all counterparties and deals with them in a fair and transparent manner.

37.3 Integrity Pact is a tool, which ensures that all activities and transactions between NMDC Limited and their counterparties are handled in a fair, transparent and corruption-free manner.

37.4 Following is the procedure for submitting the Integrity Pact;

37.4.1 Tenderers shall submit the Integrity Pact (IP) document on its company's letter head, duly signed by the authorized representative on all pages.

37.4.2 If the Bidder / Contractor is in a partnership or a consortium, the Integrity Pact shall be signed by all the partners or consortium members.

37.4.3 On behalf of NMDC, the Integrity Pact will be signed by the authorized nominee on receipt of Integrity Pact signed by the Bidder.

37.4.4 The Integrity Pact shall be submitted online with Part-I of the offer.

37.4.5 The Bidder shall not change the contents of Integrity Pact.

37.4.6 The Bidder / Contractor will abide by the conditions given in the IP document enclosed as annexure along with the tender document.

37.4.7 The details of the External Independent Monitors nominated for this tender are given hereunder:

Sl. No.	Name of the External Independent Monitor & Address
1.	Shri P R Ravi Kumar, IRS (Retd.) Akshath, No. 84, First Avenue, Kumaranasan Nagar, Ernakulam, Kerala - 682020
2.	Shri Jagdish Chander Sharma, IAS (Retd.) H. No. 188, Road No. 21-A, Prashasan Nnagar, Jubilee Hills Near Road No. 72, Hyderabad – 500110, Telangana



38 Compliance with Company Law

38.1 The Bidder must declare whether the proprietor/ partner of the firm/ Director of the limited company has any relation with any employee working in the Plants/ Units concerned or director of NMDC including its subsidiaries and if so, the details or the relation thereof must be furnished.

39. General

39.1 The Employer may conduct price negotiations, if required, with L-1 (i.e. lowest evaluated) bidder only.

39.2 Purchase preference will be given to PSUs as per prevailing guidelines of the Govt. of India.

39.3 If at any point of time, it was found by the Employer that the bidder has furnished false information, the employer may reject the bid.

39.4 The bidder may download the bidding document from website mentioned in NIT. In case of any discrepancy, the hard copy of the bidding document shall prevail.

40.0 NMDC Policy on Banning of Business Dealings with Agencies

NMDC has introduced NMDC Policy on Banning of Business Dealings with Agencies, which covers both suspension and banning of business dealings with the Agency that commits fraud and/or transgression in the dealings with NMDC. The Policy is on the NMDC website, www.nmdc.co.in

The Grounds for Banning of Business Dealings and the Banning Period as per the Policy as given at Annexure – 14.



PROFORMA FOR 'BID SECURITY DECLARATION'

(To be submitted by the Bidder/Contractor in Part – I of the Bid)

(To be submitted on Bidder's Letter Head)

I / We (name of the firm / bidder) hereby confirm my acceptance / our acceptance against the tender "Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years" that in case of any of the following situations, our firm will be suspended for a period of two years for submission of bids for tenders / contracts with NMDC Limited:

1. Withdraw or modify the bid during the period of validity (or)
2. Fail to enter into Contract Agreement (as applicable), in case of award of work (or)
3. Fail to submit Contract Performance Guarantee / Security Deposit before the deadline as specified in the bid documents.

Signature of the tenderer with date and seal



ANNEXURE - 2

PROFORMA OF LETTER OF UNDERTAKING (LOU)

(To be submitted by the Bidder/Contractor in Part – 1 of the Bid)
(To be submitted on Bidder's Letter Head)

(ITT CLAUSE – 8.1.2)

Bidder's Ref. No. -----

Dated :

**M/s NMDCL Ltd,
Khanij Bhavan, 10-3-311/A,
Castle Hills, Masab Tank,
Hyderabad - 500 028
Telangana, INDIA**

Dear Sirs,

1. We have read and examined the following Tender / Bidding Documents relating to the facilities "Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years".
 - a) Notice Inviting Tender (NIT) including Bid Data Sheet
 - b) Instruction to Tenderer (ITT) with Annexures
 - c) Form of Contract Agreement with Appendices
 - d) General Conditions of Contract (GCC) with Annexures
 - e) Special Conditions of Contract (SCC)
 - f) Safety Code for Contractors with Annexures
 - g) Technical Specifications
 - h) Any other documents (specify) including addenda / Corrigenda, if any.

2. Having examined the bidding documents, including addenda / Corrigenda, the receipt of which is hereby acknowledged, we, the undersigned, offer the above-named Facilities in



full conformity with the said bidding documents for the sum as mentioned in Price Bid or such other sums as may be determined in accordance with the terms and conditions of the Contract. We hereby submit our tender as per terms of NIT and other documents.

3. We further undertake, if invited to do so by you, and at our own cost, to attend a clarification meeting at a place of your choice, for the purpose of reviewing our Bid and duly noting all amendments and additions thereto and noting omissions there from that you may require.
4. We undertake, if our bid is accepted, to commence execution of work of the facilities and to achieve completion within the respective times stated in the bidding documents / quoted by us in our bid.
5. If our bid is accepted, we undertake to provide a Performance Guarantee in the form, in the amount, and within the time specified in the bidding documents.
6. We undertake to keep our Tender valid initially for a period of one hundred eighty (180) days from the date of opening of Part-I tender i.e., up to We hereby further undertake that I/We shall not vary/alter or revoke my/our Tender during the said period or extended period, if any.
7. We also submit herewith the prescribed Bid Security Declaration. NMDC shall have the right to take action as per the Bid Security Declaration, in addition to any other provision of ITT, if I/We do not comply with the undertaking given at 4, 5 & 6 above.
8. We undertake that *I/we are not associated, nor has been associated in the past, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications and other documents for the subject tender.
9. Should this Tender be accepted, we also agree to abide by and fulfil all the terms, conditions and provisions of the above mentioned tender documents.
10. I/We have



- a) Downloaded the bid document and subsequent clarifications / amendments / corrigendum's, if any from NMDC's website
 - b) Downloaded the bid document and subsequent clarifications / amendments / corrigendum's, if any from Central public procurement portal
 - c) Downloaded the bid document and subsequent clarifications / amendments / corrigendum's, if any from MSTC Portal
-
- 11. We hereby confirm that before submission of this bid, We have visited the site and fully acquainted with local conditions and factors for execution of the works covered under these bid documents and technical specifications and that we shall have no claims against NMDC on these counts at any time".
 - 12. Until a formal Contract is prepared and executed between us, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding Contract between us.
 - 13. We understand that you are not bound to accept the lowest or any bid you may receive and in-turn we will not have any rights to raise any claim, whatsoever it may be, due to or arising out of rejection of our bids.
 - 14. I/We shall abide by the provisions of the Integrity Pact in completeness.
 - 15. I / We confirm that we have submitted our bid as a sole bidder and we comply with requirements of the bidding document and in particular the clause on joint bidding as applicable to us.
 - 16. Undertaking of Class-1/ Class-2/ Local Content
 - 17. Cross Border issue as per Sec.144

Signature along with Seal of Co.

.....

(Of the person duly authorised to sign the Bid)

Name -



Designation -

Name of Company -

(In block letters)

Date & Postal Address -.....

WITNESS

Signature -

Telegraphic Address-

Date -

Name & Address -

.....

Telephone No. -

Strikeout whichever is not applicable.



ANNEXURE – 3

INFORMATION ABOUT THE BIDDER

Sl.No	Description	Details
1.	Constitution or legal status of Bidder (Attach Copy)	
2.	Place of registration (Attach Copy)	
3.	Principal place of business	
4.	Total value of Works executed in the last Seven years (in Rs. Lakhs)	
5.	Details of works in hand at present indicating value of works (As per Annexure-8)	
6.	Name & Designation of Power of Attorney Holder submitting the bid	
7.	Name of contact person with designation, address, telephone, telex, fax, e-mail, etc. for correspondence / communication.	

Signature of the tenderer with date and seal



ANNEXURE – 4

DETAILS OF WORKS DONE, AS PER ELIGIBILITY CRITERIA DURING THE PAST SEVEN YEARS

Details against Eligibility Criteria as given in Bid Data Sheet (BDS)

Sl. No	Client's Name and address with PIN, Phone, Fax No & Email ID	Name of work & Location	Scope of work carried out by the bidder	Agreement / LAC/ WO No & Date	Contract value (Rs. In Lakhs)		Date of Start	Date of Completion		Ref. of Document (to be Uploaded)
					Awarded	Actual on Completion		As per Agreement / LAC/ WO	Actual	

Note:

1. The above works shall be supported by 'copies of the completion/performance certificate from the Owner/Client or Executing Agency / Consultant appointed by Owner / Client indicating the name of work, the description of work done by the bidder, date of start, date of completion (contractual & actual) and contract value as awarded and as executed by the bidder'. "Contract Value" shall mean gross value of the completed work including cost of materials supplied by the owner/client but excluding those supplied free of cost.
2. During evaluation of eligibility criteria, NMDC at its discretion, may ask the bidders for clarification only related to shortfall information of the pre-existed documents/referred works in the offer received at the time of tender opening.
3. No New Credentials of works pre-existed/referred in the offer, submitted at the time of tender opening, will be considered for evaluation of eligibility criteria.
4. NMDC, may at its discretion, verify the documents in respect of the works done by the bidder.

Signature of the tenderer with date and seal



ANNEXURE – 5

DEVIATIONS TO THE TENDER CLAUSES

Sl. No.	Clause No.	Clause as per Tender Document	Clause as proposed by the Bidder/ Intended effect	Deviation Withdrawal price quoted along with the price bid (Yes / No) – Refer Bid Data Sheet

- (1) The Bidder hereby certifies that the deviations mentioned above are the only deviations to the tender conditions.
- (2) Deviations elsewhere furnished shall be ignored.
- (3) If there are no deviations, then Annexure –5 has to be submitted by indicating 'NIL'.

Signature of the tenderer with date and seal



ANNEXURE – 6

PROPOSED ORGANIZATIONAL SETUP AT PROJECT SITE

Sl. No.	Designation/ Category	Number	Qualification	No of years of professional experience	Field of specialization

Signature of Bidder with Seal



ANNEXURE – 7

Letter of Undertaking towards PF code

(Applicable to bidders who do not possess the PF Code)

(on a non-judicial stamp paper of value not less than Rs 100/-)

I /We hereby confirm that I/We am/are not registered with any of the Regional Provident Fund Authorities and /or I/we are/are not possessing a valid Provident Code Number at present.

I /We hereby undertake to register with Regional Provident Fund Authorities and/or obtain a valid provident Fund code number within one month from the date of issue of Letter of Intent/Letter of Award of Contract whichever is earlier.

I/We also agree that any payment due to us arising out of the execution of the contract shall be released by the Employer only after submission of a copy of the valid PF Code number allotted to us

Signature of Bidder with Seal



ANNEXURE – 8

DETAILS OF WORKS IN HAND AT PRESENT

Sl. No.	Full address of the client	Value of contract	Date of Commencement	Scheduled completion as per contract	Reasons for delay if any	Status as on date of submission of the tender

Signature of Bidder with Seal



Important Instructions for E-procurement

This is an e-tender event of NMDC Limited. The e-tender service provider is MSTC Limited.

You are requested to carefully read the specific eligibility conditions of NIT, Terms & Conditions under Instructions to the Tenderer and also the Evaluation Criteria of this tender before submitting your online tender. Tenderers who do not comply with the conditions with documentary proof (wherever required) will not qualify in the tender for opening of Price Bid.

1. Process of E- tender:

A) Registration: The process involves Contractors registration with MSTC Limited e-procurement portal (www.mstcecommerce.com) which is free of cost. Only after registration, the vendor(s) can submit his/their bids electronically. Electronic Bidding for submission of Techno-Commercial Bid as well as Price Bid over the internet will be done. The Contractor should possess **Class III signing type digital certificate**. Contractors are to make their own arrangement for bidding from a P.C. connected with Internet. MSTC Ltd is not responsible for making such arrangement. (Bids will not be recorded without Digital Signature).

SPECIAL NOTE: THE PRICE BID AND THE TECHNO-COMMERCIAL BID HAS TO BE SUBMITTED ON-LINE AT <https://www.mstcecommerce.com/eprochome/nmdc/>

- 1). Contractors are required to register themselves online with <http://www.mstcecommerce.com/eprochome/nmdc/>→Register as Vendor (Contractors) Filling up details and creating own user id and password→ Submit.
 - 2). Contractors will receive a system generated mail confirming their registration in their email which has been provided during filling the registration form.
- In case of any clarification, please contact MSTC Limited, (before the scheduled closing time of the e-tender).

B) System Requirement:

The following requirements need to be fulfilled for optimum use of MSTC e-procurement system.

- (1) A computer connected to internet through an ISP.
- (2) The computer should have adequate RAM depending on version of Windows.
- (3) The computer (Desktop / Laptop) should have Windows 7 or above.
- (4) The website is best viewed in Internet Explorer version 7 or above.
- (5) The protected mode of the computer should be turned off for higher version of Windows where available.
- (6) Latest Drivers for your Digital Signature Certificate should be installed properly in the computer.
- (7) The computer should have latest Java Runtime Environment version (Windows X86 Offline file) installed in it.

FOR DETAILS, PLEASE GO THROUGH THE VENDOR GUIDE AND THE VIDEO UNDER “VIEW VIDEO” LINK AT <https://www.mstcecommerce.com/eprochome>



1. **Vendor Guide Link** → <https://www.mstcecommerce.com/eprochome/UserManualVendor.pdf>

2. **Video Link** → <https://www.mstcecommerce.com/auctionhome/RenderFileViewVideo.jsp?file=IE-Configuration.mp4>

2. Submission of Bids:

a) The process involves Electronic Bidding for submission of Techno Commercial Bid (Part-I) as well as Price Bid (Part-II).

<https://www.mstcecommerce.com/eprochome/nmdc> → **Vendor Login** → **My menu** → **Bidding Floor** → **Live Events** → **Selection of the Live Event** → **Tech-Com Cover (Part-I)** → **Price-Bid (Part-II)** → **Final Submission**

b) The bidder should allow to run an application namely enApple by accepting the risk and clicking on run. If this application is not run then the bidders will not be able to save/submit his/her bid.

c) Tech-Com Cover (PART-I):

1.) Techno-Commercial bid will be opened electronically on specified date and time as given in the NIT. Bidder(s) can witness electronic opening of bid.

2.) The bidder has to submit scan copies of all the documents online in MSTC platform as mentioned in the NIT for PART I before scheduled closing time.

3.) If any of the documents are not submitted, the bidder shall be considered as non-responsive and their bid shall be liable for rejection and PART-II of such unresponsive bid will not be opened.

d) Price-Bid (PART-II):

After submitting Tech-Com Cover (PART-I), the vendor needs to do the following:

1. Click on 'Download Price' and download the Price Schedule (Excel Document).

2. Bidder needs to fill up price only in the unprotected cells in the Excel sheet(s) offline and save the file **without renaming** the file name. Bidder should not modify the protected cells. Please note System will not accept the renamed/modified file.

3. Click on 'Upload Price' Button to upload the filled up excel file.

4. Click on 'Final Submission' to submit the tender.

NOTE: Bidder should not modify the filename OR file extension. It may be noted that if any corrupted/ Bad/ Macro enabled file is uploaded at the time of price bid, System will not be able to open/read such corrupted/ Bad/ Macro enabled file. Such bids will be liable for rejection.

Price bid will be opened electronically of only those bidder(s) whose Part-I (Techno-Commercial Bid) is found to be Techno-Commercially acceptable to NMDC Ltd. The Bidders are advised to offer their most competitive prices while submitting the price bid.

e.) All entries in the tender should be entered in online Techno-Commercial Formats without any ambiguity.



- f.) Bidders are instructed to use *upload Docs* button against the clauses in PART I under event number selected. Multiple documents can be uploaded. Maximum size of single document for upload is 5 MB.
- g.) Bidders are required to ensure that their email I.D. provided is valid and updated at the stage of registration of vendor. Bidders are also requested to ensure validity of their DSC (Digital Signature Certificate).
- h.) Please note that there is no provision to take out the list of parties who are downloading the Tender document from the web site mentioned in NIT. As such, bidders are requested to see the web site once again before the due date of tender opening to ensure that they have not missed any corrigendum uploaded against the said tender after downloading the tender document. **The responsibility of downloading the related corrigenda, if any, will be that of the bidders.**
- i.) No separate intimation in respect of corrigendum to this NIT (if any) will be sent to bidders who have downloaded the documents from web site. Please see website <https://www.mstcecommerce.com/eprochome/nmdc> of MSTC Ltd. or www.nmdc.co.in of NMDC Ltd
- j.) E-tender cannot be accessed after the due date and time mentioned in NIT.
- k.) In all cases, bidders should use their own ID and Password along with Digital Signature at the time of submission of their bid.
- l.) During the entire e-tender process, the bidders will remain completely anonymous to one another and also to everybody else.
- m.) The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned.
- n.) All electronic bids submitted during the e-tender process shall be legally binding on the bidders. Any bid will be considered as the valid bid offered by that bidder and acceptance of the same by N M D C Ltd will form a binding contract between NMDC Ltd and the Bidder for execution of work. Such successful bidder shall be called hereafter **Contractor**.
- o.) It is mandatory that all the bids are submitted with digital signature certificate otherwise the same will not be accepted by the system.
- p.) NMDC Ltd reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof.
- q.) No deviation in the terms and conditions of the tender document is acceptable. Submission of bid in the e-tender floor by any bidder confirms his acceptance of terms & conditions of the tender.
- r.) Unit of Measure (UOM) is indicated in the e-tender Floor. Rate to be quoted as per UOM/currency indicated in the e-tender floor/tender document.

In case of any clarification, please contact MSTC Limited (before the scheduled time of the e- tender).

<p>Contact Persons at MSTC Ltd.</p>	<p><u>Shri. Krishna Kanth.</u> Email : krishna366377@gmail.com Mobile : +91 8333036366</p>	<p><u>Shri. Dhananjay Kumar</u> Email: dkumar@mstcindia.co.in Landline No: 040-23301049 Mobile : 9650554645</p>
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General Notes:

- 1) Bids for the subject work have been invited in 2 bid system as mentioned in NIT viz. (a). Part-I consisting of Bid Security Declaration (BSD), Letter of Undertaking, Integrity Pact, Pre-qualification data, techno-commercial bid and dummy price schedule & Part-II consisting of Price Bid.
- 2) In case of any clarification, please contact NMDC/MSTC Limited (well before the scheduled time of e-tender).
- 3) Part II (Price bid) will be opened electronically of only those bidder(s) whose Part I of the Bid are found to be acceptable to NMDC Ltd. Such bidder(s) will be intimated about the date of opening of Part II Price Bids by NMDC, through valid email confirmed by them.
- 4) Any order resulting from this e-tender shall be governed by the terms and conditions mentioned therein as well as in the tender document.
- 5) The bidders must upload all the documents required as per terms of NIT. Any other Document uploaded which is not required as per the terms of the NIT shall not be considered.
- 6) The bid will be evaluated based on the filled-in techno-commercial formats and considering the evaluation criteria as per tender document.
- 7) The documents uploaded by bidder(s) will be scrutinized. In case any of the information furnished by the bidder is found to be false during scrutiny, Punitive action including suspension and banning of business will be taken against defaulting bidders.
- 8) NMDC has the right to cancel this e-tender or extend the due date of receipt of bids without assigning any reason thereof.
- 9) The online tender should be submitted strictly as per the terms and conditions and procedures laid down in the MSTC website as described above.
- 10) Necessary addendum/ corrigendum (if any) of tender would be hosted only in the e-tendering portal of M.S.T.C. and any other website (s) (viz. NMDC/ CPP Portal) as may be mentioned in the tender document.
- 11) Any other condition regarding receipt of tender in conventional method appearing in the tender document may please be treated as not applicable, except for specific requirements, if any mentioned in the tender document.
- 12) The bidders should upload the documents duly signing each and every page.
- 13) It should be the responsibility of the bidder to ensure that scanned copies of the uploaded documents on the e- tender platform are legible.
- 14) The bidders are advised to submit their bids well in advance so as to avoid last minute technical issues and consequent lapse of time, even though every care is taken to avoid such issues.



(To be Submitted on Bidder's Letter Head)

INTEGRITY PACT

Between

NMDC Limited hereinafter referred to as "The Principal"/ Employer

and

_____ hereinafter referred to as "The Bidder / Contractor"

Preamble

The Principal intends to award, under laid –down organizational procedures, contract/s for (*Name of the Work*). The Principal values full compliance with all relevant laws and regulations, and the principles of economical use of resources, and of fairness and transparency in its relation with its Bidder/s and /or Contractor/s.

In order to achieve these goals, the Principal Cooperates with the renowned international Non-Governmental Organization "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an external independent Monitor who will monitor the tender process from the beginning till execution of the contract for compliance with the principles mentioned HEREIN.

Section 1- Commitments of the Principal.

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-



- I. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract demand, take a promise for or accept, for him/herself or third person, any material benefit which he/she is not legally entitled to.
 - II. The Principal will, during the tender process treat all Bidders with equity and reason. The principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.
 - III. The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary action.

SECTION – 2 Commitments of the Bidder/Contractor

- (1) The Bidder / Contractor commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - I. The Bidder / Contractor will not, directly or through any other person or firm, offer, promise or give to the Principal, to any of the Principal's employee involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange an advantage during the tender process or the execution of the contract.
 - II. The Bidder / Contractor will not enter with other Bidders into any illegal agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or action to restrict competitiveness.
 - III. The Bidder / Contractor will not commit any criminal offence under the relevant Anti-corruption Laws of India, further the Bidder/Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the Principal as part of the business



relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

- IV. The Bidder/Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder / Contractor will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (3) *The Bidder / Contractor may indicate the advantage of his offer compared to the tender terms and conditions. The Bidder / Contractor shall not make any commitment whatsoever on the offers / products of other bidder(s) thereby influencing the principal to take decision of the former.*

Section 3 – Disqualification from tender process and exclusion from future contract

1. If the Bidder, before contract award, has committed a serious transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.
2. If the Bidder/Contractor has committed a serious transgression through a violation of section – 2 such as to put his reliability or credibility into question, the principal is entitled also to exclude the Bidder / Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors with the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
3. If the Bidder / Contractor can prove that he has restored/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.
4. A transgression is considered to have occurred if in light of available evidence no reasonable doubt is possible.



Section 4 – Forfeiture of Security Deposit

- (1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to take action as per the Bid Security Declaration.
- (2) If the Principal has terminated the contract according to section – 3, or if the Principal is entitled to terminate the contract according to section – 3, the principal shall be entitled to forfeit *the* Security Deposit / take action as per the Bid Security Declaration.

Section 5 – Previous Transgression

- (1) The Bidder declares that no previous transgression occurred in the last three years with any other company in any country confirming to the TI approach or with any other Public Sector Enterprise in India that could justify its exclusion from the tender process.
- (2) If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 – Equal treatment of all bidders/contractors/sub-contractors.

- (1) The bidder/contractor undertakes to demand from all sub-contractors the commitment consistent with this integrity pact, and to submit it to the Principal before contract signing.
- (2) The principal will enter into agreement with identical conditions as this one with all bidders, contractors and sub contractors.
- (3) The principal will disqualify from the tender process all bidders who do not sign *this pact and submit it to the Principal along with the offer.*

Section 7 – Criminal charges violating Bidders/Contractors/Sub-Contractors



If the principal obtains knowledge of conduct of a Bidders/Contractors/Sub-Contractors, or of an employee or a representative or an associate of a Bidders/Contractors/Sub-Contractors which constitutes corruption, or if the principal has substantive suspicion in this regard, the principal will inform the vigilance office.

Section 8 – External Independent Monitor(s)

- (1) The principal appoints competent and credible external independent Monitor for this Pact. The task of the monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairman of the Board of the Principal.
- (3) The Monitor has the right of access without restriction to all Projects documentation of the Principal. The Contractor will also grant the monitor, upon his request and demonstration of a valid interest, unlimited access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor with confidentiality.
- (4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (6) The Monitor will regularly submit a written report to the Chairman of the Board of the Principal and, should the occasion arise, submit proposals for correcting problematic situations.



(7) If the Monitor has reported to the Chairman of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairman has not, with reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

Section 9 – Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract, and for all other Bidder's 6 months after the contract has been awarded.

Section 10 – Other Provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Corporate Office of the Principal.

- (2) Changes and supplements as well as termination notices need to be made in writing: Side agreements have not been made.

- (3) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

For the Principal

For the Bidder/Contractor

Place _____

Witness 1 : _____

Date _____

Witness 2: _____



ANNEXURE - 11

DETAILS OF TURNOVER

Sl. No	Period	Turn over (in Rs.)	Remarks
1	FY 2017-18		
2	FY 2018-19		
3	FY 2019-20		
4	Average Annual Financial Turnover for the preceding three (3) completed financial years as on date of opening of Tenders		

Signature of the tenderer with date and seal



Annexure - 12

(To be issued by Banker of the bidder)

Pro-forma for Solvency Certificate

To the best of our knowledge and information, M/s..... a customer of our bank, is a known company and may be regarded as good up to a sum of Rs.(INR) as on (cutoff date)

Or

Pro-forma for Line of Credit

The Company has sanctioned credit limit of Rs.(INR) from our bank out of which unutilized balance as on (cutoff date) is Rs. (INR).

This certificate is issued at the request of M/s

Yours faithfully

()

Name, authorized designation and seal

Name of the bank



Annexure - 13

CHECK LIST FOR SUBMISSION OF BID

Tender No. :

Bidder's Ref. No. :

Name of Facilities :

Sl. No.	Details of document	Refer ITT Clause No.	(Uploaded / Not uploaded) If not, give reasons
Part-I			
1	Bid Security Declaration as per Annexure - 1	8.1.1	
2	Letter of Undertaking as per Annexure - 2	8.1.2	
3	Integrity Pact as per Annexure - 10	8.1.3	
4	Information about the bidder - Constitution or legal status of Bidder as per Annexure – 3.	8.1.4	
5	Power of Attorney of the person submitting the Bid	8.1.5	
6	Documents meeting Eligibility Criteria as per Annexure - 4	8.1.7	
7	Turnover as per Annexure-11 along with supporting documents	8.1.8	
8	Original Solvency certificate/ Line of credit of stipulated value	8.1.9	
9	No Default Certificate	8.1.10	
10	Deviations, if any or NIL statement, Annex-5	8.1.13	
11	Copy of PAN Number	8.1.15	
12	Copy of PF Registration Number	8.1.16	
13	Copy of GSTIN Number	8.1.17	



Sl. No.	Details of document	Refer ITT Clause No.	(Uploaded / Not uploaded) If not, give reasons
14	Bank Account Details	8.1.18	
15	Organization set-up at site (Annexure-6)	8.1.19	
16	Time Schedule in the form of Barchart	8.1.20	
17	List of Plant & Machinery to be mobilized at site	8.1.21	
18	Dummy Price Bid	8.1.22	
19	Valid 'A' Class Electrical Contractor Licence or Undertaking.	8.1.23	
20	Details of Works in Hand, as per Annexure-8	8.1.24	
21	Amendments / addenda/ Corrigenda etc., if any	8.1.25	
22	Declaration by the bidder in his letter head that the firm is not blacklisted by any PSU/Govt body.	8.1.26	
23	Bidder must declare whether the Proprietor or any Partner of the firm or Director of their Company as the case may be, has any relation with any employee working in NMDC	8.1.27	
24	Declaration on Local Content (Annexure-15)	8.1.28	
25	Self-Certification regarding, compliance as per Rule 144 (xi) of the General Financial Rules (GFRS), 2017- as per 'Annexure-16' of ITT.	8.1.29	
26	Check List (Annexure-13)	8.1.30	
27	Site visit/ Site survey certificate, issued by NMDC site in-charge (Refer Cl. No. 24.0 of 'Scope of work and Technical Specifications – Annexure-II of Tender Document Vol-II)		
28	Filled-in questionnaire- Technical (Refer Annexure-IV of 'Scope of work and Technical Specifications of Vol-II)		



Sl. No.	Details of document	Refer ITT Clause No.	(Uploaded / Not uploaded) If not, give reasons
29	Others, if any (Bidder to specify)	8.1.31	
Part-II			
30	Price Bid (Duly Filled)	8.2	



NMDC Policy on Banning of Business Dealings with Agencies

NMDC has introduced NMDC Policy on Banning of Business Dealings with Agencies, which covers both suspension and banning of business dealings with the Agency that commits fraud and/or transgression in the dealings with NMDC. The Policy is on the NMDC website, www.nmdc.co.in

The Grounds for Banning of Business Dealings and the Banning Period as per the Policy are given below:

GROUND FOR BANNING BUSINESS DEALINGS

For the sake of clarity, the grounds on which banning of business dealings can be considered are given below. These are only illustrative, not exhaustive. The Competent Authority may decide to ban Business Dealings with an Agency for any good and sufficient reason.

- a) Security considerations, including questions of loyalty of the Agency to the State
- b) Conviction of the Director / owner / proprietor / partner of the Agency by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or NMDC during the last five years.
- c) Evidence / strong justification for believing that the Director / owner / proprietor / partner of the Agency has / have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolation in tenders, etc.
- d) The Agency's continuous refusal to return / refund the dues to NMDC without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in arbitration or Court of Law.
- e) The Agency employs an employee who was dismissed removed by NMDC for an offence involving corruption or abetment of such an offence.
- f) The banning of business dealings with the Agency by the Government or any other public sector enterprise.



- g) The Agency restored to corrupt or fraudulent practices that may include misrepresentation of facts and / or fudging / forging / tampering of documents
- h) The Agency used intimidation / threatening or brings undue outside pressure on NMDC / its official in relation to a Business Dealing.
- i) The Agency resorts to repeated and / or deliberate use of delay tactics in complying with contractual stipulations.
- j) Willful act of the Agency to supply sub-standard material irrespective of whether pre-dispatch inspection was carried out by NMDC or not
- k) The findings of CBI / Police about the Agency's involvement in fraud and / or transgressions in relation to the Business Dealings with NMDC
- l) Established litigant nature of the Agency to derive undue benefit'
- m) Continued poor performance of the Agency in at least three preceding contracts with NMDC
- n) The Agency misuses the premises or facilities of NMDC and / or forcefully occupies tampers or damages NMDC's properties including land, water resources, forests / trees, etc.
- o) False allegation on NMDC officials by the Agency if found proved by the Investigating Department including Independent External Monitor.

BANNING PERIOD

The Banning Period may range from six months to three years depending on the gravity of the case as decided by the Competent Authority. While deciding the Banning Period, the Suspension Period, if any, shall also be taken into account.



DECLARATION ON LOCAL CONTENT

I/We have read the provisions of Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017, 28.05.2018, 29.05.2019, 04.06.2020, 16.09.2020 and subsequent orders/revisions/amendments issued by the respective odal Ministry. In terms of the requirement of the aforesaid provisions, I/We hereby declare the following:

I/We confirm that, I/We am/are a Class-I Local Supplier / Class-II Local Supplier, and the local content included in the Package Work is% of our total offered price for complete scope of work for **Tender Enquiry No.: HO(Contracts)/Automation/SP-I/KDL/2020/236 Dt. 26/03/2021.**

1. Further, I/We hereby confirm the following:

Whether the bidder is presently debarred / banned by any other procuring entity for violation of 'Public Procurement (Preference to Make in India), Order 2017' (PPP-MII Order) dated 15.06.2017 issued by Department of Industrial Policy and Promotion (DIPP) and its subsequent orders/amendments/revisions.	YES / NO
---	----------

2. I/We agree to furnish any information as a proof of the above as and when required.

Date

Signature of the tenderer

Place

Seal.....

Note: in case of procurement for a value in excess of Rs. 10 Crores, certificate from statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant giving percentage of the local content shall be submitted by the bidder.



Restrictions under Rule 144 (XI) of the General Financial Rules (GFRS), 2017

Rule 144 of the General Financial Rules 2017 entitled 'Fundamental principles of public buying', has been amended by inserting sub-rule (xi) as under: Notwithstanding anything contained in these Rules, Department of Expenditure may, by order in writing, impose restrictions, including prior registration and/or screening, on procurement from bidders from a country or countries, or a class of countries, on grounds of defence of India, or matters directly or indirectly related thereto including national security; no procurement shall be made in violation of such restrictions.

For this Tender, Public Procurement No.1 dated 23.07.2020, Public Procurement No.2 dated 23.07.2020 & Public Procurement No.3 dated 24.07.2020 issued by Department of Expenditure, Public Procurement Division and subsequent orders issued by the Nodal Ministry shall be applicable even if issued after issue of the NIT but before finalization of contract/ PO/WO against this NIT. Tenderers are requested to go through the above mentioned order. The following requirements need to be met by the bidder for participating in the tender.

i. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. However the above mentioned circular - Public Procurement No.1 dated 23.07.2020 issued by Department of Expenditure, Public Procurement Division will not apply to bidders from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects as per circular no F.No.S/18/2019-PPD, Order (Public Procurement No. 2) dated 23-072020 , issued by Department of Expenditure, Public Procurement Division.

ii. "Bidder" (including the term 'tenderer', 'consultant', 'vendor' or 'service provider', 'Know-how supplier', 'Technology provider', 'Licensor' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

iii. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -

a. An entity incorporated, established or registered in such a country; or b. A subsidiary of an entity incorporated, established or registered in such a country; or c. An entity substantially controlled through entities incorporated, established or registered in such a country; or d. An entity whose beneficial owner is situated in such a country; or e. An Indian (or other) agent of such an entity; or f. A natural person who is a citizen of such a country; or g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

The beneficial owner for the purpose of (iii) above will be as under:



1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation

- a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five percent of shares or capital or profits of the company;
 - b. "Control" shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
 - i. "Agent" for the purpose of this Order is a person employed to do any act for another, or to represent another in dealings with third persons.
 - ii. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.



ANNEXURE-16

CERTIFICATE REGARDING COMPLIANCE

I have read the Order (Public Procurement No.1) dated 23.07.2020 issued by Department of Expenditure, Public Procurement Division and subsequent orders issued by the Nodal Ministry. In terms of the requirement of the aforesaid order, we hereby certify that:

a) I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country **OR**, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Copy of valid registration by the Competent Authority shall be attached.]

b) I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on subcontracting to contractors from such countries; I hereby certify that this bidder is not from such a country **OR**, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfils all the requirements in this regard and is eligible to be considered. [Copy of valid registration by the Competent Authority shall be attached.]

Yours truly,

Date

Signature:

Place

Name:

Designation:

Name of Bidder:

Seal.....

Note:

1. The above certificate given by a bidder whose bid is accepted, if found to be false, this would be a ground for immediate termination and further legal action in accordance with law.
2. **Please strike out whichever is not applicable.**



SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract [SCC] shall supplement the General Conditions of Contract [GCC]. Whenever there is a conflict, the provisions herein shall prevail over those in the GCC. The corresponding clause number of the GCC is indicated in parentheses.

1. Definitions [GCC Clause 1]

1.1 Employer

NMDC Limited,
10-3-311/A, Khanij Bhavan,
Castle Hills, Masab Tank,
Hyderabad - 500028, INDIA
FAX : +91-40-2353-4746 / 2353-1828

1.2 Executing Authority:

The executing authority for the work shall be as per the following:

Head of the Project,
NMDC Limited, BIOM Kirandul Complex
PO: Kirandul, Dist: South Bastar Dantewada, Chhattisgarh-494556
Phone No. 07857-255222, Fax No. 07857-255227
E-mail: rgovindarajan@nmdc.co.in

1.3 Paying Authority:

The paying authority for the work shall be as per the following:

Head of Finance Department,
NMDC Limited, BIOM Kirandul Complex
PO: Kirandul, Dist: South Bastar Dantewada, Chhattisgarh-494556

1.4 Contractor



Name:

Address:

Telephone No.

e-mail

Facsimile No.

1.5 Consultant

Not Applicable for this work.

2.0 Notices [GCC Clause 46]

2.1 Employer's Address for Notice purposes [Reference GCC Clause 46]

Refer SCC 1.1 for details as given herein above.

2.2 Contractor's Address for Notice purposes [Reference GCC Clause 46]

M/s. [Name and address]

Telephone No.

Facsimile No.

E-mail:

3.0 Transportation by Wagons [Reference GCC Clause 21.4.2]

The consignee for rail dispatches shall be clearly marked as below:

Refer SCC 1.1 for details as given herein above.

4.0 Transportation by Roads [Reference GCC Clause 21.4.3]

The consignee for road dispatches shall be clearly marked as below:

Refer SCC 1.1 for details as given herein above.

5.0 The surrounding value for insurance purpose (Refer GCC 36.1.11)



The surrounding value for insurance purpose shall be considered as NIL.

- 6.0 Liquidated Damages: [Clause No. 29.2 to 29.5 & 27.4 of GCC shall be read as following] [Ref: Article- 8 of Form of Contract Agreement (FOCA)]**
- 6.1 Liquidated Damages due to Delay in Completion of the Facilities (for main contract) [Ref: GCC Clause No. 29.2 & Article- 8.1 of FOCA]:**
- 6.1.1 Time is an important factor of the contract. It shall be the responsibility of the Contractor to complete the work within the stipulated period of completion.
- 6.1.2 In case of delay in completion of the contract for reasons attributable to the contractor, liquidated damages may be levied at the **rate of half percent (½ %)** of the contract price (*excluding the 5 years CAMC price*) per week of delay, subject to a **maximum of 10%** of the contract price (*excluding the 5 years CAMC price*).
- 6.1.3(i) The OWNER, if satisfied, that the works can be completed by the CONTRACTOR within a reasonable time after the specified time for completion, may allow further extension of time at its discretion with or without the levy of Liquidated Damages. In the event of extension granted being with Liquidated Damages, the OWNER will be entitled without prejudice to any other right or remedy available in that behalf, to recover from the contractor as agreed damages equivalent to half percent (½ %) of the contract value of the works (*excluding the 5 years CAMC price*) for each week or part of the week subject to the ceiling defined in sub-clause 6.1.2.
- 6.1.3(ii) The OWNER, if satisfied that the works cannot be completed by the CONTRACTOR within the contract period/ extended period of contract or in the event of failure on the part of the CONTRACTOR to complete the work within the contract period/ extended period of contract, shall be entitled, without prejudice to any other right, or remedy available in that behalf, to terminate the contract.
- 6.1.3 (iii) The OWNER if not satisfied with the progress of the contract and / or in the event of failure of the CONTRACTOR to recoup the delays in the mutually agreed time frame, shall be entitled to terminate the contract.
- 6.1.3 (iv) In the event of such termination of the contract as described in clauses 6.1.3(ii) or 6.1.3(iii) or both, the OWNER shall be entitled to recover Liquidated Damages up to **Ten Percent (10%)** of the contract value (*excluding the 5 years CAMC price*) and get the work completed by other agency(ies) / means at the risk and cost of the CONTRACTOR. The Security Deposit (Contract Performance Guarantee amount) will then be forfeited and adjusted against such claims / dues from the contractor.



- 6.1.3 (v) In case the CONTRACTOR fails to complete the work (*i.e. Supply, Erection, Testing, Pre-Commissioning, Preliminary Acceptance & issuance of PAC and upto Commissioning cum Final Acceptance & issuance of FAC*) successfully within the period of completion for reasons attributable to the contractor, he shall be liable to pay to the OWNER, as liquidated damages and not as a penalty, a sum at the rate of **½ % (half percent)** of the total contract value of the work (as awarded) (*excluding the 5 years CAMC price*) for every week or part thereof which shall be elapsed between the schedule time of completion of work and the actual date of completion of work.
- 6.1.3 (vi) PROVIDED always that the total amount of such liquidated damages for delay to be paid under this condition shall not exceed **10% (Ten percent)** of the total contract value, as awarded (*excluding the 5 years CAMC price*).

6.2 Liquidated Damages for Non-Availability during Guarantee Period (for main contract):

The equipment availability shall be **7884 Hrs. (90%)** for every year for 24X7 operation of the entire 4 x 25 KW Grid Interactive Solar Power Plant of BIOM Kirandul Complex during the guarantee period. In case of non-performance of the entire system/part thereof, rendering its availability below 7884 Hrs. during an year (*for reasons attributable to the contractor*), LD @1% of total contract value (*excluding the 5 years CAMC price*) will be levied for every 24 Hrs. or part thereof of the non-availability / breakdown period, subject to a maximum of 10% of the total contract value(*excluding the 5 years CAMC price*), as awarded.

6.3 Liquidated Damages for delay in completion and Liquidated Damages for non-availability during guarantee period (for main contract):

Liquidated Damages for delay in completion and Liquidated Damages for non-availability during guarantee period as mentioned in Clause 6.1 and 6.2 are independent of each other and are applicable separately and concurrently subject to total maximum limit of **15 (Fifteen) %** of the total contract value (*excluding the 5 years CAMC price*).

- 6.4 The OWNER may, without prejudice to any other method of recovery, deduct the amount of such damages and penalties from any money in hands, due, or which may become due, to the CONTRACTOR under the contract or any other contract between the CONTRACTOR and the OWNER. The payment or deductions of such damages and penalties shall not relieve the CONTRACTOR of his obligation to complete the works or from any other of his obligations and liabilities under the contract.



- 6.5 In addition to the above, the OWNER shall be free to cancel the contract or a portion thereof and get the balance works executed through other agency or agencies at the risk and cost of the CONTRACTOR. In the event such action is taken, the CONTRACTOR shall be liable to pay the owner for any loss, which the OWNER may sustain but he will not be entitled to any gain of such action made against default. The manner and method of such contract shall be at the entire discretion of the OWNER whose decision shall be final and binding. This right shall be without breach/without prejudice to the other rights of the OWNER to recover damages for breach of contract by the CONTRACTOR.

Note(s):

1. For specific provisions relating to LD / Penalty during the CAMC period, the relevant section of tender document viz. Vol-II (*Scope of Work and Technical Specifications*) of tender document may be referred. [Ref. Sl. 20 of General conditions for AMC under Cl. 34.0 (CAMC-05 years), Vol-II (*Scope of Work and Technical Specifications*)]
2. Liquidated damages shall be levied against suppliers / contractors in case of delay in supply of materials / execution of contract beyond the date of delivery / completion of job specified in purchase order /contract, for reasons attributable to the supplier / contractor.

The levy of LD shall be on the final executed value / amended value, including escalations (excluding taxes) as applicable, of the contract including additions to scope by way of interim approvals. However, LD shall not be levied on amount paid under amicable settlement, conciliation and arbitral awards settled after completion of work

Imposition of LD shall be based on recommendations, subject to approval of Competent Authority of NMDC Ltd.

- 8.0 Terms of Payment: The terms of payment shall be as per Appendix-3 to Form of Contract Agreement (FOCA) & GCC Clause No. 12.**

- 9.0 Price Adjustment due to Variation in Price Indices:**

The Price Adjustment due to Variation in Price Indices if any, shall be dealt in line with GCC Clause No. 11.3 to 11.5 & Appendix-4 to Form of Contract Agreement (FOCA). If completion period is within 12 months, Price Variation will not be applicable.

- 10.0 COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (CAMC):**

- 10.1 The Comprehensive Annual Maintenance Contract (CAMC) will be for a period of 5 years after expiry of the guarantee/warranty period for two years. The AMC is comprehensive in nature and includes supply, E&C of all spares required for the operation of the system.



10.2 NMDC will not maintain or procure any spares during the above mentioned 5 years AMC period. The successful tenderer, six months before the completion of the AMC period, shall submit an analysis report of field failures of equipment during the guarantee and AMC period (YOY basis).

10.3 **GENERAL CONDITIONS FOR COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT:**

This shall be as per Clause no. 34.0 of the Technical Specifications (Vol-II) of the tender document.

11.0 **Penalties during CAMC Period:**

11.1 **Penalty for Normal Visit:** - Non-deployment of sufficient man power for Normal Visit during AMC period in a particular year will attract penalty @1 % of AMC value for such shortfall in visit.

11.2 **Penalty for Breakdown Calls:** - Non-deployment of sufficient manpower for breakdown calls beyond 72 hours of breakdown will attract a penalty @½ % of total AMC value for breakdown period of every 24 Hrs. or Part thereof.

The maximum penalty in above two cases is limited to 10% of total AMC value.

11.3 **PENALTY FOR NON- AVAILABILITY DURING CAMC PERIOD:**

11.3.1 The equipment / system availability shall be 7884 hours (90%) for entire year YoY for 24 x 7 operation of Solar Plant of Kirandul Complex during the AMC period. For performance of the System below 7884 hrs, a penalty of 1 % of total contract value of AMC shall be levied for non-performance of every 24 hours or part thereof subject to a maximum of 10% of the total AMC price.

11.4 Maximum liability on account of penalty for non-availability during AMC period and penalty for non-deployment of sufficient man power during the AMC period are independent of each other and are applicable separately and concurrently subject to total maximum limit of 10% (Ten percent) of the total AMC Value.



FORM OF CONTRACT AGREEMENT (FOCA)

THIS CONTRACT No. made this Day of Two thousand at

BETWEEN

NMDC LIMITED, a Company incorporated under the Companies Act, 1956 and having its registered office at, India,at (hereinafter referred to as the "**Employer**") which term or expression unless excluded by or repugnant to the context or the meaning thereof, shall be deemed to include its successors and permitted assigns, **OF THE ONE PART**,

AND

M/s., a Company organised and existing under the laws of (*Name of the Country*) and having its Registered Office at (hereinafter referred to as "**Contractor**"), which term or expression unless excluded by or repugnant to the context or meaning thereof, shall be deemed to include its successors and permitted assigns, **OF THE OTHER PART**

AND WHEREAS

- a) The Employer has decided to set-up _____ (*Name of the Facilities*) at _____, (hereinafter referred to as the "**Facilities**"), and
- b) The Contractor has declared that the Contractor has valuable and specialized knowledge and expertise for providing and executing the above Facilities and
- c) The Contractor has declared that the Contractor is in a position to disclose, impart, deliver and transfer the requisite engineering data, drawings and documents of those items which are in the scope of the Contractor in this Contract, to the Employer for the engineering of the Facilities and for erection, start-up, commissioning of the Facilities, contract guarantee & CAMC with the aim to manufacture product as specified in the Contract, and
- d) The Contractor has obtained clarifications on technical and commercial aspects, inspected the site and surroundings of Facilities and has examined and considered all other matters, conditions and things, probable contingencies and generally all matters incidental thereto and ancillary thereof, affecting the execution and completion of the Facilities, and
- e) The Contractor has agreed to undertake design & engineering, civil engineering work, structures & equipment, fabrication & supply of steel structures, manufacture & supply of electrical and mechanical plant & equipment, intermediate storage, insurance & handling, erection work, testing, pre-commissioning, start-up & commissioning and demonstration & establishment of performance guarantee parameters of the Facilities.



NOW IT IS HEREBY AGREED as follows:

Article 1 Contract Documents

1.1 **Définitions** (Reference GCC Clause 1)

1.2 **Contract Documents** (Reference GCC Clause 2)

1.2.1 The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read and construed as an integral part of the Contract:

- (a) This Contract Agreement and Appendices hereto
- (b) Special Conditions of Contract hereto
- (c) General Conditions of Contract and Annexures hereto
- (d) Safety code for Contractors
- (e) Integrity Pact, if applicable
- (f) Technical Specifications
- (h) Any other documents

1.2.2 The contract document shall be in two parts as follows:

- (i) **Technical** containing
 - (a) Technical Specifications
 - (b) Any other documents to be agreed upon
- (ii) **Commercial** containing
 - (a) This Contract Agreement and Appendices hereto
 - (b) Special Conditions of Contract hereto
 - (c) General Conditions of Contract and Annexures hereto
 - (d) Safety code for Contractors
 - (e) Integrity Pact, if applicable
 - (f) Any other documents to be agreed upon

1.3 **Order of Precedence** (Reference GCC Clause 2)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed below **(i.e. SCC will prevail over GCC and TS will prevail over GTS, if any):**



- a. This Contract Agreement and Appendices hereto
- b. Special Conditions of Contract hereto
- c. General Conditions of Contract and Annexures hereto
- d. Technical Specifications

Article 2 Contract Price and Terms of Payment

2.1 Contract Price (Reference GCC Clause 11 & Appendix-1)

The Employer hereby agrees to pay to the Contractor the Contract Price in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price shall be [*amount in figures*], and [*amount of in words*].

2.2 Terms of Payment (Reference Appendix-3)

The terms of payment are given in Appendix-3.

2.3 Price Adjustment due to Variation in Price Indices

Price Adjustment applicable if any, shall be dealt in line with GCC Clause No. 11.3 to 11.5 & Appendix-4 to Form of Contract Agreement (FOCA).

Article 3 Effective Date

3.1 The Effective Date of Contract shall be counted from the date of 30th day of issue of the Letter of Award of Contract (LAC)/LOI.

Article 4 Scope of Facilities (Reference GCC Clause 7 & Technical Specifications)

4.1 The Contract is for the execution of Scope of Facilities as specified in the GCC Clause 7.0 and Technical Specifications, on divisible turnkey basis. The quantities/ weights of any item are indicative only for the purpose of making progress payments on pro-rata basis of Appendix-3.

4.2 Should the actual quantities/ weights differ from the indicated ones, neither the Contractor shall be entitled to get any additional price from the Employer nor is the Employer entitled to deduct any amount from the Contract Price due to variation in physical quantities / weight.

4.3 Void.



Article 5 Time for Completion (Reference GCC Clause 8 & Appendix-2)

5.1 The Facilities will be commissioned in **five months** from the Effective Date of the Contract.

*“The Performance Bank Guarantee (BG) shall be submitted by the contractor **within 30 days of issue of the Letter of Award of Contract (LAC)**”.*

Article 6 Consultant – Not applicable for this work.

Article 7 Subcontracting (Reference GCC Clause 19)

7.1 This shall be as per GCC Clause No. 19.

Article 8 Liquidated Damages (Reference GCC Clause 27 & 29)

8.1 This shall be as per SCC Clause No. 6.0.

Article 9 Arbitration (Reference GCC Clause No. 6)

Article 10 Liability of Govt. of India

10.1 It is expressly understood and agreed between the Contractor and the Employer that the Employer is entering into this Contract solely on its own behalf and not on behalf of any other person or entity. In particular, it is expressly understood and agreed that the Govt. of India is not a party to this Contract and has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that the Employer is an independent legal entity with power and authority to enter into Contracts solely on its own behalf under the applicable laws of India and general principles of Contract Law. The Contractor expressly agrees, acknowledges and understands that the Employer is not an agent, representative or delegate of the Govt. of India. It is further understood and agreed that the Govt. of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the Contract. Accordingly, the Contractor hereby, expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Govt. of India arising out of



this Contract and covenants not to sue the Govt. of India as to any manner, claim, cause of action or thing whatsoever arising of or under this Contract.

Article 11 Appendix

11.1 The following Appendices shall be deemed to form an integral part of this Contract Agreement. Reference in the Contract to any Appendix shall mean the Appendices attached hereto, and the Contract shall be read and construed accordingly;

- 1 Price Schedule
- 2 Time Schedule
- 3 Terms of Payment
- 4 Price Adjustment due to Variation in Price Indices
- 5 Performance Guarantees

Article 12. No modifications of this Contract including Appendices hereto, shall be valid unless the same is agreed to in writing by the parties and specifically mentioned as an amendment to the Contract.

Article 13 This Contract is signed in English language in two (2) originals, the Employer receiving one duly signed original and the Contractor receiving one duly signed original. Both the originals are authentic.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by for and on behalf of the Contractor

Signed by for and on behalf of the Employer

[Signature]

[Signature]



[Designation]

[Designation]

In the presence of

In the presence of

1)

1)

[Signature]

[Signature]

[Designation]

[Designation]

2)

2)

[Signature]

[Signature]

[Designation]

[Designation]

3)

3)



[Signature]

[Signature]

[Designation]

[Designation]



APPENDIX – 1

(Volume-III - PRICE SCHEDULE)



(A) Dummy Price-Bid:

Bidders are advised to submit a copy of this Price Schedule, without quoting the price, but indicating, “Quoted”/ “Not Quoted” (as the case may be), duly signed and stamped, along with the Part-I of the offer. However, bidders have to indicate the percentage rates of the taxes considered in the price bid.

(B) Price-Bid:

Price must be filled exactly in the format of Price Schedule. If quoted in separately typed sheets and any variation in Item description, Unit, Quantity, any conditions etc., is noticed, the price bid is liable for rejection.

PRICE SCHEDULE

Name of work: "Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years"

1. Contract Price	1.1	The Contract Price for the entire Scope of Facilities including all the contractual obligations of the Contractor together with its Sub-Contractor / Vendors, is indicated in the Article-2 of the Contract.	
		Bidder shall consider SRNPP in their quote as per clause no. 22.3.6 of GCC.	
2. Contract Price Break up	2.1	The break-up of the Contract Price is indicated in the Summary Price Schedule and detailed break-up of Summary Prices is given in the following Tables, hereafter.	
		<u>Table</u>	<u>Descriptions</u>
		1A	Summary Price Schedule
		2A	Price Schedule for Design, Engineering & Supplies for Main Turnkey Contract
		3A	Price Schedule for Erection, Testing, Commissioning etc. [Services] of Main Turnkey Contract
		4A	Price Schedule for Comprehensive Annual Maintenance Contract for 5 years after the guarantee period.

Signature of authorised signatory
(Official seal of Company)

Table -1A

SUMMARY PRICE SCHEDULE		
Name of work: "Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years"		
Sl. No.	Description	Supplies & Services including all duties and taxes at base date (In Rs)
1	Design, Engineering & Supplies for Main Turnkey Contract (Refer - Table 2A)	
2	Erection, Testing, Commissioning etc. [Services] for Main Turnkey Contract (Refer - Table 3A)	
3	Comprehensive Annual Maintenance Contract for 5 years after the guarantee period (Refer -Table 4A)	
4	Total Contract Price (1 to 3)	
Total in words (Sl. No. 4): Rupees :		

Note

1	Bidders to quote in summary price schedule based on which evaluation will be done and bidders shall also submit price break-up in tables 2A, 3A & 4A along with the Price Bid.
2	In case of arithmetic error in totaling, corrected arithmetic total will be considered.
3	In case of discrepancy between words and figures, words will be considered. In case of discrepancy between figures and/ or arithmetic error in totaling, corrected arithmetic total will be considered.
4	Remarks / Footnotes / Comments furnished in un-priced bids will prevail, if any discrepancy is found in furnishing any Remarks / Footnotes / Comments between un-priced bids and priced bids.
5	Taxes & Duties will be applicable as per GCC Clause.

								TABLE - 2A	
Name of work: "Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years"									
PRICE SCHEDULE FOR - DESIGN, ENGINEERING & SUPPLIES OF MAIN TURNKEY CONTRACT [on lump sum turnkey basis as per Annexure-III (Indicative BOQ) given in Vol-II of tender document and detailed Scope of work & specifications]									
Sl No.	Description of Item	Unit	Qty	(PRICE IN Rs)					
				Unit Rate [ie., all inclusive Basic Price including all costs and taxes & duties, except GST]	Total Basic Amount [ie., all inclusive Basic amount including all costs and taxes & duties, except GST]	Rate of GST [CGST+SGST/UTGST, IGST] as applicable (%)	GST Amount (CGST+SGST/UTGST, IGST) as applicable	TOTAL PRICE including all taxes, duties, levies, cess and GST amount	
a.	b	c	d	e	f=d*e	g	h=f*g/100	i=(f+h)	
	Supplies (for the main turnkey contract) : (25kWp Grid Interactive Hybrid Rooftop Solar Power Plant complete with all Mountings and Accessories on Lump Sum Turnkey basis as given in Vol-II of tender document and detailed Scope of Work & specifications)								
A.1	Power Conditioning Unit (PCU) for 25 kWp SPP consisting of an electronic three-phase inverter along with associated control, protection, filtering, measurement and data logging equipment along with solar charge controllers, compatible with Environmental conditions (Temperature, Humidity, Elevation etc) prevailing at site.	Sets	4						
A.2	Synchronizing Equipment for 25 kWp SPP	Sets	4						
A.3	Metering Equipment for 25 kWp SPP	Sets	4						
A.4	Solar PV Modules containing required nos. of PV cells for 25 kWp SPP	Sets	4						
A.5	Supply of Balance of System with all equipment, materials, spares, accessories, etc for 25kWp SPP including the following: i. Mounting Structures. ii. Cables and Hardware. iii. Junction Box and Distribution Boxes as required. iv. Earthing Kit. v. Lightning Arrestors. vi. Battery Banks with LMLA, 2V, T-gel, 150AH, 120 Nos. batteries vii. PVC Pipes and Accessories. viii. Tool Kit.	Sets	4						
(A)	Total for Supplies for the main turnkey contract: [(A) = (A.1) + (A.2)+(A.3)+(A.4)+(A.5)]								
	TOTAL								

Signature of authorised signatory
(Official seal of Company)

TABLE - 3A

Name of work: "Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years"

PRICE SCHEDULE FOR ERECTION, TESTING, COMMISSIONING ETC., [SERVICES] OF MAIN TURNKEY CONTRACT [Receipt, unloading & storage, transportation from store to erection site, erection, testing & commissioning of the entire system, associated Civil works, if any, Training etc. for main turnkey contract on Lump Sum Turnkey basis as per Annexure-III (Indicative BOQ) given in Vol-II of Tender Document and detailed scope of work & specifications

SI No.	Description of Item	Unit	Qty	(PRICE IN Rs)				TOTAL PRICE including all taxes, duties, levies, cess and GST amount
				Unit Rate [ie., all inclusive Basic Price including all costs and taxes & duties, except GST]	Total Basic Amount [ie., all inclusive Basic amount including all costs and taxes & duties, except GST]	Rate of GST [CGST+SGST/UTGST, IGST] as applicable (%)	GST (CGST+SGST/UTGST, IGST)	
a.	b	c	d	e	f=d*e	g	h=f*g/100	i=(f+h)
	Services (for the main turnkey contract) :							
B.1	Services for Installation, Testing, Commissioning, Associated Civil works, Liaisoning and obtaining necessary statutory clearances, Training etc. of 01 set of 25kWp Hybrid Rooftop SPP on Lump Sum Turnkey basis	Sets	4					
(B)	Total for Services for the main turnkey contract: [(B) = (B.1)]							

Total (In Words): Rupees :

Signature of authorised signatory
(Official seal of Company)

Name of work: "Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Balladilla Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years"

PRICE SCHEDULE FOR - COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (CAMC) FOR 5 YEARS AFTER THE GUARANTEE PERIOD

Sl No.	Description of Item	Unit	Qty	Unit Rate [i.e., all inclusive Basic Price including all costs and taxes & duties, except GST]	Total Basic Amount [i.e., all inclusive Basic amount including all costs and taxes & duties, except GST]	(PRICE IN Rs)		TOTAL PRICE including all taxes, duties, levies, cess and GST amount
						GST (CGST+SGST/UTGST, IGST) as applicable		
						Rate of GST [CGST+SGST/UTGST, IGST] as applicable (%)	GST Amount (CGST+SGST/UTGST, IGST) as applicable	
a.	b	c	d	e	f=d*e	g	h=f*g/100	i=(f+h)
	Comprehensive Annual Maintenance Contract for 5 years- [CAMC] : [Comprehensive annual Maintenance for a period of 5 years for 25 kWp Hybrid Rooftop Solar Plant after expiry of Guarantee / Warranty period as per detailed Scope of Work & Specifications.							
C.1	CAMC of the 25 kWp Hybrid Rooftop SPP for First Year.	Sets	4					
C.2	CAMC of the 25 kWp Hybrid Rooftop SPP for Second Year.	Sets	4					
C.3	CAMC of the 25 kWp Hybrid Roof top SPP for Third Year.	Sets	4					
C.4	CAMC of the 25 kWp Hybrid Rooftop SPP for Fourth Year.	Sets	4					
C.5	CAMC of the 25 kWp Hybrid Rooftop SPP for Fifth Year.	Sets	4					
(C)	Total for CAMC of 4 sets of 25 kWp Hybrid SPP for 5 years: [(C) = (C.1) + (C.2)+(C.3)+(C.4)+(C.5)]							

Total (In Words): Rupees :

Signature of authorised signatory
(Official seal of Company)



APPENDIX - 2

TIME SCHEDULE

1.0 Time Schedule for Completion of the Facilities

1.1 The Facilities will be commissioned within **FIVE** months including monsoon period if any, from the effective date of the Contract as per **Article-5** of the Contract Agreement. The Tenderer shall include in his offer programme for furnishing the equipment covered under this tender. The programme shall be in the form of a Bar chart and shall identify the various activities like design, engineering, procurement, manufacturing, fabrication and testing of the equipment, supply, erection and commissioning including associated civil & structural works, if any, as per the given scope of work and specifications.

Facilities shall be completed within the overall time schedule comprising the following :

S. No.	Items of Work	Commencement (from Effective Date)	Completion (from Effective Date)
1.	Basic Engineering		
2.	Detailed Design & Engineering		
3.	Completion of supply of all equipment at site		
4.	Commencement to completion of all Installation (Erection) of the system including all activities/ works till readiness for pre-commissioning		
5.	Pre- commissioning of the system and completion of Preliminary Acceptance Tests.		
6.	Start-up, trial run and commissioning of the system		

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7.	Performance Guarantee Tests and Final Acceptance of the system, as per the given scope of work and specifications.		
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****Please strike out whichever is not applicable.**

2.0 Time Schedule for Feedback Data, Drawings and Documents

2.1 Within 2 weeks from the Effective Date of Contract, the Contractor shall submit to the Engineer/ Consultant preliminary list of all drawings and documents by title using the approved numbering system and indicating the schedule of submission of drawings in conformity with the time schedule given in **Clause 2.2** and **2.3** hereof.

2.2 Drawing / Documents for Approval

2.2.1 The Contractor shall submit the various drawings and documents to the Engineer / Employer for approval, as given in the Contract Technical Specification and the no. of copies to be submitted for drawings and documents applicable as per contractual scope shall be as given below:

S. No.	Description	No. of Copies	Time of Submission in days from the Effective Date of Contract
A	Basic Engineering:		
1.	Name Plate and Numbering System	2	
2.	Inspection procedures	2	
3.	Site plan / layout drawing showing battery limits and co-ordinated plans of all units and facilities including requirements of utilities and other parameters at battery limits (in 1:500 scale).	2	
4.	Solar Power Array layout drawing	2	
5.	Shadow analysis report	2	

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S. No.	Description	No. of Copies	Time of Submission in days from the Effective Date of Contract
6.	General arrangement, dimensional layout & shop layout drawings	2	
7.	GA drawings and design criteria for steel structures	2	
8.	Civil Engineering & Structural drawing along with foundation details for the structure	2	
9.	Design criteria for cable selection, number of feeders, motor ratings, lighting, earthing, etc. and electrical consumer arrangement plans	2	
10.	Single line diagrams, block diagrams, GA and schematic drawings for electricals, showing the SV panel, PCU, inverter, Junction boxes, AC & DC distribution boards, meters etc., for each 25kWp SPP	2	
11.	Instrumentation and control schemes and sequence logic diagrams, List of Instruments and Instruments data sheets, Panels and desk front view diagrams, Control room layout drawings	2	
12.	Equipment list, including Fire Extinguishers	2	
B	Design and Engineering:		

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S. No.	Description	No. of Copies	Time of Submission in days from the Effective Date of Contract
1.	GA & Sectional drawings for foundation of structures and equipment	2	
2.	Structural design drawings	2	
3.	Equipment General arrangement & major assembly and sub-assembly drawings	2	
4.	General arrangement of Solar Power Arrays, etc.,	2	

****Please strike out whichever is not applicable.**

2.2.2 After approval by the Employer, the Contractor shall submit approved drawings and documents in number of copies mentioned above, to the Employer.

2.3 Drawings / Documents for Information / Review

2.3.1 The Contractor shall submit to the Engineer / Employer for information / review of the drawings and documents as given in the Contract Technical Specification and the no. of copies to be submitted for drawings and documents applicable as per contractual scope shall be as given below:

S. No.	Description	No. of Copies	Time of Submission in days from the Effective Date of Contract
1.	Preliminary foundation outline drawings	2	
2.	Certified foundation drawing including load data	2	
3.	Locations, schedules, fixing details, loadings etc. for	2	

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S. No.	Description	No. of Copies	Time of Submission in days from the Effective Date of Contract
	foundation / anchor bolts, inserts & embedment's		
4.	Design calculations for all civil and structural work.	2	
5.	Design calculations for all electrical work	2	
6.	Structural fabrication drawings with bill of materials	2	
7.	Performance data, characteristic including duty points	2	
85.	earthing and lightening protection drawings.	2	
9.	Terminal plans and interconnection diagrams for electrical works	2	
10.	Conduit drawings and cut out details	2	
11.	Loop schemes, power supply and distribution schemes and panels and desk internal wiring diagrams external connection including terminal wiring diagrams for power control and instrumentation cables	2	
12.	Drawings for approval of Statutory Authorities	2	
13.	Erection drawings, erection specifications and Erection Instructions.	2	

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S. No.	Description	No. of Copies	Time of Submission in days from the Effective Date of Contract
14.	Integrated Operation / safety and Maintenance Manuals	2	
15.	Ordering Specifications for Operation & Maintenance Spares	2	
16.	Man-power for Operation & Maintenance of the Facilities as per GCC Clause 18.5	2	
17.	Schedule for Training of Employer's as per GCC Clause 18.6- For Employer's approval	2	

****Please strike out whichever is not applicable.**

2.3.2 After "no comment" clearance by the Engineer / Employer, the Contractor shall submit the final drawings and documents in number of copies mentioned above, to the Employer.

2.4 As-Built Drawings and Documents

2.4.1 The Contractor shall submit As-built drawings & documents **after commissioning** of the facilities as per Clause 25 of GCC, as per the Schedule specified in Contract Technical Specification and the no. of copies to be submitted for drawings and documents applicable as per contractual scope shall be as given below:

However, if any drawing/ document requires changes / modifications after PG test, the same shall be submitted before FAC.

S. No.	Description	No. of Copies	Time of Submission in days from the Effective Date of Contract	
			Imported	Indigenous

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S. No.	Description	No. of Copies	Time of Submission in days from the Effective Date of Contract	
1.	General arrangement, assembly and sub-assembly drawings , dimensional drawings	2		
2.	Performance data	2		
3.	Test charts and inspection certificates	2		
4.	All design calculations with respective approved design criteria	2		
5.	Shadow analysis report	2		
6.	Electrical & instrumentation drawings	2		
7.	Civil foundation drawings	2		
8.	Steel structures drawings	2		
9.	Solar Power array layout drawings	2		
10.	Operation and safety manuals	2		
11.	Maintenance manuals	2		
12.	List of spares (Operation, Maintenance)	2		
13.	Drawings & bill of materials for Operation & Maintenance Spares	2		
14.	Ordering Specifications including catalogues & details for Operation & Maintenance Spares	2		

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S. No.	Description	No. of Copies	Time of Submission in days from the Effective Date of Contract	
15.	ordering specifications for operating consumables	2		
16.	One set of all documents as listed above, on CD	2		

****Please strike out whichever is not applicable.**

2.5 The successful bidder may indicate the following :

Sl. No.	Activity	Duration from the date of issue of letter of award of contract	
		Start date	Finish date
01.	Finalisation of general arrangement drawings		
02.	Completion of supply of all equipment at site		
03.	Commencement to completion of all Installation (Erection) of the system including all activities/ works till readiness for pre-commissioning		
04.	Pre- commissioning of the system and completion of Preliminary Acceptance Tests.		
05.	Commissioning and Final Acceptance Tests completion, as per the given scope of work and specifications.		

2.6 Within 15 days of issue of award, contractor shall submit, for review and approval, detailed network schedules based on the Master Network (mutually agreed by the Owner and Contractor) to the Engineer showing the logic and duration of activities in the following areas.

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- 2.6.1 Design, detailed engineering, procurement (including bought out items and raw materials), manufacture, shop inspection, testing despatch/shipment, erection, commissioning.
- 2.6.2 Inputs required from Owner for smooth and timely execution of Contract and also major data/ information to be submitted by contractor for further related engineering to be done by Owner are to be identified in the network based on details finalised during post Tender discussions. After approval of the detailed network schedule, Contractor shall submit one reproducible with sufficient number of prints as desired by Owner for Master Network as well as detailed network.
- 2.7 The Contractor shall submit within 15 days from date of notification of award a master list of drawings incorporating the schedule date of submissions; The schedule of submission should match with the manufacturing programme submitted in the detailed networks schedules. The list shall be updated every two months reflecting the additions/deletions during the period.
- 2.8 The Contractor shall submit to the Owner his manufacture, despatch and delivery at site schedules for all equipments within thirty (30) days from the date of issue of the notification and Award. Such schedules shall be in line with the detailed network for all phases of the work of the contract. Such schedules shall be reviewed, updated and submitted to the Owner, once every two months thereafter, by the Contractor. Schedules shall also include the materials and equipments purchased from outside suppliers.
- 2.9 The Contractor shall submit to the Owner/Engineer the detail billing schedule within 30 days after the issue of notification of award for approval. Additions/ deletions to this Billing schedule during detailed engineering shall also be submitted within 2 weeks of the approval of the drawings.
- 2.10 Within one week of approval of the Network schedule, the contractor shall forward to the Owner copies of the computers initial run data. The type of output and number of copies of each type to be supplied by the contractor shall be determined by the Owner.
- 2.11 The network schedule shall be updated at a frequency mutually agreed upon for the purpose of progress, monitoring. But for the purpose of identification of Contractor's Contractual liability the agreed Master network and detailed network schedules referred above shall only be applicable.
- 2.12 Monthly review meeting shall be held for review of the progress and identification of necessary corrective actions, wherever possible at the works wherein the major items

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of the plant of equipment are being manufactured at a mutually agreed venue. The meeting will be attended by the Engineer and responsible representatives of the Contractor that the Engineer considers necessary for the meeting. The Contractor shall be responsible for minuting the proceedings of the meeting, with the concurrence of the Owner, a report of which shall reach the Engineer not later than seven (7) days after the meeting.

2.13 Access to the Contractor's and Sub-Vendor's/ Sub-Contractor's works shall be granted to the Engineer at all reasonable times for the purpose of ascertaining the progress.

2.14 **PROGRESS REPORTS**

During execution of the Contract/manufacture the Contractor shall furnish monthly progress reports to the Engineer in a format as specified by the Owner, indicating the progress achieved during the month, and total progress upto the month as against scheduled and anticipated completion dates in respect of activities covered in programmes/schedules referred above. If called for by the Owner, Contractor shall also furnish to the Owner, resources data in a specified format and time schedule. The Contractor shall also furnish any other information necessary ascertain progress, as and when called for by the Owner. The progress reports shall cover Engineering, Manufacture, vendor approval, status of manufacture / supplies (including bought out items), the activities and hold up etc. and shall be submitted in six (6) copies each.

3.0 **INSPECTION**

3.1 Inspection and testing at the manufacturer's works shall be in an agreed manner. The contractor shall present sufficient documentary evidence that the materials used in the manufacture of the equipment will meet the requirements of specifications. With respect to materials used for construction such as structural steel, mild steel, cast iron, cast steel etc. the contractor shall produce requisite test certificate along with specifications and test pieces on which tests were carried out by the manufacturer. At the time of examination with respect to large castings and forging, the contractor shall arrange for necessary X-ray/Ultrasonic tests to be carried out at his own cost. Should the contractor be himself not in a position to carry out the tests, he shall arrange to get them tested by Government approved test houses and the cost of such tests shall be to the contractor's account.

3.2 The Owner or his duly authorised representative shall have the right to be present when the tests are carried out by the Contractor. If called for samples shall become

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the Owner's property. Before any assembly the contractor shall notify the Owner as to the progress of the work in order that the inspection and/or tests can be carried out as may be required to ascertain, without prejudice to the Contractor's liability, whether materials and other services are in conformity with the requirements.

- 3.3 The complete equipment, assembly and major sub-assemblies shall be shop tested before despatch. The Contractor shall give reasonable notice as may be acceptable to the Owner but not less than fifteen (15) days in advance of any equipment/assembly/major sub-assemblies being ready for testing, specifying the period likely to be required for such testing, and the owner or his authorised representative shall attend and witness the testing as soon as possible. Failing such visit, the Contractor shall proceed with the test.
- 3.4 In all cases, where examination, inspection and testing are to be carried out whether at the premises of the Contractor or Sub-Contractor's works, the contractor except where otherwise specified shall provide free of charge to the Owner or his duly authorised representative such labour, materials, electricity, fuel, water, stores, apparatus and instruments as may be reasonably required to carry out efficiently such tests and shall give facilities to the Owner or his representative to witness such testing.
- 3.5 When the tests have been satisfactorily completed at the Contractor's or sub-supplier's works, the owner or his authorised representative will issue a certificate to that effect. If final certificate cannot be issued, preliminary and a provisional certificate shall be issued. No equipment/ assembly/major sub-assembly shall be despatched before such certificates have been issued by the Owner. The satisfactory completion of these tests on the issue of certificates shall not bind the Owner to accept the machine should it on further tests after testing be found not to comply with the contract.

4.0 DESPATCH SCHEDULE

- 4.1 The CONTRACTOR shall prepare and submit in triplicate detailed despatch schedule for the Plant and Equipment to be despatched to the project within one (1) month of the effective date of Contract which shall be approved by the owner. The delivery schedule shall indicate the breakdown of the complete Plant into shipment units with approximate weights and dimensions and the respective dates in the logical sequence of erection upon which such units will be despatched from the CONTRACTOR's and/or its SUB-CONTRACTOR's works within the overall delivery schedule of the Contract. This shall not absolve the CONTRACTOR from his responsibilities for any delay.



- 4.2 All consignments shall be dispatched by road and the CONTRACTOR shall ensure that the following is observed by himself and the SUB-Contractors:
- i) Identify and obtain the correct type of trucks/trailors, keeping in view the nature of consignments to be dispatched.
 - ii) Take care to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.
 - iii) The consignee for dispatches shall be clearly marked to the CONTRACTOR at his site address.

5.0 ACCEPTANCE OF THE UNIT

[Details shall be as per Vol-II (Scope of Work and Technical Specifications)]

5.1 Preliminary Acceptance

- 5.1.1 On satisfactory completion of erection & Pre- commissioning of the system, Preliminary acceptance tests shall be taken up within one month by the CONTRACTOR to prove that the System has been supplied as per the Contract and after erection is fit to be started up and commissioned.
- 5.1.2 Tests shall be performed on the individual Sub-assemblies of the unit and also for the system and shall be designed to conduct the systematic check of the components and of the functional operation thereof.
- 5.1.3 Tests shall be conducted by the CONTRACTOR as per contract specifications under his sole responsibility and employing his personnel. Results of tests shall be recorded jointly by the CONTRACTOR and the owner. The CONTRACTOR shall handover all the test certificates obtained by them during execution of the work.
- 5.1.4 A detailed programme of tests shall be drawn up by the CONTRACTOR and shall be subject to the approval of the owner. Such programme may be revised and adjusted as may be required by the owner during the test run.
- 5.1.5 On successful completion of Preliminary Acceptance Tests and liquidation of the defects list, Preliminary Acceptance Certificate shall be issued by the owner

Note: - The PAT certificate shall be issued based on certification by acceptance of Engineer-in- Charge.

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5.2 Commissioning Cum Final Acceptance

Final acceptance certificate shall be issued by the owner within 30 days from the date of issue of Preliminary Acceptance Test certificate and fulfillment of the following conditions: -

- 5.2.1 On satisfactory completion of Preliminary Acceptance Tests.
- 5.2.2 The CONTRACTOR has rectified in a definitive manner all defects/ objections/ observations mentioned in the Commissioning Certificate;
- 5.2.3 The PV modules are generating the guaranteed output of 95% power.;
- 5.2.4 All other supplies and services have been completed as per the Contract;
- 5.2.5 Final documentation incorporating latest modifications has been submitted by the CONTRACTOR in requisite copies;
- 5.2.6 The CONTRACTOR has met any and all other obligations under this Contract.

Note(s):- 1. The FAT certificate shall be issued based on certification by acceptance of engineer-in- charge/ his representative.

2. The system will be deemed as commissioned & accepted only after issuance of FAT certificate.

3. However, the CONTRACTOR shall be responsible for pertinent compliances as per the guarantee provisions mentioned in the tender specifications.

6.0 REJECTION OF PLANT AND FACILITIE

In case, even after all possible repairs and replacements, the Contractor fails to attain the minimum level of performance guarantee parameters as per contract stipulations, the owner may reject the plant and facilities and recover the entire cost paid to the Contractor or alternatively the Owner may proceed for commercial settlement with the contractor for acceptance of the facilities at the negotiated price. For further pertinent details, Vol-II (Scope of work & Technical Specifications) of the tender document may be referred.

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TERMS OF PAYMENT

1. General

- 1.1 In accordance with the provisions of **Clause 12** of GCC (Terms of Payment), the Employer shall pay the Contractor for the Scope of Facilities detailed under **Clause 7** of GCC & Technical Specifications, on the basis of the price break-up given in the Price Schedule (**Appendix-1**) and Billing Schedule as per **Sub-Clause 11.7.1** of GCC.
- 1.2 Void.
- 1.3 The Contract is a Divisible Contract. The Contractor shall submit complete and correct separate invoices and documents for supplies and services for payments to be made in Indian currency.
- 1.4 The Contractor shall reimburse the Employer all costs, charges, damages or expenses which the Employer may have paid or incurred, if and to the extent to which the Contractor is liable under this Contract to pay upon written request of the **Engineer / Employer**, failing which such costs, charges, damages or expenses shall be deducted by the Employer from any money due or becoming due by the Employer to the Contractor under this Contract or any other Contract failing which such amounts shall be considered as debt from the Contractor to the Employer and shall be recoverable accordingly.
- 1.5 INCOME TAX

Any Indian Income Tax which Employer may be required to deduct by law or statute, shall be deducted at the source under relevant Chapter of Income Tax Act and the same shall be paid to Income Tax Authorities on account of the Contractor. Employer shall provide the Contractor a certificate for such deduction of Tax. The Contractor shall indicate their Permanent Account Number with the relevant Income Tax Authority to Employer. Contractors shall maintain books of account and shall get the account audited as per relevant Section of Income Tax Act.



If the Contractor is exempted from the deduction /recovery of Income Tax, no such recovery shall be made by Employer. Contractor shall furnish valid exemption Certificate issued by Income Tax Department to this effect

- 1.7 GST shall be paid to the Contractor as per invoice. The Invoice for the supply of goods or services or the both shall separately indicate the Goods and Service Tax claimed by the Contractor along with their relevant Goods and Service Tax Identification Number (GSTIN) obtained by the Contractor.
- 1.8 The payment to the Contractor shall be released within thirty (30) days from the date of receipt of the complete and correct invoices & relevant documents along with price adjustment statement.

2.0 TERMS OF PAYMENTS

Subject to any deductions that may be made as per the contract and based on submission / maintaining of pertinent Contract Performance Guarantee (s) as per contract terms, the Contractor shall be entitled to receive the contract price in the following manner as per approved billing schedule.

2.1 Supplies (for main turnkey contract) - Payment terms - (Ref. Price Schedule: Table-2A)

- 2.1.1 **80% of the *Supply price (Basic Price)* as per approved billing schedule and 100% Goods and Services Tax (GST)** will be paid against following dispatch documents and receipt at site / project stores and certification by Owner:
- a) Clear lorry receipt / Delivery Challan
 - b) Invoice (GST Compliant)
 - c) Packing list
 - d) Test certificate
 - e) Pre-dispatch inspection certificate / waiver of Inspection, by NMDC.
 - f) Warranty certificate
 - g) Dispatch clearance certificate issued by NMDC.



Contractor agrees that any retention money withheld from any invoice towards security against the obligation due from the contractor i.e., final completion certificate, commissioning certificate etc., and payment for such invoice be regarded as fully discharged for the purpose of GST.

2.1.2 **10% of the *Supply price (Basic Price)* will be released after issue of Preliminary Acceptance Certificate. This Payment will be released against submission of following documents:**

- a) Signed commercial Invoice -3 copies
- b) Preliminary Acceptance Certificate (*i.e. PAC*) from Owner /Engineer-In-Charge at project site regarding preliminary acceptance of the system by NMDC.

2.1.3 **10% of the *Supply price (Basic Price)* (final payment) will be released after successful commissioning (*i.e. Commissioning cum Final Acceptance*) of the entire system with availability of necessary statutory clearances and issue of Final Acceptance Certificate. This Payment will be released against submission of following documents:**

- a) Signed commercial Invoice -3 copies
- b) Successful Commissioning certificate (*i.e. FAC*) from Owner /Engineer-In-Charge at project site regarding final acceptance of the system by NMDC and submission of all completed documentation including 'As built drawings' as certified by Owner.

2.2 **Services- /Design, Engineering, Installation, Testing, Commissioning, Associated Civil works, Liaisoning and obtaining necessary statutory clearances, Training etc. - for main turnkey contract] –Payment Terms- (Ref. Price Schedule: Table-3A)**

2.2.1 **80 % of the *Services Price (Basic Price)* as per approved billing schedule and 100% Goods and Services Tax (GST) will be paid on pro-rata basis after issuance of Certificate by the Owner/ Engineer-in charge at project site.**

Contractor agrees that any retention money withheld from any invoice towards security against the obligation due from the contractor i.e., final completion certificate, commissioning certificate etc., and payment for such invoice be regarded as fully discharged for the purpose of GST.

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- 2.2.2 **10 %** of the *Services Price (Basic Price)* will be paid after issuance of Preliminary Acceptance Certificate from Owner/ Engineer-in charge at project site, i.e. along with payment due under Clause 3.6.1.2.
- 2.2.3 **10%** of the *Services price (Basic Price)* (final payment) will be paid after successful commissioning (*i.e. Commissioning cum Final Acceptance*) of the entire system with availability of necessary statutory clearances and submission of all completed documentation including ‘As built drawings’ as certified by Owner/ Engineer-in charge at project site, i.e. alongwith payment due under Clause 3.6.1.3.

Notes:

Regarding payments against Commissioning Certificate / FAC: In case of abnormal delays in issue of Commissioning Certificate / FAC for reasons not attributable to the contractor, the corresponding amount will be released against BG(s) of equivalent value and for a period mutually agreed, as indicated below:

- a) If commissioning of the system cannot be taken up for a period more than **3 months** after issue of ‘Preliminary Acceptance Certificate’ due to reasons not attributable to the Contractor, then payment against commissioning may be released against a bank guarantee valid up to actual completion date of successful commissioning.

These BGs are additional and over & above any other BGs to be submitted for any other reason.

- b) All fees / charges, to be levied by Statutory / Regulatory Authorities for granting relevant approvals for this work, shall be borne by NMDC **or** reimbursed by NMDC to Contractor if already paid on behalf of NMDC and upon production of invoice(s) & receipts to Owner/ Engineer-in charge at project site. **These charges would also form part of value for charging GST, if the same is incurred by the Contractor.**

Contractor shall inform NMDC in writing about such fees / charges of Statutory / Regulatory Authorities, preferably at least two weeks in advance for making necessary arrangements for payments.

The fees / charges to be levied by Statutory / Regulatory Authorities towards relevant approvals, however, do not form part of the contract price and the same will be over and above the the contract price of this work as awarded to the contractor.

No extra charges consequent upon any misunderstanding or otherwise, shall be paid by Owner.

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Also, 15% payment shall be retained which will be released after finalization of delay analysis, if any, and defect liability period.

2.3 Comprehensive Annual Maintenance Contract for 5 years- [CAMC] –Payment Terms- (Ref. Price Schedule: Table-4A)

100% of the CAMC Price including Goods and Service Tax (GST) will be payable on pro-rata basis for every quarter against Quarterly running bills, subject to Availability of Performance Guarantee towards comprehensive maintenance contract as per Contract Terms. Payment will be made once in three months, on the service rendered satisfactorily. Record of works carried out during the period should be enclosed along with the Invoice. Following documents are to be submitted for the payment:

- a) Signed commercial invoice – 3 copies
- b) Service certificate from NMDC's engineer-in-charge regarding satisfactory maintenance of the equipment.

10% payment shall be retained, which will be released after deducting penalty.

3.0 Paying Authority:

Head of Finance Dept., Bailadila Iron Ore Mine, Kirandul Complex,

4.0 Executing Authority:

Head of Project, Bailadila Iron Ore Mine, Kirandul Complex,



ANNEXURE - A TO TERMS OF PAYMENT

PROFORMA FOR BILL FOR PAYMENTS

PROJECT : Date of Bill :
Description : Order No.
And date
Name of supplier :
Contract Value : Serial Number of Bill :

To
NMDC Ltd.,

BILL FOR PAYMENT

1. Pursuant to the above referred contract dated the undersigned hereby applies for payment of the sum of Rupees...

..... (Specify amount).

2. The above amount is on account of: Check whichever applicable)

Progressive payment against receipt of equipment at site.

Other (Specify)

Final payment as detailed in the attached schedule (s) which form an integral part of this bill.

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3. The payment claimed is as per item (s) No. (s)..... of the payment schedule annexed to the above-mentioned order.

4. This bill consists of this page, details of claim statement (schedule) and the following signed schedules:
 - 1.

 - 2.

 - 3.

The following documents are also enclosed

Signature of Contractor

Authorised Signatory



(In case it is delayed due to fault of employer)

PRICE ADJUSTMENT DUE TO VARIATION IN PRICE INDICES (As per Applicability)

(If the completion period is within 12 months, Price variation will not be applicable)

- 1.0 The prices for the items for which the prices indicated in the Contract are in foreign currencies, shall not be subject to any price adjustment / escalation.
- 1.1 Applicability of price adjustment shall be governed by clause-11.3, 11.4 & 11.5 of GCC. Price Adjustment, if any, if required to be made in terms of Contract then the same shall be paid every six (6) months.
- 2.0 The Base Date of the Contract Price is _____. [*Base date of the Contract for the purpose of price adjustment shall be the date seven (7) days before last date of submission of price bid/ updated price bid*]
- 2.1 The 'Original Price' as on Base Date shall be referred to as "Po" and the 'Revised Price' after price adjustment, if any, shall be referred to as "P" in the formulae given hereunder. "Po" and "P" are exclusive of taxes & duties. If, price adjustment becomes applicable in terms of the Contract, "P" minus "Po" shall be the net price adjustment to be made.
- 2.2 The terms LTR and LTO have been defined below under the different heads, wherever applicable. The values for LTR & LTO shall be taken based on either Gazette Notification or Tripartite Agreement. In no case LTR for Gazette Notification and LTO for Tripartite Agreement or vice-versa shall be taken. The ratio 'LTR/LTO' to be used in the formulae shall be the lower of the two ratios arrived at as aforesaid. This shall be applicable for calculating the price adjustment under clause 2.5 to 2.9 hereunder.

2.3 For Supply of Indigenous Mechanical Plant & Equipment including Technological Structures

Unless otherwise specified, the Price for supply of indigenous mechanical plant & equipment including Technological Structures shall be subject to adjustment as per the following formula:

$$P = Po [0.20 + 0.80 RBli / RBlo]$$

Where:

P = Revised price after adjustment.

Po = Original Price for Supply of Indigenous Mechanical Plant & Equipment including Technological Structures as on Base Date.



RBIi = RBI Index for heavy machinery & parts, **Item No Ka1 of Table No 40** of Index Number of wholesale price in India, prevailing one month prior to actual month of delivery or one month prior to end scheduled completion month of delivery, whichever is lower.

RBIo = RBI Index for heavy machinery & parts, **Item No Ka1 of Table No 40** of Index Number of wholesale price in India, prevailing on Base Date.

2.4 **For Supply of Indigenous Electrical Plant & Equipment**

Unless otherwise specified, the Price for supply of indigenous electrical equipment shall be subject to adjustment as per the formula of Indian Electrical and Electronic Manufacturers' Association (IEEMA) including base date.

For items of Facilities for which IEEMA formulae do not exist, the formula given under Sub-Clause 2.3 hereof, shall be applicable for the purpose of calculation of the Price Adjustment. However, instead of Ka1, **Item No Kb of Table No 40** of Index Number of wholesale price in India will be applicable.

The Price Adjustment as above will be calculated based on IEEMA index prevailing one month prior to the actual date of dispatch or one month prior to end scheduled completion month of delivery, whichever is earlier.

2.5 **For Erection of Mechanical and Electrical Plant & Equipment**

The prices for erection of mechanical and electrical plant & equipment shall be subject to adjustment as per the following formula :

$$P = P_o \left[\frac{LTR}{LTO} \right]$$

Where:

P = Revised price after adjustment.

Po = Original Price for Erection of Mechanical and Electrical Plant & Equipment as on Base Date.



LTR = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on actual date of erection or scheduled date of erection, whichever is earlier.

LTO = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on the base date.

The Price Adjustment towards the labour component, shall be payable for the quantities on pro-rata basis as per the agreed bar chart or actual quantity executed, whichever is less.

2.6 For Supply of Building Steel / Space Frame Structures and Sheeting

Unless otherwise specified, the Price for supply of building steel structures and sheeting shall be subject to adjustment in accordance with the following formulae:

2.6.1 In case Steel is given by the Employer on cost recovery basis at rates prevailing on Base Date

$$P = \frac{[LTR]}{Po [0.7 + 0.3 \frac{LTO}{LTR}]}$$

Where :

P = Revised price after adjustment.

Po = Original Price for Supply of Steel Structures and Sheeting as on Base Date.

The details of LTR and LTO are given at **Sub-Clause 2.6.3**

2.6.2 For steel is procured by the Contractor under the scope of work.

$$P = \frac{Po [0.3 + 0.4 \frac{RBI_i}{RBI_o} + 0.3 \frac{LTR}{LTO}]}{[RBI_o \quad LTO]}$$

Where :

P = Revised price after adjustment.

Po = Original Price for Supply of Steel Structures & Sheeting as on Base Date.

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RBli = Wholesale price Index for iron & steel as per RBI Bulletin prevailing one month prior to actual month of delivery or one month prior to end scheduled completion month of delivery, whichever is lower.

RBlo = Wholesale price Index for iron & steel as per RBI Bulletin prevailing on Base Date.

The details of LTR and LTO are given at **Sub-Clause 2.6.3**

2.6.3 For Building Steel Structures Fabricated inside Employer's Plant Premises:

LTR = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on actual date of supply or scheduled date of supply, whichever is earlier.

LTO = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on the base date.

2.6.3 For Building Steel Structures Fabricated outside Employer's Plant Premises:

LTR = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on actual date of supply or scheduled date of supply, whichever is earlier.

LTO = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on the base date.

2.7 **For Erection of Building Steel/Space Frame Structures and Sheeting**

Unless otherwise specified, the Price for erection and installation of building steel structures and sheeting including final painting shall be subject to adjustment in accordance with the formula given hereunder:

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$$P = P_o \left[0.60 + 0.40 \frac{LTR}{LTO} \right]$$

Where :

P = Revised price after adjustment.

P_o = Original Price for Erection of Steel Structures and Sheeting as on Base Date.

LTR = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on actual date of erection or scheduled date of erection, whichever is earlier.

LTO = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on the base date.

2.8 For Civil Engineering Works including all necessary Supplies

Unless otherwise specified, the Price for the Civil Engineering works including all necessary supplies shall be subject to adjustment in accordance with the following formulae :

$$P = P_o \left[0.35 + 0.25 \frac{RBli(\text{cement})}{RBlo(\text{cement})} + 0.10 \frac{RBli(\text{steel})}{RBlo(\text{steel})} + 0.3 \frac{LTR}{LTO} \right]$$

Where :

P = Revised price after adjustment.

P_o = Original Price for Civil Engineering works as on Base Date.

RBli(cement) = Wholesale price Index for cement as per RBI Bulletin prevailing one month prior to actual month of execution or one month prior to end scheduled completion month , whichever is lower.



RBlo(cement) = Wholesale price Index for cement as per RBI Bulletin prevailing on Base Date.

LTR = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on actual date of execution or scheduled date of completion, whichever is earlier.

LTO = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on the base date.

The Price Adjustment towards the labour component shall be payable for the quantities on pro-rata basis as per the agreed Bar Chart or actual quantity executed, whichever is less.

RBli(steel) = Wholesale price Index for steel as per RBI Bulletin prevailing one month prior to actual month of execution or one month prior to end scheduled completion month, whichever is lower.

RBlo(steel) = Wholesale price Index for steel as per RBI Bulletin prevailing on Base Date.

2.9 For Erection of Refractories

Unless otherwise specified, the Price for Erection of Refractories shall be subject to adjustment as per the following formula :

$$P = P_o \left[0.50 + 0.50 \frac{LTR}{LTO} \right]$$

Where :

P = Revised price after adjustment.



Po = Original Price for Refractories as on Base Date.

LTR = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on actual date of erection or scheduled date of erection, whichever is earlier.

LTO = Minimum wage payable to the minimum rated unskilled worker within the Plant premises (as per the Gazette Notification for minimum wages issued by the State Government) on the base date.

The Price Adjustment towards the labour component shall be payable for the quantities on pro-rata basis as per the agreed bar chart or actual quantity executed, whichever is less.



PERFORMANCE GUARANTEES

1.0 This Appendix sets out

- (a) the performance guarantees referred to in **Clause 27** of GCC (Performance Guarantee Tests).
- (b) the preconditions to the validity of the performance guarantees, either in production and/or consumption, set forth below.
- (c) the minimum level of the performance guarantees.
- (d) the procedure for conducting the performance guarantee tests, recording of measurements / results and calculation for deriving the test results.
- (e) formula for calculation of liquidated damages for failure to attain the performance guarantees.

2.0 Preconditions

The Contractor gives the performance guarantees (specified herein) for the Facilities, subject to the following preconditions being fully satisfied:

*[List any conditions (if any) for the carrying out of the Guarantee Test referred to in **Clause 27** of GCC.]*

This will be as agreed in the Contract Technical Specifications – Vol. – II of the tender documents.

3.0 Performance Guarantee Parameters

This shall be as per Technical Specifications – Vol.-II of the Tender Document

4.0 Failure in Guarantees and Liquidated Damages

4.1 Failure to Attain Guaranteed Parameters

If the production capacity of the facilities attained in the performance guarantee test, pursuant to **Clause 27** of GCC, is less than the guaranteed figure specified, but the actual production capacity attained in the performance guarantee test is not less than the minimum level of performance guarantee parameters specified, and the Contractor elects to pay liquidated damages to the Employer in lieu of making changes, modifications and / or additions to the facilities, pursuant to **Sub-Clause 27.4 & Sub-Clause 27.4.1** of GCC, then the Contractor shall pay liquidated damages at the rate specified.

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4.2 **Limitation of Liability**

- 4.2.1 The Contractor's aggregate liability to pay liquidated damages for failure to attain the performance guarantees parameters above the minimum levels of performance guarantee parameters specified shall not exceed seven and half percent (7.5 %) of the Contract Price plus escalations, if any, excluding taxes & duties.
- 4.2.2 However, in case the Contractor expresses its inability to achieve a maximum level of performance guarantee parameters and reduce consumption of raw materials and Utilities below the maximum level of guaranteed maximum level of consumption of raw materials and Utilities, the Employer shall not reject the plant and equipment after commissioning and achievement of minimum Performance Guarantee parameters. After successful commissioning and achievement of minimum Performance Guarantee parameters, the total liability of the Contractor on account of delay and non-achievement of maximum PG parameters will not be more than LD.
- 4.2.3 In case, even after all possible repairs and replacements the Facilities fail to attain the minimum level of performance guarantee parameters, the Employer may reject the Facility and recover the entire cost paid to the Contractor or alternatively the Employer may proceed for commercial settlement with the Contractor for acceptance of the Facilities at the negotiated Price.

Further, the limitation of liability shall not be applicable in case of work undertaken by Employer at the Risk & Cost of Contractor, under Clause no. 37 or 44.2 of GCC.



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GENERAL CONDITIONS OF CONTRACT (GCC)

A. CONTRACT & INTERPRETATION

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

“Contract” means the Contract Agreement entered into between the Employer and the Contractor, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term “the Contract” shall in all such documents be construed accordingly.

“Contract Documents” means the documents listed in Article 1.2 (Contract Documents) of the Contract Agreement (including any amendments thereto).

“GCC” means the General Conditions of Contract hereof.

“SCC” means the Special Conditions of Contract.

“Technical Specifications/ Contract Technical Specifications” mean the technical specifications, schedules, detailed designs, statements of technical data, performance characteristics value and all other technical particulars of the Contract.

“GTS” means the General Technical Specifications.

“Day” means calendar day of the Gregorian Calendar.

“Month” means calendar month of the Gregorian Calendar.

“Employer” means NMDC Limited and includes the legal successors or permitted assigns of the Employer.

“Engineer” means the person appointed by the Employer in the manner provided in **Sub-Clause 17.1** (Engineer) hereof and to perform the duties delegated by the Employer.

“Consultant” means any firm or person(s) duly appointed as such by the Owner/Employer for performance of specified activities of the works and/or for monitoring the execution of works [Ref.: **Clause 1.4** of SCC and as specified in the **Article 6** of the Contract Agreement].

“Contractor” means the person(s) whose bid to perform the Contract has been accepted by the Employer and is named as such in the Contract Agreement, and

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includes the legal successors or permitted assigns of the Contractor. In case Contract is with Consortium of two or more members then the Contractor shall mean one or more members of Consortium as the case may be.

“Contractor’s Representative” means any person nominated by the Contractor and approved by the Employer in the manner provided in **Sub-Clause 17.2** (Contractor’s Representative) hereof to perform the duties delegated by the Contractor. For site work Contractor’s Representative shall also mean the representative of Sub-Contractors and Sub-Contractor’s Sub-Contractors.

“Sub-Contractor”, including vendors, means any person to whom execution of any part of the Facilities, including preparation of any design or supply of any Plant and Equipment, is sub-Contracted directly or indirectly by the Contractor, and includes its legal successors or permitted assigns.

“Contract Price” means the sum specified in **Article 2.1** (Contract Price) of the Contract Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.

“Base Date” means the date given in **Sub-Clause 2.0** of **Appendix-4** of Contract Agreement which shall be considered in price variation formulae as given in **Sub-Clause 2.3 to 2.9** of **Appendix-4** of Contract Agreement.

“Facilities” mean the work specified in **Clause 7** hereof, Technical Specification and all supply & services to be carried out by the Contractor under the Contract.

“Plant and Equipment” means permanent plant, equipment, machinery and things of all kinds to be provided and incorporated in the Facilities by the Contractor under the Contract but does not include Contractor’s Equipment.

“Installation Services” or “Services” means all those services ancillary to the supply of the Plant and Equipment for the Facilities, to be provided by the Contractor under the Contract; e.g., design & engineering, supervision work, Customs & Port clearance, loading & unloading, dismantling & modification, intermediate storage, transportation and provision of marine or other similar insurance, inspection, expediting, site preparation works (including the provision and use of Contractor’s Equipment and the supply of all construction materials required), installation, testing, pre-commissioning, commissioning, demonstration of performance guarantee tests, the provision of operations and maintenance manuals, training, etc.

“Contractor’s Equipment” means all plant, equipment, machinery, tools, apparatus, appliances or things of every kind required in or for installation completion and maintenance of Facilities that are to be provided by the

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Contractor, but does not include Plant & Equipment, or other things intended to form or forming part of the Facilities.

“Site” means the land and other places upon which the Facilities are to be installed, and such other land or places as may be specified in the Contract as forming part of the Site.

“Effective Date of Contract” shall be the 30th day from the date of issue of the Letter of Award of Contract (LAC)/LOI.

“Time for Completion” means the time specified in **Article 5.1** of the Contract Agreement within which Completion of the Facilities as a whole (or of a part of the Facilities where a separate Time for Completion of such part has been prescribed) is to be attained in accordance with the stipulations made in the Contract Agreement and the relevant provisions of the Contract.

“ Inspector” / “Inspecting Engineer” shall mean any person or firm nominated by or on behalf of the Employer or his duly authorized agent to inspect equipment, materials, supplies or work under the Contract.

“Pre-commissioning” means the checking, testing including conducting of integrated trial runs (cold integrated trial runs in case of Facilities involving operation at high temperature) and meeting other requirements specified in the Technical Specifications that are to be carried out by the Contractor in preparation for Commissioning as provided in **Clause 24** (Preliminary Acceptance) hereof.

“Preliminary Acceptance” of the Facilities means that the Facilities have been completed operationally and structurally and put in a tight and clean condition, and that all work in respect of Pre-commissioning of the Facilities have been completed; in other words, that the Facilities are fit for Start-up & Commissioning and Preliminary Acceptance Certificate has been issued as provided in **Clause 24** (Preliminary Acceptance) hereof.

“Program of Performance” shall mean the program submitted by the Contractor in accordance with **clause 18.1**

“Preliminary Acceptance Certificate” means the Certificate to be issued by the Employer on successful completion of Preliminary Acceptance Tests.

“Commissioning” means operation of the Facilities by the Contractor to a level of output as provided in **Clause 25** (Commissioning) hereof.

“Commissioning Certificate” is the Certificate to be issued by the Employer as per **Sub-Clause 25.3** hereof.

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“Completion of the Facilities” means the Facilities have been commissioned as per **Clause 25** (Commissioning). The Facilities will be considered completed in all respects and accepted when performance guarantee parameters are established as per **Clause 27** (Performance Guarantee Test)

“Taking Over” means, on commissioning, the Employer shall be responsible for the care & custody of the Facilities together with the risk of loss or damage thereto, and shall thereafter take-over the Facilities.

“Performance Guarantee Test” means the test(s) specified in the Technical Specifications to be carried out to ascertain whether the Facilities are able to attain the Performance Guarantees specified in the Contract as per **Clause 27** hereof.

“Performance Guarantee Certificate” means the Certificate to be issued by the Employer upon successful establishment of Performance Guarantees Parameter as specified in **Appendix-5** to Contract Agreement.

“Final Acceptance” means the acceptance by the Employer of the Facilities which certifies the Contractor’s fulfillment of the Contract in respect of Performance Guarantees of the Facilities in accordance with the provisions of **Clause 27** hereof and completion of Defects Liability Period.

“Final Acceptance Certificate” is the Certificate to be issued by the Employer as per **Clause 28** hereof.

“Defect Liability Period” means the period of validity of the warranties given by the Contractor commencing from the date of Commissioning of the Facilities, during which the Contractor is responsible for defects with respect to the Facilities as provided in **Clause 30** (Defect Liability) hereof.

“L1” means the lowest tender or lowest bid or the lowest quotation received in a tender/ bidding process, as adjudged in the evaluation process as per the tender document.

“Local content” means the amount of value added in India which shall be the total value of item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duty) as a proportion of the total value, in percent.



“Margin of Purchase Preference” means the maximum extent to which the price quoted by a “Class-I local supplier” may be above the L1 for the purpose of purchase preference.

“Non-local supplier” means a supplier or service provide, whose goods, services or works offered for procurement, has local content less than or equal to 20%.

“Class-I local supplier” means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%.

“Class-II local supplier” means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%.

“Works” means all works as per Rule 130 of GFR-2017 and will also include turnkey works. This includes all activities to be executed in accordance with the contract or part thereof as the case may be and shall include all extra activities, additions, alterations or substituted activities as directed by the Owner/Engineer-in-Charge for due completion of the contract.

“Nodal Ministry” means the Ministry or Department identified in respect of a particular item of goods or services or works.

“Procuring Entity” means a Ministry or department or attached or subordinate office of, or autonomous body controlled by the Government of India and includes Government Companies as defined in the Companies Act.

2. Contract Documents

2.1 Subject to **Article 1.3** (Order of Precedence) of the Contract Agreement, all documents forming part of the Contract (and parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.

2.2 The Contractor shall be required to provide at least **one original + 6 (six)** copies of signed Contract Agreement for Employer’s use within **30 (thirty)** days of the date of signing of the Contract.

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3. Interpretation

3.1 Language

3.1.1 All correspondence and communications to be given and all other documentation to be prepared and supplied under the Contract shall be written in English, and the Contract shall be construed and interpreted in accordance with English language.

3.2 Singular and Plural

3.2.1 The singular shall include the plural and the plural the singular, except where the context otherwise requires.

3.3 Headings

3.3.1 The headings and marginal notes in the General Conditions of Contract are included for ease of reference, and shall neither constitute a part of the Contract nor affect its interpretation.

3.4 Persons

3.4.1 Words importing persons or parties shall include firms, Corporations, Companies, Joint Ventures, Consortiums and Government entities.

3.5 Void.

3.6 Entire Agreement

3.6.1 The Contract constitutes the entire agreement between the Employer and Contractor with respect to the subject matter of Contract and supersedes all communications, negotiations and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract.

3.7 Amendment

3.7.1 No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party hereto.

3.8 Contractor

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3.8.1 The Contractor shall be an independent Entity performing the Contract. The Contract does not create any agency, partnership, joint venture or other joint relationship between the parties hereto.

3.8.2 Subject to the provisions of the Contract, the Contractor shall be solely responsible for the manner in which the Contract is performed.

3.8.3 All employees, representatives or Sub-Contractors engaged by the Contractor in connection with the performance of the Contract shall be under the complete control & supervision of the Contractor and shall not be deemed to be employees of the Employer, and nothing contained in the Contract or in any Sub-Contract awarded by the Contractor shall be construed to create any Contractual relationship between any such employees, representatives or Sub-Contractors and the Employer.

3.9 Void.

3.10 **Waiver**

3.10.1 Subject to **Sub-Clause 3.10.2** below, no relaxation, forbearance, delay or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect or restrict the rights of that party under the Contract, nor shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

3.10.2 Any waiver of a party's rights, powers or remedies under the Contract must be in writing, must be dated and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

3.11 **Severability**

3.11.1 If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

4. **Notices**

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- 4.1 Unless otherwise stated in the Contract, all notices to be given under the Contract shall be in writing, and shall be sent by personal delivery, post / airmail post, special courier, telefax, email to the address of the relevant party set out in the Special Conditions of Contract, with the following provisions.
- 4.1.1 Any notice sent by telefax, email shall be confirmed within two (2) days after dispatch by notice sent by airmail post or special courier, except as otherwise specified in the Contract.
- 4.1.2 Any notice sent by airmail post or special courier shall be deemed (in the absence of evidence of earlier receipt) to have been delivered ten (10) days after dispatch. In proving the fact of dispatch, it shall be sufficient to show that the envelope containing such notice was properly addressed, stamped and conveyed to the postal authorities or courier service for transmission by airmail or special courier.
- 4.1.3 Any notice delivered personally or sent by facsimile; email shall be deemed to have been delivered on date of its dispatch.
- 4.1.4 Either party may change its postal, telefax, email address or addressee for receipt of such notices by 10 (ten) days' notice to the other party in writing.
- 4.2 Notices shall be deemed to include any approvals, consents, instructions, orders and certificates to be given under the Contract.

5. Governing Law

- 5.1 The Contract including the Arbitration proceedings shall be governed by and interpreted in accordance with laws of India.

6. SETTLEMENT OF DISPUTES

APPLICABLE LAW, CONCILIATION AND ARBITRATION:

6.1 APPLICABLE LAW:

This Agreement shall be construed and governed in accordance with the Indian substantive Laws.

6.2 CONCILIATION:

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Any disputes, differences, whatsoever, arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this Contract shall be settled between the Employer and the Contractor amicably. In case, such amicable settlement is not possible, the parties shall take recourse to the conciliation proceedings for resolving such dispute, question, claim or differences.

6.2.1 The Conciliatory Committee shall comprise of the following:

- i) A nominee of **the Employer** - Member
(Independent of the Officer handling the case)
- ii) A nominee of Contractor/ Supplier - Member
(Independent of the Officer handling the case)
- iii) Head of Law/ Law Officer of **the Employer** - Member & Convener

The above Committee shall conduct the conciliation proceedings in accordance with the provisions of Arbitration and Conciliation Act 1996 and amendments from time to time. The venue of the Conciliation shall be at **Hyderabad**. The settlement so arrived at during conciliation shall be binding on both the parties and will not be called in question before any court or forum whatsoever.

6.3 ARBITRATION:

6.3.1 All disputes or differences which may arise between the Owner and Contractor in connection with this Contract (other than those in respect of which the decision of any person is expressed in the Contract to be final and binding) shall, after written notice by either party to the other and to the Chairman cum managing Director of the NMDC Ltd. (who will be the appointing authority), be referred for adjudication to the sole Arbitrator to be appointed as hereinafter provided.

6.3.2 The appointing authority will send within ninety days of receipt of the notice of arbitration a panel of three names of persons, not directly connected with the work, to the Contractor who will select any one of the persons named to be appointed as a sole Arbitrator within 30 days of receipt of names. If the appointing authority fails to send to the Contractor the panel of three names, as aforesaid,

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- within the period specified, the contractor shall send to the appointing authority a panel of three names of persons who shall also be unconnected with the organization by which the work is executed. The appointing authority shall on receipt of the names as aforesaid select any one of the persons named and appoint him as the sole Arbitrator. If the appointing authority fails to select the person and appoint him as the sole Arbitrator within 30 days of receipt of the panel and inform the Contractor accordingly, the Contractor shall be entitled to invoke the provisions of the Indian Arbitration and Conciliation Act 1996 as amended from time to time.
- 6.3.3 The further progress of any work under the contract shall unless otherwise directed by the Owner / Engineer continue during the arbitration proceedings and no payment due or payable by/to the Owner shall be withheld on account of such proceedings. It shall not be open to arbitrator to consider and decide whether or not such work shall continue during the arbitration proceedings.
- 6.3.4 GOVERNING LAW:** The laws applicable to the Contract shall be the laws in force in India. The Courts of Hyderabad, Telangana State shall have exclusive jurisdiction in all matters arising under this Contract.
- 6.3.5 The venue of the arbitral proceedings shall be Hyderabad, Telangana State, India.
- 6.3.6 The arbitral tribunal shall give reasons for its award. Each party shall bear its own cost and the cost of arbitration shall be equally borne by each party. The award rendered in any arbitration hereunder shall be final and binding upon the parties. The parties agree that neither party shall have any right to commence or maintain any suit or legal proceeding concerning any dispute under this agreement until the dispute has been determined in accordance with the arbitration proceeding provided for herein and then only to enforce or facilitate the execution of an award rendered in such arbitration.
- 6.3.7 Arbitration between a Central Public Sector Undertaking of the Government of India (not under the Ministry of Steel) and the Employer shall be as per the guidelines of Ministry of Heavy Industries and Public Enterprises, Government of India.

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- 6.3.8 Arbitration between a Central Public Sector Undertaking of the Government of India under the Ministry of Steel, Government of India and the Employer, shall be as per the guidelines of the Ministry of Steel.
- 6.3.9 The mechanism for settling the dispute through Arbitration shall be applicable only in cases where the disputed amount or the amount of all claims put together does not exceed 25% of the contract value or maximum of disputed claim amount shall not exceed Rs.100 crores whichever is lower. In case the disputed amount exceeds the above referred percentage of 25% of contract value or maximum value of total claim value of Rs. 100 crores, the parties shall be within their rights to take recourse to remedies that may be available to them under the applicable laws other than Arbitration after the prior intimation to the other party.
- 6.3.10 Parties agree that neither party shall be entitled for any pre-reference or pendente-lite interest, i.e. date of cause of action till the date of the Award by the Arbitral Tribunal. Parties agree that claim for any such interest shall not be considered and shall be void. The Arbitral Tribunal shall have no right to award pre-reference or pendente-lite interest in the matter.
- 6.3.11 Parties further agree that following matters shall not be referred to Conciliation and Arbitration-
- (a) Any claim, difference or dispute relating to, connected with or arising out of NMDC's decision to initiate any proceedings for suspension or banning, or decision to suspend or to ban business dealings with the Bidder/Contractor and /or with any other person involved or connected or dealing with bid/ contract/ bidder/ contractor.
 - (b) Any claim, difference or dispute relating to, connected with or arising out of NMDC's decision under the provisions of Integrity Pact executed between the NMDC and the Bidder/ Contractor.

B. SUBJECT MATTER OF CONTRACT

7.0 Scope of Facilities

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7.1 **Scope of Supplies and Services**

- 7.1.1 Unless otherwise expressly limited in the Technical Specifications, the Contractor's obligation cover design & engineering; civil engineering work; dismantling, if any, of existing building, structures & equipment; modification / diversion, if any, of utility / services; fabrication & supply of steel structures; manufacture (including associated purchases & supply of plant & transportation; intermediate storage; insurance & handling; erection work; testing; pre-commissioning; start-up & commissioning and demonstration & establishment of performance guarantee parameters of the Facilities as detailed hereafter, in accordance with the plans, specifications, drawings, codes and any other documents as specified in the Technical Specifications.
- 7.1.2 The Contractor shall, unless specifically excluded in the Contract, perform all such work and / or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Completion of the Facilities (within the Battery limits as defined in the Technical Specification) as if such work and / or items and materials were expressly mentioned in the Contract without any extra cost to Employer.
- 7.1.3 The Contractor shall furnish the items with its specifications & prices of spare parts required for the operation and maintenance of the Facilities for the period of two years.

7.2 **Design, Drawings & Technical Documents**

- 7.2.1 The Contractor shall be responsible for supply of all the design, drawings and technical documents & information in respect of the plant & equipment as per **Appendix 2** to Contract Agreement & commissioning spares. The Contractor shall deliver the design, drawing, technical documents & information, to the Employer.

7.3 **Dismantling & Demolition of Existing Building, Structures, Plant & Equipment (As specified in Technical Specifications)**

The Contractor shall be responsible for carrying out dismantling / demolition of necessary existing buildings and structures including foundations, covered works and plant & equipment and stacking and expeditious removal of the debris to the dumping ground to be specified by the Employer within a distance of 10 km from the site.



7.4 Supply of Plant & Equipment, Structures, Commissioning Spares, Operation & Maintenance Spares, Initial Fills & Lubricants and Special Tools & Tackles

7.4.1 Plant and Equipment

The contractor shall be responsible for supply of plant & equipment as described in the Technical Specifications and Drawings / documents.

7.4.1.1 The Contractor shall furnish a copy of the unpriced Orders/ Contracts for all the bought-out items **“as mutually agreed”**.

7.4.2 Commissioning Spares

7.4.2.1 The Contractor shall, within the Contract Price, supply adequate commissioning spares required during Start up and commissioning along with the plant & equipment mentioned in **Clause 7.4.1**, hereof.

7.4.2.2 Should the commissioning spares found to be inadequate, the Contractor shall supply without any extra cost to the Employer, additional required commissioning spares within the time schedule to ensure that the Facilities are commissioned.

7.4.3 Operation and Maintenance Spares

7.4.3.1 The Contractor shall, within the Contract Price, supply adequate spares required for the normal operation and maintenance of the Facilities, for a period of two years which will be required after commissioning. Further, the contractor shall supply adequate spares required for the normal operation and maintenance of the Facilities for a period of five (05) years after the completion of guarantee period of two (02) years.

7.4.3.2 Should the operation & maintenance spares found to be inadequate, the Contractor shall supply without any extra cost to the Employer, additional required operation & maintenance spares to ensure smooth performance of the Facilities during the guarantee period of two years and Comprehensive Annual Maintenance Contract (CAMC) period of five years after the guarantee period.

7.4.3.4 The Contractor shall supply complete ordering specification including manufacturing drawings with bill of materials, material specification & catalogues with reference details and list of suppliers shall also form part of such ordering specification.

7.4.4 Initial Fill and Lubricants

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- 7.4.4.1 The Contractor shall supply along with the Plant & Equipment the oils, grease & lubricants required for the initial fill including flushing liquor and also chemicals for pickling, etc., well in advance, for commissioning of the Plant & Equipment.
- 7.4.4.2 The cost of such initial fill of oils including hydraulic oils, grease and other lubricants is included in the Contract Price. Should the oil, grease & lubricants found to be inadequate, the Contractor shall supply without any extra cost to the Employer, additional required oil, grease & lubricants, within the time schedule to ensure commissioning is not held-up the un-used oil, grease & lubricants shall be the property of the Employer.
- 7.4.4.3 The Contractor shall be responsible for supply of adequate quantities of such oils, grease & lubricants as may be required for this purpose till commissioning as per **Clause 25** hereof. The contractor shall also be responsible for supply of adequate quantities of such oils, grease & lubricants as may be required during the guarantee period of two years and CAMC period of five years after the guarantee period. The cost of such oils including hydraulic oils, grease and other lubricants is included in the Contract Price.
- 7.4.4.4 These oils, grease & lubricants should be preferably of Indian origin. In the case of imported oil, grease & lubricant, specification for the same shall be furnished by the Contractor for procurement in future.
- 7.4.4.5 The Contractor shall also furnish consumption rates of all the consumables along with estimated annual requirement and ordering specification for timely procurement by the Employer for future requirements.
- 7.4.4.6 The Contractor shall guarantee the long-term availability of spares to the Owner for 15 years of the equipment covered under the Contract. The Contractor shall guarantee that before going out of production of spare parts of the equipment covered under the Contract, he shall give the Owner at least twelve (12) months advance notice so that the latter may order his bulk requirement of spares, if he so desires. The same provision will also be applicable to Contractor's Sub-Contractors and the Contractor shall ensure adherence of his Sub-Contractors to this requirement. Further, in case of discontinuance of manufacture of any spares by the Contractor or his Sub-Contractors the Contractor will provide the Owner one year in advance, with full manufacturing drawings, material specifications and technical information required by the Owner for the purpose of manufacture of such items.
- 7.4.4.7 Further, in case of discontinuance of supply of spares by the Contractor or his sub-contractors the Contractor will provide the Owner with full information for

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replacement of such spares with other equivalent makes, if so required by the owner.

7.4.5 **Special Tools & Tackles**

The Contractor shall supply along with the Plant & Equipment special tools & tackles, instruments and appliances which will be required for erection, commissioning, operation and maintenance of the Facilities including guarantee period of 2 years & CAMC for 5 years after the guarantee period.

The Contractor shall provide ordering specification including the names of suppliers giving sufficient details to enable the Employer to procure such special tools, tackles, instruments and appliances, at a later date when necessary, after successful commissioning.

7.5 **Civil Engineering Work (As specified in Technical Specifications)**

7.5.1 Unless otherwise expressly limited and/or excluded elsewhere in the Contract from Contractor's scope, the Contractor shall be responsible for the construction of all civil foundation for structures and equipment, construction of super structures, buildings and all other connected civil construction works included in the scope of work as per Technical Specifications in accordance with **Sub-Clause 20.4** hereof.

7.5.2 It is presumed that the Contractor has already inspected the site and satisfied itself about the actual site conditions and has collected any other information which may be required by the Contractor. All necessary soil tests over and above those carried out by the Employer are to be undertaken by the Contractor and no extra claim on this account shall be admitted.

7.5.3 The Contractor shall be held responsible for proper performance for buildings and structures including all other civil work for a period of 24 months after commissioning of the Facilities. Any defect found during this period will be made good by the Contractor at its own cost failing which the Employer reserves the right to take remedial measures at the Contractor's risk and cost.

7.5.4 All excavated materials shall remain the property of the Employer.

7.5.4.1 All fossils, coins, articles of value of antiquity and structure and other remains or things of geological and archaeological interest discovered on the site of works shall be the absolute property of the Employer and the Contractor shall take all precautions to prevent his workmen or any other person removing or damaging

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any such article or thing and shall immediately upon discovery thereof and before removal inform the Employer of such discovery and carry out the removal under the supervision of the Employer of the same and hand it over to the Employer.

7.6 Scope of work for Erection of Structures, Plant & Equipment

7.6.1 The scope of work of the Contractor amongst others, shall be complete erection of the Plant and Equipment, steel structures etc., as given in the Technical Specifications.

7.6.2 The Contractor shall intimate the Employer in writing well in advance about the requirement of shut down of any of the existing units / facilities for inter-connection / incorporation of additional facilities. The shutdown period shall be mutually discussed and finalized. The work to be undertaken during the shutdown period shall be planned meticulously by the Contractor to reduce the shutdown period to the minimum.

7.6.3 The Contractor shall use permanent pipe and clamps scaffolding for working at heights.

7.7 Technical Services (This Clause shall be read in conjunction with Contract Technical Specifications)

7.7.1 Technical Services to be provided by the Contractor shall include the following amongst others:

- a) Raw material testing, if necessary.
- b) Basic design, layout, engineering & drawings.
- c) Detailed design, layout, engineering & drawings.
- d) Drawings / data for carrying out Plant Engineering and detailed design/drawings of civil, structural and services.
- e) Technical services relating to planning, procurement, manufacturing, inspection, expediting, packing, shipping, storage, etc.
- f) Supervision of civil & structural engineering work & erection work including specialized erection services.
- g) Technical consultation / liaison / guidance relating to detail design and plant engineering by Contractor's Sub-Contractors, Co-ordination relating to site work and other engineering

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work, feedback data and information to the Employer / Consultant for the Contractor's scope of supply and services.

- h) Project Management Services including co-ordination relating to customs clearance, transportation, insurance, claim settlement, inspection of supplies, construction planning and scheduling, erection planning, field construction engineering, trial runs, start up, commissioning and performance guarantee tests.
- i) Training of Employer's Personnel.
- j) Deputation of Foreign Experts for supervision of design and manufacture of Plant and Equipment as well as for supervision of erection, cold tests, commissioning, guarantee tests, etc.
- k) Quality control and adherence to time schedule, control of site work and other Indian works.
- l) Clearance of installations from the statutory and other concerned authorities on behalf of Employer. The Contractor shall also assist in preparing application forms, providing necessary drawings, documents, test certificates etc., including necessary co-ordination with statutory and other concerned authorities.
- m) Post Commissioning services in accordance with terms and conditions stipulated under the Contract, if so specified in **SCC**.

7.8 Training of Employer's Personnel (This Clause shall be read in conjunction with Technical Specifications)

Subject to stipulations of the Contract, the Contractor shall arrange for training in India & abroad of the Employer's personnel for operation, maintenance and other services of the facilities under the Contractor's scope of supply. The contractor shall furnish the details of the training to be provided to the employer's personnel for the approval of the employer. Employer may indicate the field of training and man-days to the contractor for compliance.

- 7.8.1 The traveling and living expenses of the Employer's trainees shall be borne by the Employer. The Employer shall also arrange necessary travel documents for its trainees. The Contractor shall, however, assist in arranging visa and medical insurance for such trainees, wherever necessary.

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7.9 Void.

7.10 Demonstration of Performance Guarantee

7.10.1 The Contractor guarantees the equipment for its workmanship, materials, design and satisfactory performance in accordance with the relevant specifications & provisions of this Contract. The guarantee for performance includes individual items and systems for the ratings / output as well as for the integrated operation of the Plant. The Contractor's responsibility under this guarantee shall not in any way be reduced, diminished or absolved for any reason whatsoever in respect of supplies, materials and equipment not manufactured by the Contractor. The Contractor, upon successful commissioning of each equipment / system will conduct performance guarantee tests to demonstrate the integrated operation of all equipment / systems.

7.10.2 The details of the performance guarantee tests, test procedures, test schedules, for the demonstration of the performance guarantees shall be submitted to the Employer which will be mutually agreed upon. Any subsequent deviation / modification in the agreed schedule, if considered necessary, at a later date shall be mutually discussed and agreed upon.

7.10.3 After commencing a test, it shall be completed unless in the opinion of either Employer or Contractor a safety hazard exists which necessitates shutdown.

7.10.4 The Contractor shall undertake to demonstrate the Performance Guarantee Tests and achieve the guaranteed production capacity in a sustained manner and also the other parameters as specified in **Appendix-5** of the Contract Agreement.

7.11 Void.

8.0 Time for Completion

8.1 The Contractor shall attain Completion of the Facilities as defined at **Clause 1** hereof within the time stated in the **Article-5** of Contract Agreement or within such extended time to which the Contractor shall be entitled under **Clause 42** (Extension of Time for Completion) hereof.

9.0 Contractor's Responsibilities (This Clause shall be read in conjunction with Contract Technical Specifications)

9.1 The Contractor shall carryout Scope of Facilities as specified in Clause-7 hereof including design & engineering; civil engineering & allied work; dismantling, if any,

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- of existing building, structures & equipment; modification / diversion, if any, of utility/ services; fabrication & supply of steel structures; manufacture (including associated purchases and / or sub-contracting) & transportation; intermediate storage; insurance & handling; erection work & commissioning of the Facilities with due care and diligence in accordance with the Contract.
- 9.2 The Contractor shall be deemed to have entered into this Contract on the basis of a proper examination of the data relating to the Facilities (including any data as to boring tests) provided by the Employer, and on the basis of information that the Contractor could have obtained from a visual inspection of the Site (if access thereto was available) and of other data readily available to it relating to the Facilities prior to bid submission. The Contractor acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Facilities. The Contractor shall satisfy himself regarding the accessibility to site by existing roads, feasibility of taking materials / equipment to site and availability of Labour and local conditions.
- 9.3 Void.
- 9.4 The Contractor shall comply with the Indian Laws that may be in vogue as on Base Date of the Contract or may come into force during currency of the Contract, that binds upon the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the Contractor or its personnel, including the Sub-Contractors and their personnel.
- 10. Employer's Responsibilities**
- 10.1 The Employer shall ensure the accuracy of information and / or data to be supplied by the Employer, except when otherwise expressly stated in the Contract.
- 10.2 The Employer shall be responsible for acquiring and providing legal and physical possession of the Site and access thereto, and for providing possession of land access to all other areas reasonably required for the proper execution of the Contract, including all requisite rights of way. The Employer shall give full possession of land and accord all rights of access thereto on or before the mutually agreed date(s).

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- 10.3 If requested by the Contractor, the Employer shall use its best endeavors to assist the Contractor in obtaining in a timely and expeditious manner all permits, approvals and / or licenses necessary for the execution of the Contract from State or Central Government Authorities.
- 10.4 To the extent specified in the Contract or agreed upon by the Employer and the Contractor, the Employer shall provide to the Contractor sufficient, properly qualified operating & maintenance personnel; shall supply & make available all raw materials, & utilities, and shall perform all work and services of whatsoever nature, for properly carrying out pre-commissioning, commissioning and performance guarantee tests by the Contractor at or before the time specified in the Program of Performance hereof and in the manner thereupon specified or as otherwise agreed upon by the Employer and the Contractor.

10.5 Void.

10.6 Void.

C. PAYMENT

11. Contract Price

11.1 The Contract Price as specified in **Article 2** (Contract Price and Terms of Payment) of the Contract Agreement shall be for the entire Scope of the Facilities. The break-up of the Contract Price is given in the **Appendix-1** to the Contract Agreement.

11.2. Price Basis

11.2.1 The Contract Price quoted in Indian Rupees shall comprise of basic price, all duties, taxes and levies other than Goods and Services Tax (GST) as may be applicable and prevailing as on base date on Taxable Value of the Contract (Basic price + other charges, duties levies taxes other than GST) and GST as may be applicable and prevailing as on base date as per the Price Schedule Format. While the basic price under the Contract will constitute the consideration of other taxes, duties, levies, cess, etc. other than GST, the payment of Goods and Services Tax (GST) will be reimbursed on actuals against documentary evidence subject to a ceiling indicated **in Price Schedule given in Appendix-1** except on account of impact due to price variation, if applicable and statutory variation on account of taxes and duties.

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- 11.2.2 Void.
- 11.2.3 Void.
- 11.2.4 Void.
- 11.2.5 Void.
- 11.2.6 The GST TDS if any required by Employer to be made under GST Act or rules made thereunder shall be deducted at such rate as may be specified with effect from such date as notified from the invoice of the contractor.
- 11.2.7 The contractor shall make his own arrangements for Raw Water & Electrical Power required for Construction & Erection Work at site, as per **Sub-Clause 20.4.2 & 20.4.3** hereof.
- 11.2.8 The Contractor shall use such items of steel as are made by Steel Authority of India Limited (SAIL) / TATA Steel/ RINL/Essar/JSW and which are required for execution of all civil and building structural work including sheeting and technological structures. Such items of steel as are made by SAIL/ TATA Steel/ RINL/Essar/JSW and required for the work shall be procured from SAIL/ TATA Steel/ RINL/Essar/JSW -Stockyards.
- 11.2.9 Percentage of Goods and Services Tax (GST) either CGST and SGST/UTGST or IGST considered in the offer shall be indicated separately item wise by the successful bidder, as per the billing schedule/price schedule format.
- 11.3 Firm Contract Price**
- 11.3.1 Void.
- 11.3.2 The Price for items for which the price indicated in the Contract is in Indian Rupees, except as provided in the **Sub-Clause 11.3.3** hereof, shall be firm, not subject to any escalation except in the event of a change in the scope of work or specification or as otherwise provided in the Contract. However, scope of work in pursuance of **Sub-Clause 7.1.2**, hereof, shall not be taken as change in the scope of work or specification.
- 11.3.3 Where the contractual “Time for Completion” exceeds twelve (12) months, unless otherwise specifically indicated in the Contract, the Price for the following heads shall be subject to price adjustment due to variation in price indices as per **Appendix-4** (Price Adjustment due to variation in Price Indices):
- Supply of Indigenous Mechanical Plant & Equipment including Technological Structures.

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- Supply of Indigenous Electrical Plant & Equipment.
- Erection of Mechanical & Electrical Plant & Equipment including Technological Structures.
- Supply of Building Steel Structures & Sheeting.
- Erection of Building Steel Structures & Sheeting.
- Civil Engineering & Allied works including all necessary supplies.

11.4 **Ceiling of Price Variation (as per applicability of the clause, Ref: Cl. 11.5 hereof)**

11.4.1 The Price Variation (plus or minus) as per **Appendix-4** shall be subject to a ceiling amount of 15% of Price (excluding duties, taxes, levies, etc.) for respective heads indicated in **Sub-Clause 11.3.3**.

11.4.2 For the purpose of calculation of ceiling on Price variation, the taxes & duties included in the Contract Price as on Base Date, the advance payments as per **Appendix-3** shall be deducted from the Contract Price.

11.4.3 The statutory variation in Taxes, Duties being reimbursed at actuals as per **Sub-Clause 14.6** hereof, shall not be included in fifteen percent (15%) ceiling on Price Adjustment.

11.5 **Validity of Price Variation**

11.5.1 No price variation is applicable for contracts with contractual "Time for Completion" up to twelve (12) months.

11.5.2 When contractual "Time for Completion" of the Contract is up to twelve (12) months and if completion of Facilities / works is delayed beyond scheduled "Time for Completion" due to reasons attributable to the Employer and extension to the "Time for Completion" is granted, the extent of price adjustment, if any, shall be allowed in the Contract Price, for the upward variations arising between the scheduled "Time for Completion" and actual date of completion of the respective item of work within the "Extended Time for Completion" of the Contract

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11.5.3 When contractual "Time for Completion" of the Contract is for more than twelve (12) months, price adjustment shall be allowed in the Contract Price for the variations, as follows:

- a. Price adjustment, if any, shall be allowed only for that part of the Facilities / works, which are executed within the scheduled "Time for Completion" and the price adjustment will be limited to the price adjustment arising from the Base date of the Contract to the scheduled completion as indicated in Contract Agreement or actual completion period of the respective items of work whichever is lower.
- b. If completion of facilities / works is achieved within the scheduled 'Time for Completion' (as per sub-clause above) but beyond scheduled period of completion as indicated in Contract Agreement, the price adjustment shall be calculated on the basis of the lower of the following two RBI Indices:
 - 1) RBI Index as on the scheduled date of completion; or
 - 2) RBI Index as on the Actual date of completion.
- c. If completion of the Facilities / works is delayed beyond scheduled "Time for Completion", due to the reasons not attributable to the Employer, notwithstanding the extension to the "Time for Completion" is granted, no price adjustment shall be allowed in the Contract Price for the portion of work executed beyond scheduled "Time for Completion". However, in case the RBI indices during the extended completion time are lower, the same will be applicable for calculating the price adjustment payable.
- d. If completion of Facilities / works is delayed beyond scheduled "Time for Completion" due to reasons attributable to the Employer and extension to the "Time for Completion" is granted, price adjustment, if any, shall be paid in the Contract Price, for the variations arising between the base date and actual date of completion of the respective item of work within the "Extended Time for Completion" of the Contract.

In the event of Contract period getting extended, due to reasons attributable to Employer, the contractor agrees that the adjustment in the

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price is limited to the value arrived based on the agreed price variation terms/formulae stipulated in the Contract and no claims other than price variation shall be admissible on account of such delay.

However, if the completion of facilities / works is delayed beyond scheduled date of the “Time for Completion” due to reasons attributable to both the parties, then the period for delay attributable to the Employer will be considered as initial delay and the price adjustment shall be applicable during this period as well.

11.5.4 The Contractor shall submit its first Statements for Price Adjustment, if any, after completion of six months from Effective Date of Contract with all break-up and supporting documents to justify Price Adjustment. Subsequent Price Adjustment Statements shall be submitted after every six months. The payable escalation amount shall be paid as per payment terms.

11.6 Adjustment of Price for Weights and Physical Quantities of Work

11.6.1 The Contract is for Turnkey Completion of Scope of Facilities as specified in the **Clause 7** hereof & Technical Specifications. The physical quantities and weights as given in the contract/ billing schedule, are indicative only for the purpose of making progress payments on prorated basis as per **Appendix-3** of Contract Agreement. Neither the Contractor shall be entitled to get any additional price from the Employer nor the Employer is entitled to deduct any amount from the Contract Price due to variation in physical quantities and weights.

11.7 Billing and Dispatch Schedule

11.7.1 The Contractor within 30 (Thirty) days of issue of Letter of Award of Contract shall submit detailed Billing Schedules (breakup of the Price Schedule contained in the **Appendix-1** for release of progress payments in accordance to **Appendix-3**, which will be scrutinized and approved by the Employer. The detailed Billing Schedules shall be based on Time Schedule included in **Appendix-2** (Time Schedule) to the Contract Agreement and PERT network as per **Sub-Clause 18.1.1** hereof, for respective progress payment terms in accordance with **Appendix-3**.



11.7.2 Within 30 (Thirty) days of issue of Letter of Award of Contract, a detailed shipping schedule matching to billing schedule **& time schedule**, shall be submitted by the Contractor, indicating the break-up of the complete Plant & Equipment and structures into shipment units with approximate weights and dimensions and the respective dates upon which such units will be dispatched from the Contractor's and / or its Sub-Contractor's works. The Contractor shall arrange for supplies of the Plant & Equipment and structures in the logical sequence required for erection at site within the overall Time for Completion of the Facilities unless otherwise agreed to by the Employer. The Contractor shall promptly give written notice to the Employer of any anticipated delay in maintaining such schedule stating reasons and remedial measures, thereof. This shall not, however, in any way absolve the Contractor from his responsibility of timely delivery of plant & equipment as per Contractual time schedule.

12. Terms of Payment

12.1 General

- 12.1.1 No advance will be provided to the Contractor, unless specified in ITT/ BDS and the payments will be linked with the progress.
- 12.1.2 All payments shall be made as specified in **Appendix-3** (Terms of Payment), directly by the Employer to the Contractor unless otherwise provided in the Contract or agreed between the Parties.
- 12.1.3 If as per provisions of Contract any payment is made directly by the Employer to the Sub-Contractors, such payments shall constitute a proper discharge of Employer's obligations for such payments to the Contractor.
- 12.1.4 The payments will be made in the currencies quoted by the Contractor and included in the Contract unless otherwise agreed to between the Parties.
- 12.1.5 The Contractor shall furnish the detailed Billing Schedule as per **Sub-Clause 11.7.1** hereof, for each item under the scope of work of the Contract, for the approval of Employer, which after the approval only, will be the basis for submission of invoices for progress payments.
- 12.1.6 The Employer shall release the payment to the Contractor within thirty (30) days from the date of receipt of the complete and correct invoices & relevant documents.

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12.1.7 All interim / progress payments shall be regarded as payments by way of advance against the final payment only and not as payment for work completed and shall not preclude defective / imperfect / incomplete Facilities to be removed. It will not be considered as an admission by the Employer of the due performance of the Contract, or any part thereof by the Contractor nor shall it preclude, determine or affect in any way the powers of the Employer under these conditions or in any way vary or affect the Contract.

13. Securities

13.1 Issuance of Securities (Bank Guarantees)

13.1.1 The Contractor shall provide the Securities in the form of Bank Guarantees specified below in favour of the Employer at the times, and in the amount, manner and form specified below.

13.1.2 The Bank Guarantee shall be in the form provided in the **Annexure A to B** hereof or in another form acceptable to the Employer as mutually agreed prior to contract finalization with the successful bidder.

13.1.3 The Bank Guarantee for Indian Rupee payments shall be issued and be payable/operable by Scheduled Commercial Bank in India or nationalized bank in India at the place acceptable to the employer.

13.1.4 Void.

13.1.5 In case the project gets delayed then the BG shall be extended by the contractor for such delayed period. However, if the delay is due to reasons not attributable to Contractor, the BG extension charges shall be reimbursed by the Employer.

13.2 Performance Security/Bank Guarantee(s)

13.2.1 CPG for Main Contract (towards turnkey work execution)

1st CPG:

Within thirty (30) days of issue of the Letter of Award of Contract (LAC)/LOI, the successful Tenderer, to whom the contract is awarded, shall furnish a Contract Performance Guarantee (CPG) in the form of EFT/Demand Draft/Bank Guarantee (BG) from a Nationalized Indian Bank/Scheduled Commercial Bank including a foreign bank having a branch in India, in the form attached as Annexure-A to the GCC hereof in favour of the Employer. The Performance Guarantee amount shall

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be equal to **three percent (3%)** of the total contract price for turnkey work execution, excluding the price for 5 years CAMC and it shall guarantee the faithful performance of the contract in accordance with the terms and conditions specified in the tender documents. The Bank Guarantee towards the Performance Guarantee shall be initially be kept valid till the expiry of the guarantee period / defect liability period plus three months. However, if the Guarantee/Defects Liability Period has been extended on any part of the Facilities, the Contractor shall issue an additional Bank Guarantee in an amount proportionate to the Price of that part and shall be valid for further 12 months.

Minimum initial validity of the 1st CPG for the Main Contract shall be 32 months [Project completion time up to commissioning of 5 months + guarantee period of 24 months + 3 months].

- 13.2.1.1 If the contractor fails to provide the Performance Bank Guarantee, the Employer shall have the right to take risk purchase action including forfeiting the bid security, and get the Facilities executed by any other party at the risk and cost of the Contractor, after expiry of the notice for terminating the Contract for such default by the Contractor.

This CPG will be submitted at the office of Tender Receiving Authority of NMDC Ltd., for onward transmission to the Executing Authority of NMDC Ltd., after pertinent verification etc.,

13.2.2 2nd CPG:

Extended Performance Guarantee for Solar PV Modules (i.e. 2nd CPG -for main contract):
The total solar PV modules supplied on turnkey basis, shall be under guarantee as follows
[Ref. Specific Provisions on Warranty / Guarantee- Cl. 31.0 & Cl. 3.1 (A)-Annexure-II- Vol-II
(Scope of Work and Technical Specifications) of Tender document]:

- (I). Against defects in material / manufacturing and workmanship for a **period of 10 years (120 calendar months) commencing from the date of successful commissioning** of the system; and
- (II). Towards guarantee of minimum **80% of the initial rated output at the end of 25 years.**

The submission of extended CPG will be as under:

- (a) **The Contractor shall furnish an extended performance bank guarantee (i.e. the 2nd CPG under the main contract) equivalent to Three Percent (3 %) of total cost**

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of supply of PV modules to the Executing Authority of NMDC Ltd., 3 months prior to the expiry of 1st CPG for main contract as per Cl. 13.2.1 above and this BG shall be initially valid for 2 year plus 3 months. This performance guarantee shall be renewable every 2 years till the end of total extended performance period of 25 years of Solar PV modules is reached, counted from the date of successful commissioning of the system.

The BG shall be from a Nationalized Indian Bank / Scheduled Commercial Bank including a Foreign Bank having a branch in India in favour of the Owner in line with the prescribed format.

- (b) In case the 1st BG towards the extended guarantee for Solar PV modules (*i.e. the 2nd CPG under the main contract*) is not furnished to the Owner, at least 30 days prior to the expiry of validity of 1st CPG for the main contract as per Cl. 13.2.1 above, Owner shall be entitled to encash the 1st CPG of the main contract as per Cl. 13.2.1 above without any notice whatsoever.
- (c) Further, in case the BG for the succeeding time span (*i.e. for ensuing time span of 2 years or as applicable as per requirement of contract*) towards extended guarantee for Solar PV Modules is not furnished to the Owner, at least 30 days prior to the expiry of validity of the preceding performance BG for the purpose, Owner shall be entitled to encash the preceding performance BG without any notice whatsoever.

13.2.3 CPG for Comprehensive Annual Maintenance (CAMC) for 5 years after the Guarantee period (3rd CPG):

The contractor shall furnish a Contract Performance Guarantee (CPG) for Comprehensive Annual Maintenance (CAMC) in the form of EFT/Demand Draft/Bank Guarantee (BG) from a Nationalized Indian Bank/Scheduled Commercial Bank including a foreign bank having a branch in India, in the form attached as Annexure-A to the General Conditions of the Contract (GCC) in favour of the Employer equivalent to **three percent (3 %)** of total CAMC charges of 5 years, to be submitted to the Executing Authority of NMDC Limited, 3 months prior to the expiry of the validity of the CPG for main contract (*i.e. the 1st CPG*).

The CAMC Performance BG shall be initially valid for **One (01) year with a claim period of 3 months**. The performance guarantee shall be renewable every year for a further period of 1 year, till the completion of total CAMC period of 05 years.

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13.2.3.1 In case the contract performance guarantee for the CAMC is not furnished to the Owner at least 30 days prior to the expiry of validity of CPG for the main contract as per Cl. 13.2.1 above (*i.e. the 1st CPG*), the Owner shall be entitled to encash the CPG of the main contract without any notice whatsoever.

In case the yearly extension of the CAMC performance BG is not furnished to the Owner at least 30 days prior to the expiry of its validity period, the Owner shall be entitled to encash the CPG of the preceding year CAMC (*i.e. the 3rd CPG*) without any notice whatsoever.

13.3 **Bank Guarantee for release of payments towards Commissioning**

13.3.1 The Contractor shall provide Bank Guarantee (as per **Annexure-B** hereof) to the Employer for an amount equivalent to the payment under **Sub-Clause 25.4** hereof, in the same currency or currencies valid for a period of 12 months.

13.3.2 The Bank Guarantee shall be returned to the Contractor as soon as Commissioning Certificate has been issued, at the latest, however, on the expiry of 12 months from the date of release of payment against Bank Guarantee.

13.4 **Bank Guarantee for release of payments towards Performance Guarantee Certificate**

13.4.1 The Contractor shall provide Bank Guarantee (as per **Annexure-B** hereof) to the Employer for an amount equivalent to the payment under **Clause 27** hereof, in the same currency or currencies for a period of 12 months.

13.4.2 The Bank Guarantee shall be returned to the Contractor as soon as the Performance Guarantee Test is successfully completed and the guaranteed output and other parameters are met, at the latest, however, on expiry of 12 months from the date of release of payment against Commissioning Certificate.

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13.5 Bank Guarantee for release of payments towards Final Acceptance Certificate

13.5.1 The Contractor shall provide Bank Guarantee (as per **Annexure-B** hereof) to the Employer for an amount equivalent to the payment under **Clause 28 hereof**, in the same currency or currencies valid for a period of 24 months.

13.6 Claims under Security (Bank Guarantee)

If the Employer considers itself entitled to any claim under any Bank Guarantee, it shall so notify the Contractor, specifying the default of the Contractor upon which it bases its claim, and it shall require the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within fourteen days of receipt of such notice, then the Employer shall be entitled to call Security.

The actual expenditure incurred by the Contractor for extension of BG/Additional Insurance Premium shall be reimbursed to the Contractor in case delay in completion of project is not attributable to the Contractor.

14. Taxes & Duties

14.1 Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies and charges assessed on the Contractor, its Sub-Contractors or their employees by Municipal, State or Central Government Authorities.

However, subject to stipulations of the Contract, the payment of duties, taxes, levies, etc., will be reimbursed (on actual) against documentary evidence to be produced by the Contractor, subject to a ceiling indicated in price schedule(s) of the Contract. In no case the reimbursement towards duties and taxes, etc., shall exceed the amount indicated in price schedule(s) of the Contract towards duties, taxes, levies, etc. except on account of statutory variation in Taxes & Duties and / or imposition of new taxes and duties.

All taxes & duties payable outside India in respect of performance of the Contract shall be borne & paid by the Contractor. The Employer shall have no liability whatsoever on this account.

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- 14.1.1 The GST TDS if any required by Employer to be made under GST Act or rules made thereunder shall be deducted at such rate as may be specified with effect from such date as notified from the invoice of the contractor.
- 14.1.2 The Contractor shall bear and pay all the liabilities in respect of non-observance of all legal formalities as per various statutory provisions.
- 14.1.3 Void
- 14.2 Notwithstanding Sub-Clause 14.1 hereof, the Employer shall bear and pay Customs Duty, Cess, and IGST on imported Plant & Equipment for which prices indicated in the Contract are in Foreign Currencies. Customs Duty, Cess and IGST for replacement against short supply, damaged, defective items, of such imported Plant & Equipment for which prices indicated in the Contract are in Foreign Currencies shall be borne by the Contractor.
- 14.2.1 The Contractor shall bear and pay Customs Duty, Cess, and IGST on imported plant & equipment for which prices indicated in the Contract are in Indian Rupees.
- 14.3 Notwithstanding Sub-Clause 14.1 here, the Employer shall bear and pay Income Tax, Integrated Goods and Services Tax (IGST) on imported engineering/ Technical Services, supervision services by Overseas Contractor's experts & training, for which prices indicated in the Contract are in Foreign currencies, directly to the authorities, for which required documents will be furnished by the Contractor to the Employer.
- 14.3.1 The personnel Income Tax of Overseas Contractor's experts, if payable, shall be paid by the Overseas Contractor's experts directly and the Employer shall neither be liable to pay the Income Tax nor for filing the tax return for Overseas Contractor's experts
- 14.3.2 The Employer will furnish to the Overseas Contractor, the original tax receipts in connection with payments made under the Contract.
- 14.4 **Avoidance of Double Taxation**
- 14.4.1 In case the Overseas Contractor becomes entitled to receive or receives any tax exemptions, reductions, allowances or privileges in the foreign country on account of taxes & duties paid by the Employer in India, on behalf of the Overseas Contractor for imported supplies & services or due to Avoidance of Double Taxation Treaty between Governments of Overseas Contractor's Country & India then the same shall have to be reimbursed by the Overseas Contractor to the Employer.

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14.4.2 A certificate from an independent Chartered Accountant stating as given thereunder, shall be furnished by the Contractor to the Employer, as soon as possible:

- i) Refund / Reimbursement due on account of tax paid by the Employer in India, where available under said treaty, has been claimed by the Contractor, and
- ii) Refund / Reimbursement obtained, has been paid by the Contractor to the Employer.

14.4.3 The Overseas Contractor shall provide to the Employer expeditiously all details, information's, clarifications & documents, to the extent that such disclosure is reasonable, as may be required to file the requisite return with the Indian Income Tax Authorities to permit the Employer to get the same assessed in the most economical manner as per the provisions of the Income Tax Act / Agreement for Avoidance of Double Taxation.

14.5 **INPUT TAX CREDIT**

14.5.1 The Contractor shall submit all Documents required by the Employer to avail the GST Input Tax credit. In case, the Contractor fails to submit the required document for availing the GST Input tax credit by the Employer in respect of supplies, the amount of Goods and Service tax on such indigenous plant & equipment and Integrated Goods and Services Tax (IGST) on imported plant & equipment may be recovered by the Employer from the Contractor unless the Contractor furnishes proper justification.

In case of indigenous plant & equipment, Contractor is responsible for uploading his outward supplies data with GSTN in the month of supply and any demand of interest for failure of the contractor to upload the invoice details or to accept purchase data filed by Employer in inward supplies return (GSTR-2) shall be to the account of Contractor.

14.5.2 For supply of all imported plant & equipment by overseas suppliers, the Contractor shall furnish all required Documents including bill of entry in original etc. to enable the Employer to avail the GST Input tax Credit.

14.5.3 E-way bills / Transit passes / Road Permits, if required for materials etc., bought into the project site is to be arranged by the Contractor only. The Employer will issue e-waybills as required for dispatch of materials to the Contractor on request

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who is not registered under GST Act. Advance intimation in this regard is to be given by the Contractor to the Employer.

The Contractor shall comply with the requirement of relevant Goods and Service Tax Act and rules made thereunder regarding utilization of the E-waybills and submission of the counter foils to the employer. In case of failure to do so, the Contractor will be responsible for all consequential actions and penalties, if any.

14.6 Variations in Taxes & Duties

14.6.1 For the purpose of the Contract, it is agreed that the 'Contract Price' specified in **Article 2** ("Contract Price" & "Terms of Payment") of the Contract Agreement is based on the taxes, duties, levies etc. and charges prevailing on Base date (hereinafter called "**Tax**" in this **Sub-Clause 14.6** hereof). If any rate of tax is increased or decreased, a new tax is introduced, an existing tax is abolished, or any change in interpretation or application of any tax occurs in the course of the performance of Contract, which was or will be assessed on the Contractor, Sub-Contractors or their employees in connection with performance of the Contract, an adjustment of the Contract Price shall be made as per **Sub-Clauses 14.6.2 & 14.6.3**, hereof, by addition to the Contract Price or deduction therefrom, as the case may be.

14.6.1.1 For taxes and duties which are eligible for Input Tax Credit, the adjustment in the Contract Price towards variations in taxes, imposition of new taxes or abrogation of existing taxes shall be applicable.

For other taxes & duties, the variations in the taxes, enactment of new taxes or abrogation of existing taxes, which takes place within the scheduled Contractual delivery / execution period shall be applicable.

Whereas the variations in the taxes, enactment of new taxes or abrogation of existing taxes, which takes place during the extended period shall be applicable only if the reasons for delay is attributable to employer.

However, Base Date for statutory Variation & imposition of new taxes and duties shall be the date seven (7) days before last date of submission of price bid / updated price bid as per Appendix-4 Clause 2.0

14.6.2 The adjustment in the Contract Price towards variation in the taxes shall be made by the Employer on production of the documentary evidences by the Contractor.

14.6.3 The Contract Price shall be adjusted towards variations in taxes in respect of only finished equipment supplied by the Contractor to the Employer. No adjustment in

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the Contract price shall be made for variations in the taxes on raw-materials, parts, component / intermediate components, assemblies / sub-assemblies, etc.

14.6.4 For the purpose of adjustment in the Contract Price towards variation in taxes, the Contract Price shall be the price including price adjustment due to variation in price indices, as payable in accordance with **Appendix-4**.

14.6.5 In case any steel structure is fabricated at Employer's site after approval of the Employer as specified in the **Sub-Clause 21.1.1**, hereof, beyond the items and quantities indicated in the **Table-1.3** of the **Appendix-1** and there is saving in payment of duties, taxes, levies, etc. on this account then such saving will be recovered by the Employer from the Contractor's bills.

14.7 **Goods & Service Tax**

14.7.1 Invoices for all Taxable Input Services shall be made to 'NMDC Limited' for availing Input Tax credit of Goods and Service Tax under relevant Rules and shall be furnished by the Contractor to the Employer for availing Input Tax credit of Goods and Service Tax.

The Invoice for the supply of services shall separately indicate the Goods and Service Tax claimed by the Contractor along with their relevant Goods and Service Tax Identification Number obtained by the Contractor.

14.7.2 The Contractor shall submit all other Documents required by the Employer to avail the Input Tax credit of Goods and Service Tax. In case, the Contractor fails to submit the required document for availing the Input Tax credit of Goods and Service Tax by the Employer in respect of Input Services, the same may be recovered by the Employer from the Contractor unless the Contractor furnishes proper justification.

14.7.3 Contractor shall issue tax invoice indicated all the specified fields in the Tax invoice rules including HSN/SAC codes, GSTIN Number, etc. as per GST Act/Rules.

14.7.4 The contractor shall submit to Employer the GST compliant tax invoice/debit note/revise tax invoice on the basis of which Employer will claim the Input Tax Credit in its return.

14.7.5 It is the responsibility of the contractor to determine the place of supply in terms of the place of supply rules.

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14.7.6 In the event of non-reporting of invoices for supplies effected to Employer during month or non-acceptance of purchase data submitted by Employer relying on the invoice received from contractor, Employer has the right to withhold the GST.

14.7.7 Contractor shall attend to all issues on reconciliation of invoices, mismatch reports etc. to the satisfaction of Employer.

14.7.8 GST charged by the contractor shall be released separately to the contractor only after Submission of Tax Invoice/Debit Note/Revised Tax Invoice as prescribed in GST Rules. Filing of valid statutory GST Returns in GSTN portal and input tax credit of such invoice is matched. Timely payment of applicable tax.

14.7.9 If the contractor fails to upload the invoice details in the GSTR return or fails to pay applicable taxes under GST, additional cost of interest or penalty levied to Employer by revenue authorities due to any default by contractor shall be recovered from the contractor.

14.7.10 In case Employer has to incur any liability (like interest etc.) due to denial/reversal of input tax credit in respect of the invoice submitted by the contractor, for the reasons attributable to the contractor, the same shall be recovered from the contractor.

14.7.11 In case, the government notifies the activity covered in the contract for the purpose of TDS under GST Act, Employer shall deduct TDS from the contractor bills and will issue necessary certificate to the contractor to claim credit of the same.

14.7.12 Whenever advance against supplies received if any, contractor shall issue receipt voucher and pay the applicable GST in the month of receipt.

14.7.13 **Other GST Compliance Related Terms:**

- Contractor shall issue tax invoice indicating all the specified fields in the Tax invoice Rules as notified including HSN/SAC codes, GSTIN Number.
- Contractor is responsible for uploading his outward supplies data with GSTN in the month of supply and any demand of interest and penalty from Revenue Authorities to the OWNER for failure of the Contractor to upload the invoice or to accept purchase data filed by OWNER in GSTR-2 shall be to the account of Contractor.

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- In the event of non-reporting of invoices for supplies effected to OWNER during the month or non-acceptance of purchase data submitted by OWNER relying on the invoice received from Contractor, OWNER is entitled to withhold the GST claimed in the Tax Invoice.
- Whenever advance against supplies is received by the Contractor, then the Contractor shall issue receipt voucher and pay the applicable GST in the month of receipt.
- Contractor shall attend to all issues on reconciliation of invoices, mismatch reports etc. to the satisfaction of OWNER.
- In case, the government notifies the activity covered in the contract for the purpose of TDS under GST Act, OWNER shall deduct TDS from the Contractor bills and will issue necessary certificate to the Contractor to claim credit of the same.
- It is the responsibility of the Contractor to determine the place of supply in terms of the place of supply rules

14.8 **Income Tax**

Any Indian Income Tax which Employer may be required to deduct by law or statute, shall be deducted at the source under Indian Income Tax Act on account of the Contractor. Employer shall provide the Contractor a certificate for such deduction of Tax. The Contractor shall indicate their Permanent Account Number with the relevant Income Tax Authority to Employer.

D. CONFIDENTIAL INFORMATION

15. Copyright

- 15.1 The copyrights in all drawings, documents and other materials containing data and information including drawings/ordering specifications / catalogues for fast wearing parts furnished by the Contractor to the Employer shall remain vested in the Contractor; however, the Employer shall have the right to use all such drawings, documents and other

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material, data and information for execution of the Contract and operation and maintenance of the Facilities being subject of the Contract.

16. Confidential Information

- 16.1 The Employer and the Contractor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any document, data or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract. Notwithstanding the above, the Contractor may furnish to its Sub-Contractor(s) such documents, data & other information it receives from the Employer to the extent required for Sub-Contractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such Sub-Contractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this clause.
- 16.2 The Employer shall not use such documents, data and other information received from the Contractor for any purpose other than the operation and maintenance of the Facilities. Similarly, the Contractor shall not use such documents, data and other information received from the Employer for any purpose other than the design, procurement of Plant and Equipment, construction or such other work and services as are required for the performance of the Contract.
- 16.3 The obligation of a party under **Sub-Clauses 16.1 and 16.2** hereof, however, shall not apply to that information which
- a) now or hereafter enters the public domain through no fault of that party.
 - b) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party hereto.
 - c) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
- 16.4 The above provisions of this clause (**Clause 16** hereof) shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Facilities or any part thereof.

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16.5 The provisions of this clause (**Clause 16** hereof) shall survive termination, for whatever reason, of the Contract.

E. WORK EXECUTION

17. Representatives

17.1 Engineer

17.1.1 If the Engineer is not named in the Contract, then within fourteen (14) days of the Effective Date, the Employer shall notify the Contractor in writing the name of the Engineer. The Employer may from time to time appoint some other person as the Engineer in place of the person previously so appointed. The Engineer shall represent and act for the Employer at all times during the currency of the Contract. All notices, instructions, orders, certificates, approvals and all other communications under the Contract shall be given by the Engineer, except as herein otherwise provided.

17.2 Contractor's Representative

17.2.1 If the Contractor's Representative is not named in the Contract, then within fourteen (14) days of the Effective Date, the Contractor shall appoint the Contractor's Representative with the consent of Employer.

17.2.2 The Contractor shall not revoke the appointment of the Contractor's Representative without the Employer's prior written consent.

17.2.3 The Contractor's Representative shall represent and act for the Contractor at all times during the currency of the Contract and shall give to the Engineer all the Contractor's notices, instructions, information and all other communications under the Contract. All notices, instructions, information and all other communications given by the Employer or the Engineer to the Contractor under the Contract shall be given to the Contractor's Representative or, in its absence, its deputy, except as herein otherwise provided.

All notices, instructions, information and other communications given by the Contractor to the Employer under the Contract shall be given to the Engineer, except as herein otherwise provided.

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17.2.4 The Employer may by notice to the Contractor object to any representative or person employed by the Contractor in the execution of the Contract who, in the reasonable opinion of the Employer, may behave inappropriately, may be incompetent or negligent, or may commit a serious breach of the Site regulations provided under **Sub-Clause 22.3** hereof. The Contractor on receipt of such notice, shall remove such person from the Facilities. If any representative or person employed by the Contractor is removed in accordance with **Sub-Clause 17.2.4** hereof, the Contractor shall promptly appoint a replacement.

17.3 Co-operation with Other Contractors

17.3.1 The Contractor shall, upon written request from the Engineer, provide all relevant technical information to the other Contractors employed by the Employer on or near the Site for any associated Plant & Equipment to enable the Employer to obtain the efficient & economical design of the associated Plant & Equipment.

If required by the Contractor, the other contractors of the Employer will enter into a confidentiality agreement to ensure the technical information is not unlawfully disclosed.

17.3.2 The Contractor shall, upon written request from the Engineer, give all reasonable opportunities for carrying out the work to any other Contractors employed by the Employer on or near the Site and shall co-ordinate with the other Contractors for any interface activity under its Scope of Facilities.

17.3.3 The Contractor shall also so arrange to perform its work as to minimize, to the extent possible, interference with the work of other Contractors. The Engineer shall determine the resolution of any difference or conflict that may arise between the Contractor & other Contractors in regard to their work *in* consultation with Contractors.

18. Work Program

18.1 Program of Performance

18.1.1 Within the time frame as per Contract Technical Specification. Contractor shall prepare and submit to the Engineer the Master PERT Network (Hard & soft) for

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- the performance of the Contract, showing the sequence in which it proposes to design, manufacture, transport, assemble, install and pre-commission the Facilities, as well as the date by which the Contractor reasonably requires that the Employer shall have fulfilled its obligations under the Contract as per **Clause 10** hereof, so as to enable the Contractor to execute the Contract in accordance with the programme and to achieve Acceptance of the Facilities in accordance with the Contract.
- 18.1.2 The Master PERT Network so submitted by the Contractor shall accord with the Time Schedule included in **Appendix-2 (Time Schedule)** to the Contract Agreement and any other dates and periods specified in the Contract.
- 18.1.3 The Engineer shall approve the Master PERT Network after scrutiny and discussions with the Contractor within two (2) weeks of submission of Master PERT Network. The Contractor shall submit finalised Master PERT Network in number of copies as required by the Employer.
- 18.1.4 Based on the finalised Master PERT Network as per **Clause 18.1.3** hereof, the Contractor shall submit L-1 & L-2 Network for each unit of the Facilities progressively as per the Time frame as per Contract Technical Specification. These Networks shall be approved by the Engineer within three (3) weeks of the submission.
- 18.1.5 The Contractor shall update and revise the finalised Master PERT Network as and when appropriate or when required by the Engineer, but without modification in the Times for Completion given in the **Clause 1.1** of **Appendix-2** and any extension granted in accordance with **Clause 42** hereof, and shall submit all such revisions to the Engineer.
- 18.1.6 The Contractor shall intimate the Employer / Engineer, in writing well in advance, about the requirement of shut down of any of the existing Units / facilities for inter-connection / incorporation of additional units / facilities. The shutdown period shall be mutually discussed and finalised. The work to be undertaken round the clock during the shut down period shall be planned meticulously by the Contractor to reduce the shut down period to the minimum.
- 18.2 Progress Report**
- 18.2.1 The Contractor shall monitor progress of all the activities specified Program of Performance hereof, and submit to the Engineer a progress report along with Computerized Network Analysis Report every month.

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18.2.2 The progress report shall be in a form acceptable to the Engineer and shall indicate: (a) percentage completion achieved compared with the planned percentage completion for each activity; and (b) where any activity is behind the program, giving comments and likely consequences and stating the corrective action being taken.

18.2.3 Progress Review Meeting

Employer shall arrange progress review meeting periodically (not exceeding 3 months) to monitor the progress of the work. It will be mandatory on the part of the Leader of the Consortium to attend such meetings with their Consortium Members.

18.3 Progress of Performance

18.3.1 If at any time the Contractor's actual progress falls behind the Program of Performance hereof, or it becomes apparent that it will so fall behind, the Contractor shall, at the request of the Engineer, prepare and submit to the Engineer a revised program, taking into account the prevailing circumstances, and shall notify the Engineer of the steps being taken to expedite progress so as to attain Completion of the Facilities within the Time for Completion under **Sub-Clause 8.1** (Time for Completion) hereof, any extension thereof entitled under **Sub-Clause 42.1** (Extension of Time for Completion) hereof, or any extended period as may otherwise be agreed upon between the Employer and the Contractor.

18.4 Work Procedures

18.4.1 The Contract shall be executed in accordance with the Contract Documents including Appendices to the Contract Agreement and Annexure hereof.

18.4.2 The Contractor may execute the Contract in accordance with its own standard project execution plans and procedures to the extent that they do not conflict with provisions contained in the Contract.

18.5 Manpower Requirement for Operation & Maintenance of Facilities

18.5.1 The Contractor shall deploy adequate manpower required category wise and unit wise for the regular operation of the Facilities at the Guaranteed period of the Contract and during the CAMC period. The manpower requirement shall also include the requirement for the maintenance of the Facilities. The Contractor shall also submit job specifications for each

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category of personnel particularly in the critical positions to enable the Employer to deploy / recruit such personnel after the CAMC period..

18.6 Training

18.6.1 The Contractor shall identify the key positions and number of persons both in maintenance and operations department to be trained for efficient running of the plant/equipment.

18.6.2 The Contractor shall arrange for training of the personnel of the Employer, as indicated in technical specifications.

18.6.3 The Contractor shall submit Schedule for Training of personnel of the Employer within a reasonable period but not later than six (6) months from the Effective Date of Contract. The schedule shall be mutually agreed upon between the Employer and the Contractor.

18.6.4 The Contractor shall supply two (2) copies of Training Manuals, Instructions and other connected literature to the Employer in English Language. In addition, each trainee shall be provided the necessary manuals, literatures etc.

19. Subcontracting

19.1 The contractor may engage sub-contractors with the prior approval of employer as per stipulated procedures of the employer.

Such approval, by the Employer for any of the Sub-Contractors / Vendors shall not relieve the Contractor from any of its obligations, duties or responsibilities under the Contract.

19.2 On the request of the Contractor, the Employer may make direct payment in respect of equipment supply / work to the Sub-Contractor / Vendor on certification by the Contractor.

20. Design and Engineering

20.1 Specifications and Drawings

20.1.1 The Contractor shall execute the basic and detailed design and the engineering work in compliance with the provisions of the Contract, or where not so specified, in accordance with good engineering practice.

20.1.1.1 The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications, drawings and other technical documents that it has prepared,

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whether such specifications, drawings and other documents have been approved by the Engineer / Consultant or not, provided that such discrepancies, errors or omissions are not because of inaccurate information furnished in writing to the Contractor by or on behalf of the Employer.

20.2 Codes and Standards

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date of bid submission shall apply unless otherwise specified. During Contract execution, any changes in such codes and standards shall be applied after approval by the Engineer / Consultant & shall be treated in accordance with **Clause 41** hereof.

20.3 Approval / Review of Technical Documents by Engineer / Employer:

20.3.1 The Contractor shall prepare and furnish to the Engineer / Employer the drawings / documents listed at **Sub-Clause 2.2** of **Appendix-2** to the Contract Agreement for approval or review as specified and in accordance with the requirements of **Sub-Clause 18.1** (Program of Performance) hereof. (However, this shall be read in conjunction with Contract Technical Specification)

20.3.2 Any part of the Facilities covered by or related to the drawings / documents to be approved by the Engineer / Employer shall be executed only after the Engineer / Employer's approval thereof.

20.3.3 **Sub-Clauses 20.3.5 through 20.3.9** hereof, shall apply to those drawings/ documents requiring the Engineer / Employer's approval, but not to those furnished to the Engineer / Consultant for its reference only.

20.3.4 To enable the Employer to accord approval and to review documents the Contractor shall submit back-up data / drawings / basic calculations / assumptions as may be required by the Employer / Engineer, and the same shall be as specified in Contract Technical Specifications.

20.3.5 Within fourteen (14) days after receipt by the Engineer Employer of any drawings /document requiring the Engineer / Consultant's approval in accordance with **Sub-Clause 20.3.1** to **20.3.3** hereof, the Engineer / Employer shall either return one copy thereof to the Contractor with its approval endorsed thereon or shall notify the Contractor in writing of its disapproval thereof and the reasons therefor and the modifications that the Engineer / Employer proposes.

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- 20.3.6 The Engineer / Employer shall not disapprove any document, except on the grounds that the document does not comply with some specified provision of the Contract or that it is contrary to good engineering practice.
- 20.3.7 If the Engineer / Employer disapproves the drawing / document, the Contractor shall modify the drawing / document and resubmit it for the Engineer / Employer's approval in accordance with **Sub-Clause 20.3.5** hereof. The Engineer/Employer will not give any new comment on the revised drawing, wherein all comments have been incorporated by the Contractor in the revised drawing. If the Engineer /Employer approves the drawing / document subject to modification(s), the Contractor shall make the required modification(s), whereupon the document shall be deemed to have been approved.
- 20.3.8 The Engineer / Employer's approval, with or without modification of the document furnished by the Contractor, shall not relieve the Contractor of any responsibility or liability imposed upon it by any provisions of the Contract.
- 20.3.9 The Contractor shall not depart from any approved drawing / document unless the Contractor has first submitted to the Engineer / Employer an amended drawing / document and obtained the Engineer / Employer's approval thereof, pursuant to the provisions of this **Sub-Clause 20.3** hereof.

20.4 **Civil Engineering & Allied Work**

- 20.4.1 The Contractor shall carryout Civil Engineering & Allied Work as per the Technical Specification in accordance with conditions given below:
- 20.4.1.1 The Contractor shall make its own arrangement for all labour, construction, tools & tackles & construction materials. All temporary approach roads to the site for carrying out construction work shall be constructed and maintained by the Contractor at its own cost.
- 20.4.1.2 The Contractor shall make arrangement at its own cost for drawing and distributing water and power from a single point each, where water and power will be provided by the Employer. The Contractor should have adequate water storage capacity to meet its requirements.
- 20.4.1.3 The Contractor shall take all necessary precautions to avoid damage to any property of the Employer or any third party. The Contractor shall also ensure that the progress of work of other Contractors in the adjoining areas is not hindered.
- 20.4.1.4 The Contractor shall take all precautions during execution, especially while excavating to avoid interference with or damage to underground works,

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such as cables, pipe lines, drains, etc. and provide all possible protection to these works and in case they are damaged, rebuild / divert them at its own cost (This shall be read in conjunction with GCC clause 22.6.8)

- 20.4.1.5 The Contractor shall carry out, at its own cost, necessary precision survey to set out and check the setting of all works including foundation & anchor bolts, etc., to the required tolerances using the grid reference points available in the plant site.
- 20.4.1.6 Materials brought to the site shall not be removed from the site without the written consent of the Employer. The Contractor shall submit well in advance for approval of all samples, specimens as the Employer may demand from time to time. Any material brought to site and rejected by the Employer shall be removed by the Contractor from the site of work immediately.
- 20.4.1.7 The Employer may during the progress of work, order the removal of part or whole of the work executed, found not in accordance with the approved drawings /specifications / written instructions. No extra claims shall be entertained for removal & re-execution of such work.
- 20.4.1.8 No work shall be covered up or put out of view without the clearance of the Employer. In the event of failing to do so, the Contractor shall uncover any part of the work or make openings in or through the works as the Employer may direct and they shall be made good with materials approved by the Employer and should match with workmanship of the surrounding work.
- 20.4.1.9 The Contractor shall provide sufficient strong and stable stagings so as to ensure safety of the labour & structures.
- 20.4.1.10 The Contractor shall dismantle and remove the stagings and other temporary facilities like stores, offices, labour camp, etc., on completion of work, clear and clean the site where such temporary facilities were built and restore the same to original condition.
- 20.4.1.11 After completion of work, the Contractor shall carry out micro leveling of the site within battery limit ensuring proper grades and slopes to achieve efficient drainage of the site. The Contractor shall remove all debris, surplus earth, etc., and dump the same at place(s) as directed by the Employer within a distance of 10 km from the site.
- 20.4.1.12

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- a) The cost of testing of concrete and any other material, shall be borne by the Contractor.
- b) The Contractor shall install its own testing facilities at site for testing of construction materials like cement, aggregates, concrete cubes, soil etc. and this shall be read in conjunction with the contract technical specification.
- c) Testing shall be carried out by the Contractor in the presence of Employer's representative. However, the Contractor shall arrange for such testing, in case of exigencies on the Employer's instructions, at any other testing laboratory as approved by the Employer without any extra cost to the Employer. All test results shall be submitted by the Contractor to the Employer for his approval.
- d) Any special measures or techniques which may be necessary for construction of structures, e.g., dewatering, sheet piling, diaphragm walls, well sinking, well point system, continuous pouring of concrete, etc., shall be deemed to have been taken into account by the Contractor and no extra claim, whatsoever, shall be entertained and this shall be read in conjunction with the contract technical specification.

20.4.1.13 In respect of any portion of works which is to be embedded or covered up by other works, the Contractor shall submit them to Employer for technical inspection and have the necessary clearance certificates duly signed by the Employer and Contractor before letting such portion to be embedded or covered.

20.4.1.14 Wherever works are to be carried out in proximity or within existing facilities, Contractor may have to adopt special methodology of construction suited to prevailing conditions. The Contractor shall make necessary schemes in advance and finalize the same with the approval of the Engineer / Consultant.

20.4.2 Construction Water

20.4.2.1 Supply of water will be made available free of cost for the construction purposes at single point within a distance of 300 m from the battery limit. Any further distribution will be the responsibility of the Contractor. Free drinking water will also be provided at one agreed point in the Site. Further distribution either to his labour colony or his work site or to his office shall be the responsibility of the Contractor.

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20.4.2.2 All pipelines, pumps and other accessories required for taking the water from mains to the site of work shall be provided by the CONTRACTOR at his own cost. He shall not be entitled to any payment on account of the expenditure incurred in providing the Pipe lines, Pump, etc.

20.4.2.3 Even though the OWNER may permit the CONTRACTOR to use any existing source of water as per clause 20.4.2.1 above, the OWNER will not be responsible for sufficient yield of water from such source and the CONTRACTOR shall be responsible for making at his own cost alternative arrangements for water, if necessary. The ENGINEER also reserves the right to limit the quantity of water to be allowed to be drawn by the CONTRACTOR.

20.4.2.4 It will be the responsibility of the CONTRACTOR to satisfy himself that the water drawn by him is fit for construction and to adequately treat such water before use at his own cost when it is not found fit for the said purpose.

20.4.2.5 The CONTRACTOR shall make his own arrangements for storage of sufficient quantity of water required for the work. He shall not be entitled to any payment on account of the expenditure incurred in providing storage facilities.

20.4.3 **Construction Power**

20.4.3.1 The Employer will supply 415V, 3-Phase four wire AC power in bulk at one point within 300 meters of battery limit, for construction & erection free of charge. The Contractor shall make its own arrangements to lay and maintain necessary distribution lines and wiring at its own cost. Electrical power for fabrication work, if any, envisaged at site shall be supplied, metered and charged at the rate prevailing from time to time. This shall be read in conjunction with contract technical specification. The CONTRACTOR shall ensure that the Electric Equipments and distribution lines conform to Indian Electricity rules 1956 and Indian Electricity Act 1910 with latest amendments and that all equipments are approved by the Electrical Inspector of the State Government.

20.4.3.2 The Contractor shall ensure that the electrical equipment employed by the Contractor will be such that the aggregate power factor does not fall below 0.8 at the Employer's terminal point.

20.4.3.3 The electrical installations for construction power shall conform to Indian Electricity Rules.

20.4.3.4 The Contractor will employ Electricians having valid Electrical License for carrying out the installations as well as for maintenance.

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20.4.3.5 The Contractor shall be responsible for all damages, losses, etc., if it is due to the Contractor's negligence, improper installation, operation and/ or maintenance of Contractor's part of installations.

20.4.4 Structural Load Test

The Contractor shall carry out structural load test on any part of the building/ structure if any, at its own cost if such structural load test is warranted due to unsatisfactory test results of concrete cubes and if so directed by the Employer.

However, the tests, if required will be as specified in Contract Technical Specification.

20.4.5 Royalties for the Construction Materials

20.4.5.1 Royalties for the construction materials, e.g., sand, stone aggregates, boulders, moorum etc. as prescribed from time to time by the State Government shall be recovered from the bills of the Contractor and paid to the State Government by the Employer if there is a demand from statutory authorities in this regard. The Contractor shall submit necessary documentary evidence that the Contractor has paid the royalties directly to the statutory authorities at source.

20.4.6 Explosives

20.4.6.1 In case, explosives are required for blasting of hard rock, if any, the same shall be arranged by the Contractor at its own cost. Fulfillment of statutory obligations shall be the responsibility of the Contractor.

21. Procurement

21.1 Plant & Equipment, Structures etc.

21.1.1 The Contractor shall not carry out fabrication work at Employer's site without necessary prior approval from the Employer.

21.2 Void.

21.3 Packing

21.3.1 The Contractor shall include and provide for securely protecting and packing the materials so as to avoid loss or damage during handling & transport by air, sea, rail and road.

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21.3.2 All packing cases, packing and other similar materials shall be new and supplied free by the Contractor and same will not be returned.

21.3.3 Notwithstanding anything stated in this clause, the Contractor shall be entirely responsible for loss, damage or depreciation or deterioration to the materials & supplies due to faulty and / or insecure packing.

21.4 **Transportation**

The Contractor shall be entitled to select any safe mode of transport operated by any person to carry the Plant & Equipment, Structures, etc.

21.4.1 **Transportation by Ship/ Air**

21.4.1.1 The Contractor shall be free to transport the material through any reputed shipping agency.

21.4.1.2 The Bills of Lading should be drawn so as to show:

SHIPPERS Any shipping agency of international repute

CONSIGNEE NMDC Limited, BIOM, Kirandul Complex

PORT OF DISCHARGE - **[Contractor to indicate]**

21.4.1.3 The Contractor shall forward the non-negotiable copies of the shipping documents to the employer indicating the freight and insurance value of the consignment immediately after shipment of each consignment.

21.4.2 **Transportation by Wagons**

21.4.2.1 In case of dispatch of consignment in Railway wagons, the Contractor shall ensure that the following is observed:

- i) Identify, place necessary indents on the Railways and obtain at the appropriate time the correct type of wagons required, keeping in view the consignments to be despatched.
- ii) In case of over dimensioned (O.D.) consignments, the Contractor shall obtain the sanction for movement of the O.D. Consignment from the Railways.
- iii) Non-availability of special wagon or handling the consignments shall not be an excuse for payment of demurrage and if so shall be to the Contractor's account.

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iv) Care being taken to avoid all possible chances of damages during transit and to ensure that all packages are firmly secured.

v) The destination shall be indicated in SCC.

21.4.2.2 The RR / Challans duly endorsed by the Engineer or Authorized representative of the Employer, will be handed over to the Contractor for taking delivery of consignments from Railway unloading the same from wagons and subsequent handling, transportation and storage at site after submission of custody-cum-indemnity bond in the form provided in the Bidding Document or in another form acceptable to the Employer. The demurrage charges, if any, will be payable by the Contractor.

21.4.2.3 The consignee for rail dispatches shall be clearly marked as *Designated* NMDC Project (ref. 1.1 of **SCC**), NMDC Limited

21.4.3 **Transportation by Road**

21.4.3.1 In case of the consignments dispatched by road, the Contractor shall ensure that the following is observed by the Contractor and the Sub-contractors:

i Identify and obtain the correct type of trucks / trailers, keeping in view the nature of consignments to be despatched.

ii Care being taken to avoid all possible chances of damages during transit to ensure that all packages are firmly secured.

iii All consignments despatched by road shall be on “Door Delivery” and freight paid basis.

21.4.3.2 The RR / Challans duly endorsed by the Engineer or Authorized representative of the Employer, will be handed over to the Contractor for taking delivery of consignments from Trucks, unloading the same from Trucks and subsequent handling, transportation & storage at site after submission of Custody-cum-Indemnity Bond in the form provided in the Bidding Document or in another form acceptable to the Employer. The demurrage charges, if any, will be payable by the Contractor.

21.4.3.3 The consignee for road dispatches shall be clearly marked as Designated NMDC Project (ref. 1.1 of **SCC**), NMDC Limited

21.4.4 Void.

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21.4.5 **Dispatch Documents for Transportation of Plant & Equipment, Structures, etc. by Wagon & Road**

21.4.5.1 The Contractor shall arrange to dispatch the following documents to the Employer at the address given in the SCC.

- a) Four (4) photocopies of the clean rail / lorry receipt.
- b) Four (4) copies of Contractor's signed invoice.
- c) Four (4) copies of Challan and Packing List.
- d) Four (4) copies of Inspection Certificate/ Despatch Clearance Certificate issued by the Engineer / Employer's Authorised Representative
- e) Four (4) copies of manufacturer's test certificate.

21.5 The Contractor shall be responsible for obtaining, if necessary, approvals from the authorities for transportation of the structures/Plant and Equipment. The Employer shall use its best endeavors in a timely and expeditious manner to assist the Contractor in obtaining such approvals, if requested by the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any claim for damage to roads, bridges or any other traffic facilities that may be caused by the transport of the Plant and Equipment to the Site.

21.6 Void.

21.7 Void.

22. Installation

22.1 Setting out

22.1.1 **Benchmark:** The Contractor shall be responsible for the true and proper setting-out of the Facilities periodically in relation to benchmarks, reference marks, check lines and levels provided to it in writing by or on behalf of the Employer.

22.2 **Contractor's Supervision:** The Contractor shall give or provide all necessary superintendence during the installation of the Facilities, and the

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Contractor's Representative(s) shall be constantly on the Site to provide full-time superintendence of the installation. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective discipline and supervisory staff who are competent to adequately supervise the work at hand.

22.3 Labour

22.3.1 The Contractor shall provide and employ on the Site in the installation of the Facilities such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution of the Contract.

22.3.2 The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst its employees & labour and labour of its Sub-Contractors / Vendors.

22.3.3 Labour Rules

22.3.3.1 In respect of all labour directly or indirectly employed on the works by the Contractor, the Contractor shall comply with and implement all the Provisions of the Contract Labour (Regulation and Abolition) Act 1970, or any amendment thereof, and all legislations and Rules of the State and / or Central Government or other local authority formed from time to time governing the protection of health, sanitary arrangements, wages, welfare and safety of labour employed on the works and the Contractor shall be deemed to be the Principal Employer for this purpose. The rules and other statutory obligations with regard to fair wages, welfare and safety measures, maintenance of register, etc., will be deemed to be part of the Contract. The Contractor will get itself registered with the concerned statutory authorities as provided in the Act and shall be directly responsible to the authorities thereunder for compliance with the provisions thereof.

22.3.3.2 Reporting of Accidents

The Contractor shall be responsible for the safety of its own and its Sub-Contractors' workmen and employees. All accidents at site are to be immediately reported to the required authorities.

The Contractor shall be responsible for all such accidents attributable to their own employees, subcontractors and workmen.

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22.3.3.3 **Preservation of Peace**

The Contractor shall take requisite precautions and use its best endeavor to prevent riotous or unlawful behaviors by, or amongst his workmen and / or others employed on the works, by the Contractor its Sub-Contractors and for the preservation of peace and protection of the inhabitants and security of the property in the neighborhood of the works / site.

22.3.3.4 **Use of Intoxicants**

The use or sale of ardent spirits or other intoxicating beverages, upon the works or in any of the building, boarding houses, encampments or other tenements owned, occupied by or within the control of the Contractor or any of its employees or its Sub-Contractor is strictly forbidden, and the Contractor shall secure strict compliance.

22.3.3.5 **Observance by Sub-Contractors**

The Contractor shall also be responsible for the compliance of all the rules & regulations by his Sub-Contractor(s)

22.3.4 **Contract Labour Rules**

22.3.4.1 The Contractor will get himself registered with the concerned statutory authorities as provided in the Act and shall be directly responsible to the authorities for compliance with the provisions thereof and NMDC shall have no relation of Employer and Employee for contractual worker / labour.

22.3.4.2 The Contractor shall also maintain all records/register/return/cards such as:

- (a) Register of workmen employed by Contractor
- (b) Employment Card
- (c) Muster Roll
- (d) Register of wages-cum-muster roll

- (e) Submission of Return

22.3.5 **Compliance with Statutory Laws and Other Regulations of Govt. / Local Authority**

All statutory / labour rules of Govt./local authorities as applicable at, Project/Plant site shall be strictly followed by Contractor. Contractor shall indemnify Employer against any such implication.

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The following Acts with latest amendment thereof shall be complied with by the Contractor:

- a) Employee Provident Fund & Misc. Provision Act, 1952.
- b) Contract Labour Act (Regulation and Abolition Act, 1970
- c) Minimum Wages Act, 1948
- d) Payment of Wages Act, 1936
- e) Workmen Compensation Act, 1923.
- f) Factories Act, 1948
- g) Apprenticeship Act, 1961
- h) Family Pension Act, 1952
- i) ESI Act
- j) Shops & Establishments Act
- k) Cess Act, 1996
- l) Any other statutory Act relevant to in this regard

22.3.6 Special Relief for NMDC Production Project applicable for Contract Laborer's (SRNPP Provisions) are indicated below:

(i) Tenderers are required to consider an additional amount of Rs. 170/- (Rupees One Hundred Seventy only) per man-day as SRNPP (Special Relief for NMDC Production `Project applicable for the contract Laborer's to be engaged locally at production projects (BIOM-Bacheli and Kirandul/DIOM-Donimalai/Panna) for execution of the contract.

(ii) NMDC's initiative towards improvement in the benefits to the Contract labour under the scheme named SRNPP has been implemented in the NMDC production projects of the company viz Kirandul Complex, Bacheli Complex, Donimalai and Panna Projects from 1/10/2010. Under this scheme an additional amount of Rs. 170/- per day over and above statutory minimum wages on actual attendance is payable as "Special Relief for NMDC Production Project (SRNPP)" to the Contract Laborer's working in production projects of the company.

The payment of fair wages shall be ensured strictly by the contractors to the contract Laborer's without fail. The fair wages shall not be less than SRNPP plus the minimum wages prescribed by the Statutory Authority.

Accordingly, Terms and Conditions regarding payment of SRNPP have been incorporated. The Bidder must provide above said additional amount to be paid to all Contract Labour on actual attendance and record the same in attendance register along with maintaining the records of payment at the time of weekly payment. This shall be certified by the Engineer-in-charge concerned.

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Bidder shall consider SRNPP in their quote as per above details.

22.4 Contractor's Equipment

22.4.1 The Contractor shall mobilize all construction equipment, tools, tackles & consumables to ensure timely completion of work and quality of workmanship. On request, the Employer may provide the Contractor any special handling / construction equipment needed in the interest of work subject to availability and on payment of hire charges and other conditions of Employer.

22.5 Site Regulations and Safety

22.5.1 The Contractor shall comply with the Site regulations, during the execution of the Contract at the Site, as given under the Chapter "Safety in Contract Works" (IPSS in Steel Industry).

22.5.2 The employees /labour of the Contractor / Sub-Contractor and Plant & Equipment brought to Site shall be subject to gate pass to be issued by Security Department or the respective Department.

22.5.2.1 Preparation of gate pass normally takes around 10 days' time. The Contractor / Sub-Contractor shall plan their programme in advance accordingly.

22.5.2.2 Employer shall have the right to refuse the gate pass to any workers/representatives without assigning any reason. The contractor shall ensure that gate pass issued to their workers/ representatives/ Sub-contractors are not misused. All representatives/ workers of the Contractors/ Sub-Contractors shall possess admit pass.

22.6 Erection

22.6.1 The Contractor shall provide all temporary ladders, scaffolding materials, platforms, supports and other necessary facilities required for handling, erection, testing and visual inspection of supplies at the point of installation and shall also provide necessary packing plates, wedges, shims, levelling screws etc., required for erection of equipment and structures.

22.6.2 The Contractor shall return to the Employer all crates, packing cases and packing materials and all returnable supplies at a place and manner designated by the Employer *within 10 Km from the battery limit.*

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- 22.6.3 The Contractor shall provide erection consumables like oxygen and acetylene gas, welding rods, solder lugs, oil, grease, kerosene, cotton waste, etc., required for erection of plant equipment and steel structures.
- 22.6.4 The Contractor shall construct and maintain its own site offices and stores as required for the work and arrange for maintaining in neat manner of the area placed at the Contractor's disposal. The temporary allotment of land for the purpose of site office, stores and temporary works for execution of Contract, shall be on the following terms:
- 22.6.4.1 Land will be allotted free of charge for the purpose of site office & stores
- 22.6.4.2 The allotment shall remain valid till the period of Contract and shall automatically cease after expiry of the Defect Liability period of the Contract. The validity shall also automatically cease on termination of Contract due to any reason whatsoever.
- 22.6.4.3 On completion of the work and expiry of the Defect Liability period, the Contractor shall remove all structures built by the Contractor and restore the land to its original condition.
- 22.6.5 The Contractor shall provide sufficient fencing, notice boards and lights to protect and warn others as may be considered necessary by the Employer / Consultant.
- 22.6.6 All guarantees and test certificates obtained by the Contractor during the execution of work shall be transferred to the Employer before issue of Preliminary Acceptance Certificate.
- 22.6.7 The plant & equipment and structures will be erected by contractors as per the instructions of equipment suppliers and the contractor shall use to the maximum extent, pre-assembly and mechanization in order to fulfill the erection and construction targets.
- 22.6.8 The Contractor shall be responsible for protection and / or diversion of underground and all existing over ground services, wherever required and / or diversion of the underground services which are indicated in the drawing made available to the Contractor. In case there are underground services which need to be protected and / or diverted but are not shown in the drawing, the Contractor shall be responsible to execute the same at extra price, if any, to be mutually agreed between Contractor & Employer.

22.7 **Emergency Work**

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If, by reason of an emergency arising in connection with and during the execution of the Contract, any protective or remedial work is necessary as a matter of urgency to prevent damage to the Facilities, the Contractor shall immediately carry out such work. If the Contractor is unable or unwilling to do such work immediately, the Employer may do or cause such work to be done as the Employer may determine that it is necessary in order to prevent damage to the Facilities.

In such event the Employer shall, as soon as practicable after the occurrence of any such emergency, notify the Contractor in writing of such emergency, the work done and the reasons therefor. If the work done or caused to be done by the Employer is work that the Contractor was liable to do at its own expense under the Contract, the reasonable costs incurred by the Employer in connection therewith shall be paid by the Contractor to the Employer. Otherwise, the cost of such remedial work shall be borne by the Employer.

22.8 Site Clearance

22.8.1 In the course of carrying out the Contract, the Contractor shall keep the Site reasonably free from all unnecessary obstruction, store or remove any surplus materials, clear away any wreckage, rubbish or temporary works from the Site, and remove any Contractor's Equipment no longer required for execution of the Contract.

22.8.2 After Completion of all parts of the Facilities, the Contractor shall clear away and remove all wreckage, rubbish, debris and surplus material of any kind from the Site and shall leave the Site and Facilities clean and safe.

22.9 Lighting, Fencing and Watching

The Contractor shall provide and maintain at its own expense all lighting, fencing, and watching when and where necessary within battery limit for the proper execution and the protection of the Facilities and for the safety of the public.

22.10 Work at Night and on Holidays

As and when the Engineer considers it necessary to carry out work on extended hours / three shift basis or on Public Holidays so as to meet the Time for Completion and request the Contractor to carry out work on extended hours / three shifts or on Public Holidays, the Contractor shall carry out the work accordingly to meet the Time of Completion.

23. Test and Inspection

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- 23.1 After finalization of Billing schedule, the equipment/ items to be inspected shall be identified jointly by Shop, Project and Consultant. Inspection of all such items shall be carried out at manufacturers' sites as per approved QAP. For rest of the equipment / items, dispatch clearance shall be issued by the "Engineer" after receipt of test guarantee certificates/internal inspection report from the Contractor or its sub-contractors / manufacturer.
- 23.1.1 The Contractor shall at its own expense carry out at the place of manufacture and / or on the Site all such tests and / or inspections of the Plant and Equipment and any part of the Facilities as are specified in the Contract or as per approved QAP.
- 23.2 The Engineer or his designated representative(s) shall be entitled to attend the aforesaid test and / or inspection, provided that the Employer shall bear costs and expenses incurred in connection with such attendance including, but not limited to, all travelling and board and lodging expenses.
- 23.3 Whenever the Contractor is ready to carry out any such test and / or inspection, the Contractor shall give a fourteen (14) days advance notice of such test and / or inspection and of the place and time thereof to the Engineer along with relevant test certificates. The Contractor shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Engineer or his designated representative(s) to attend the test and / or inspection.
- 23.4 The Contractor shall provide the Engineer with a certified report of the results of any such test and / or inspection.
- If the Engineer or his designated representative(s) fails to attend the test and / or inspection within 14 days, or if it is agreed between the parties that such persons shall not do so, then the Contractor may proceed with the test and / or inspection in the absence of such persons, and will provide the Engineer with a certified report of the results thereof, based on which the employer will issue the dispatch clearance.
- 23.5 If any Plant and Equipment or any part of the Facilities fails to pass any test and / or inspection, the Contractor shall either rectify or replace such Plant



and Equipment or part of the Facilities and shall repeat the test and / or inspection upon giving a notice under **Sub-Clause 23.3** hereof.

23.6 The Contractor shall afford the Engineer, at the Employer's expense, access at any reasonable time to any place where the Plant and Equipment are being manufactured or the Facilities are being installed to inspect the progress and the manner of manufacture or installation, provided that the Engineer shall give the Contractor a reasonable prior notice.

23.7 No equipment/material shall be dispatched without inspection as per approved quality assurance plan (QAP) unless waived/ dispatch clearance issued by the Employer. Inspection may be carried out by Employer's authorized representative/third party agency (to be appointed by Employer).

Inspection certificates/dispatch clearance so issued shall form the part of valid documents for claiming progress payments by the Contractor.

23.8 The execution of a test and / or inspection of Plant and Equipment or any part of the Facilities, or the attendance by the Employer or the Engineer, or the issue of any test certificate or waiver certificate pursuant to **Sub-Clause 23.4** hereof, shall not **relieve** the Contractor from any of its responsibilities under the Contract.

24. Preliminary Acceptance

24.1 On completion of erection of the Facilities by the Contractor, trial runs for individual equipment / units shall be conducted by the Contractor to prove that the Facilities have been supplied and erected as per Contract and after erection, Facilities are fit for startup and commissioning.

Trial runs shall be so designed to conduct the systematic check of the components and of the functional operation thereof. Trial runs shall comprise idle, no-load and part-load trial runs, as applicable.

Trial runs shall be conducted by the Contractor under its sole responsibility and employing its own personnel. The Employer's supervisory personnel and skilled operating personnel shall, however, witness the trial runs.

On successful completion of trial runs and liquidation of the defects and / or deficiencies, indicated / listed by the Employer to the Contractor during trial runs (except minor defects and / or deficiencies which in the opinion

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of the Employer will not affect the operation, safety & commissioning of the Facilities), the Contractor shall so notify the Employer in writing for conducting integrated trial runs.

- 24.2 On receipt of the notice from the Contractor for conducting integrated trial runs, the Employer, if required, shall deploy the necessary operating personnel, and provide raw materials, utilities & services as per Clause 10 hereof.
- 24.3 As mutually agreed between the Contractor and the Employer after the operating personnel have been deployed by the Employer and raw materials, utilities & services have been provided by the Employer in accordance with **Sub-Clause 24.2** hereof, the Contractor shall conduct Pre-Commissioning including integrated trial runs of the Facilities, in preparation for Commissioning.
- 24.3.1 In case of Facilities involving operation at high temperature, trial runs on individual equipment / units and integrated trial runs shall be conducted in cold condition.
- 24.4 As soon as all works in respect of integrated Pre-Commissioning are completed and the Facilities are ready for Commissioning, the Contractor shall so notify the Engineer in writing.

This Clause shall be read in conjunction with Contract Technical Specifications

- 24.5 The Engineer shall, within seven (7) days after receipt of the Contractor's notice either issue a Preliminary Acceptance Certificate (PAC) stating that the Facilities are fit for start-up and commissioning, as at the date of the Contractor's notice or notify the Contractor in writing of any defects and / or deficiencies.

If the Engineer notifies the Contractor of any defects and / or deficiencies, the Contractor shall then correct such defects and / or deficiencies and shall repeat the procedure described in **Sub-Clause 24.4** hereof.

If the Engineer is satisfied that the defects and / or deficiencies, indicated / listed by the Employer to the Contractor have been liquidated and the Facilities are fit for start-up and commissioning, the Engineer shall, within seven (7) days after receipt of the Contractor's notice, issue a Preliminary



Acceptance Certificate stating that the Facilities are fit for start-up and commissioning, as at the date of the Contractor's repeated notice.

If the Engineer is not so satisfied, then the Employer shall notify the Contractor in writing of any defects and / or deficiencies within seven (7) days after receipt of the Contractor's repeated notice, and the above procedure shall be repeated.

Pending minor defects/ deficiencies, which will not affect start up and Commissioning, PAC will be issued by the Employer.

- 24.6 As soon as possible, after issue of Preliminary Acceptance Certificate, the Contractor shall complete outstanding defects and / or deficiencies, if any, so that the Facilities are fully in accordance with the requirements of the Contract, failing which the Employer will subject to GCC Clause 24.5, undertake such completion and deduct the costs thereof from any money owing to the Contractor.

25. Commissioning

- 25.1 After the issue of Preliminary Acceptance Certificates, the Contractor shall start-up and commission the Facilities in accordance with provisions and terms of Contract Technical specification.

The Employer shall provide the operating and maintenance personnel and all raw materials, utilities & services required for commissioning. The contractor shall supply the commissioning spares and oil, grease, lubricants & chemical etc. required for commissioning as per **Clause 7.4.2 & 7.4.4** hereof.

- 25.2 The Contractor shall conduct commissioning test as specified in Contract Technical Specifications and wherever applicable establish sixty six percent (66) % of the guaranteed production capacity for a continuous period of 72 hours.

- 25.3 The Commissioning Certificate shall be issued by the Employer subject to the following:



- a) Commissioning test as per sub-clause 25.2 has been successfully completed and the quality of materials produced and other parameters related to commissioning are as per Contract Technical Specifications.
- b) The Contractor to the satisfaction of the Employer, has met all the objections / observations, if any, contained in the Preliminary Acceptance Certificate.
- c) Upon fulfillment of above condition, the Contractor will apply to the Employer to issue the Commissioning Certificate. Within 7 days of receipt of Contractor's application, Employer will issue the Commissioning Certificate.

25.4 In the event of delay in conducting the commissioning test for reasons attributable to the Employer for more than **60 (sixty)** days after issue of PAC, the Contractor shall receive payment towards commissioning against Bank Guarantee of equal value valid for 12 months.

In case of delay beyond six months for conducting the commissioning test for reasons attributable to the Employer, the conducting of commissioning test and Contractor's subsequent balance obligations and commercial implication thereto, if any, shall be mutually finalized between the parties.

26. Taking Over

- 26.1 Taking over of the facilities will be carried out from the **date of Commissioning mentioned in the Commissioning Certificate.**
- 26.2 The Employer shall have the right to take possession or use any completed or partially completed work. Such possession or use shall not be deemed to be an acceptance of any work done not in accordance with the Contract. However, any damage to such work solely due to such provision or use shall be to the Employer's account.

However, priority will be given to the Contractor for conducting Commissioning over commercial production in order to adhere to the contractual Time for Completion.

27. Performance Guarantee Test

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- 27.1 The Contractor shall guarantee that during the performance guarantee test, the Facilities and all parts thereof shall attain the performance guarantee parameters specified in **Appendix-5** to the Contract Agreement, subject to and upon the conditions specified therein. Upon successful completion of Performance Guarantee Test as per Appendix-5, the Contractor shall apply to the Employer to issue the Performance Guarantee Certificate. Within 14 days after receipt of Contractor's application the Employer shall issue the Performance Guarantee Certificate.
- 27.2 If, for reasons attributable to the contractor the performance guarantee parameters specified in **Appendix-5** to the Contract Agreement, are not met either in whole or in part, the Contractor shall at its cost and expense make such changes, modifications and / or additions to the Facilities or any part thereof as may be necessary to meet performance guarantee parameters. The Contractor shall notify the Employer upon completion of the necessary changes, modifications and / or additions, and shall request the Employer to allow the Contractor to repeat the performance guarantee test so as to establish the performance guarantee parameters.
- 27.3 If, for reasons attributable to the contractor, the performance guarantee parameters specified in **Appendix-5** to the Contract Agreement are not attained either in whole or in part, after first campaign of performance guarantee test as per **Sub-Clause 27.2** hereof, the Contractor shall at its own cost make good any deficiencies and the Contractor shall be allowed by the Employer to repeat the performance guarantee tests twice after first campaign of guarantee test and the Contractor must establish the performance guarantee parameters.
- 27.4 In case the Contractor expresses its inability to achieve the performance guarantee parameters but attains above the minimum acceptance level of performance guarantee parameters, as specified in **Appendix-5** to the Contract Agreement, either in whole or in part in spite of repeated performance guarantee tests conducted by the Contractor, the Employer shall recover the amount of Liquidated Damages, but not by way of penalty, by making deductions from the Contractor's account by encashment of Contractor's Bank Guarantee(s) at the rate specified in **Appendix-5** to the Contract Agreement for the respective items, subject to a maximum of ten percent (**10%**) of the Contract Price plus escalation, if any, excluding taxes and duties, in respect of the failure to meet the minimum level of performance guarantees in accordance with the provisions in **Appendix-5** to Contract Agreement.

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The Employer shall not reject the plant & equipment after commissioning and achievement of minimum acceptance level of performance guarantee parameters. After successful commissioning and achievement of the minimum acceptance level of performance guarantee parameters, the total liability of the contractor on account of delay and demonstration of maximum PG parameters shall not be more than Liquidated Damages.

In case, even after all possible repairs and replacements the Contractor fails to attain the minimum level of performance guarantee parameters, the Employer may reject the Facility and recover the entire cost paid to the Contractor or alternatively the Employer may proceed for commercial settlement with the Contractor for acceptance of the Facilities at the negotiated Price.

- 27.4.1 In case, the Contractor is a Consortium, the Employer shall recover the amount of Liquidated Damages, but not by way of penalty, by making deductions from the account of each member of Consortium, or by encashment of their Bank Guarantees, subject to a maximum of ten percent (10%) of the Contract Price plus escalation, if any, excluding taxes and duties of the respective Scope of Facilities. However, each member of Consortium, will be liable for damages in the ratio of the respective Contract price.
- 27.5 In case, the performance guarantee test has not been carried out for reasons attributable to the Employer within a period of six month from the date of commissioning mentioned in Commissioning Certificate, the Contractor shall receive payment towards Performance Guarantee, against Bank Guarantee of equal value to be valid for a period of 12 (twelve) months beyond aforesaid six (6) months period and conducting of the Performance Guarantee Tests and its commercial implications, if any, shall be mutually finalized between the parties.
- 27.6 In case Bank Guarantee is submitted as per **Sub-Clause 27.5** hereof, by the Contractor then the same shall be returned to the Contractor as soon as the performance guarantee test is successfully completed and the guaranteed output and other parameters are met, at the latest, however, on expiry of twelve (12) months from the date of release of payment against Commissioning Certificate.

28. Final Acceptance

28.1 Final Acceptance shall occur in respect of the Facilities when:

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- a) The performance guarantee tests have been successfully completed and performance guarantee values are achieved in accordance with technical specifications or the amount of Liquidated Damages along with applicable GST, recoverable if any, has been recovered by the Employer from the Contractor.
- b) The CONTRACTOR has rectified in a definitive manner all defects/ objections/ observations mentioned in the Commissioning Certificate.
- c) All other supplies and services have been completed as per the Contract.
- d) Supply of spares along with necessary drawings & documents have been completed;
- e) Final documentation incorporating latest modifications has been submitted by the CONTRACTOR in requisite copies;
- f) The Contractor has submitted all final drawings & documents for the respective Facilities in accordance with the provisions of this Contract as given in Appendix-2.
- g) The Contractor has fulfilled all the obligations under the Contract.

28.2 At any time after the events set out in **Sub-Clause 28.1** hereof, have occurred, the Contractor may give a notice to the Engineer requesting for the issue of Final Acceptance Certificate (FAC) in respect of the Facilities specified in such notice as at the date of such notice.

28.3 The Engineer shall, within seven (7) days after receipt of the Contractor's notice, issue a Final Acceptance Certificate.

28.4 Payment for Final Acceptance may be released against BG of equal value valid for 12 months after fulfillment of clause-28.1 a & b.

F. GUARANTEES AND LIABILITIES

29. Completion Time Guarantee

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- 29.1 The Contractor guarantees that it shall attain “Completion of the Facilities” as defined in Clause 1, within the Time for Completion as specified in the **Article-5** of the Contract Agreement or within such extended time to which the Contractor shall be entitled under **Clause 42** hereof.
- 29.2 **Liquidated Damages due to Delay in “Completion of the Facilities”**
- 29.2.1 If the Contractor fails to attain “Completion of the Facilities” as defined in **Clause 1** hereof, within the Time for Completion or any extension thereof under **Clause 42** hereof, due to reasons attributable to the Contractor, the Employer shall recover the amount of Liquidated Damages, but not by way of penalty, by making deductions from the Contractor’s account or by encashment of Contractor’s Bank Guarantees at the rate of 0.5% of the Contract Price plus escalation, if any, excluding taxes & duties per complete week of delay up to a maximum of 10% of the Contract Price plus escalation, if any, excluding taxes & duties (excluding the 5 year CAMC price).
- 29.2.2 In case, the Contractor is a Consortium, the Employer shall recover the amount of Liquidated Damages, but not by way of penalty, by making deductions from the account of each member of Consortium by encashment of their Bank Guarantees hereof, up to a maximum of 10% of the Contract Price plus escalation, if any, excluding taxes & duties of the respective Scope of Facilities. However, each member of Consortium, will be liable for damages in the ratio of the respective Contract price.
- 29.2.3 However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Facilities or from any other obligations and liabilities of the Contractor under the Contract.
- 29.3 The aggregate ceiling on Liquidated damages due to delay in completion of facilities and for non-fulfillment of Performance Guarantee parameters in accordance with the Contract shall be limited to 15% (fifteen percent) of the Contract Price plus escalation, if any, excluding taxes & duties.
- 29.4 Any recovery of Liquidated damages shall be effected from the amount payable to the Contractor against Commissioning, Performance Guarantee Test, Final Acceptance Certificate and Performance Bank Guarantee. Liquidated Damages will not be recovered from the running bills prior to above payments.
- 29.5 The levy of LD shall be on the final executed value / amended value, including escalations (excluding taxes) as applicable, of the contract including additions to scope by way of interim approvals. However, LD shall not be levied on amount **Tender Enquiry No: HO (Contracts)/ Rooftop Solar/Kirandul/2021/214 dated 14/10/2021**



paid under amicable settlement, conciliation and arbitral awards settled after completion of work.

Imposition of LD shall be based on recommendations, subject to approval of Competent Authority.

30. Defect Liability

30.1 The Contractor shall warrant that the Facilities or any part thereof shall be free from defects in the design, engineering, materials and workmanship of the Plant and Equipment & Structures supplied and of the work executed.

Defect liability shall not apply to normal wear and tear. Plant/equipment will be operated and maintained as per Operation and Maintenance manuals provided by the Contractor.

30.2 **The Defect Liability Period shall be twenty four (24) months from the date of commissioning, as mentioned in the Commissioning Certificate.**

If during the Defect Liability Period any defect be found in the design, engineering, materials and workmanship or of the work executed by the Contractor, the Contractor shall promptly, in consultation and agreement with the Employer and at its cost, repair, replace or otherwise make good such defect as well as any damage to the Facilities caused by such defect.

The Contractor may, with the consent of the Employer and after submission of Bank Guarantee for the equivalent cost of Plant & Equipment, remove from the Site any Plant and Equipment or any part of the Facilities that are defective if the nature of the defect, and / or any damage to the Facilities caused by the defect, is such that repairs cannot be expeditiously carried out at the Site. However, in case value of such items is less than 20% of the respective performance bank guarantee, no additional bank guarantee is required to be submitted and the material can be taken out against indemnity bond. In case of defective parts not repairable at Site but become essential in the mean time for the commercial use of the plant, the Contractor shall replace at Site free of cost to the Employer, the defective parts, before the defective parts are removed from the Site.

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30.3 If the repair, replacement or making good is of such a character that it may affect the efficiency of the Facilities or any part thereof, the Employer may give to the Contractor a notice requiring that tests of the defective part of the Facilities shall be made by the Contractor immediately upon completion of such remedial work, whereupon the Contractor shall carry out such tests.

If such part fails the tests, the Contractor shall carry out further repair, replacement or making good (as the case may be) until that part of the Facilities passes such tests. The tests shall be agreed upon by the Employer and the Contractor.

If the Contractor does not commence the rectification either by repair or replacement of such defects within 30 (thirty) days from the date of notice by the Employer or does not complete the rectification with reasonable diligence and within a reasonable time, the Employer may, at its option, rectify the defects at the Contractor's expense. The Employer shall, in such case, deduct from payment due to the Contractor the expenses incurred by the Employer for remedy of such defects without prejudice to the other rights of the Employer under the Contract.

30.4 If the Facilities or any part thereof cannot be used by reason of such defect and / or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Employer because of any of the aforesaid reasons.

30.5 In addition, the Contractor shall also provide an extended warranty for any such replaced or repaired component of the Facilities for the period of minimum 12 months but not more than 36 months cumulatively or as it may be stipulated in Contract Technical Specifications. Such obligation shall be in addition to the defect liability specified under **Clause 30** hereof.

31. Patent Indemnity

31.1 The Contractor shall, subject to the Employer's compliance with **Sub-Clause 31.2** hereof, indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and

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expenses of whatsoever nature, including attorney's fees and expenses, which the Employer may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing by reason of the installation of the Facilities by the Contractor.

Such indemnity shall not cover any use of the Facilities or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the Facilities or any part thereof, or any products produced thereby in association or combination with any other equipment, plant or materials not supplied by the Contractor, pursuant to the Contract Agreement.

- 31.2 If any proceedings are brought or any claim is made against the Employer arising out of the matters referred to in **Sub-Clause 31.1** hereof, the Employer shall promptly give the Contractor a notice thereof, and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf at the risk & cost of the Contractor.

The Employer shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all expenses incurred in so doing.

- 31.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Contractor may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided by the Employer.

32. Limitation of Liability

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- 32.1 Except in cases of criminal negligence or willful misconduct,
- a) the Contractor shall not be liable to the Employer, whether in Contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs and
 - b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise including the cost of repairing or replacing defective equipment, shall not exceed the 100 % (Hundred Percent) of the Contract Price plus escalation, provided that this limitation shall not apply to any obligation of the Contractor to indemnify the Employer with respect to copyright, patent infringement, workman compensation etc. Further, the limitation of liability shall be applicable in case of works undertaken by employer at the Risk & Cost of Contractor, under clause no. 37 and 44.2 of GCC.

G. RISK DISTRIBUTION

33. Transfer of Ownership

- 33.1 The title of ownership of Imported plant & equipment, structures, refractories, tools & tackles, first fill of lubricants and all other goods (including spare parts) whose prices in the Contract are indicated in Foreign Currency, shall be transferred to the Employer after loading on FOB port of shipment basis as per Incoterms, 2000 with amendments if any w.r.t. FOB terms.
- 33.2 The title of ownership and property for indigenous Plant & Equipment, Structures, Refractories, spares, tools & tackles, first fill of lubricants, etc. shall pass on to the Employer after the Contractors have effected the dispatch of same to the Employer or the Contractors have effected the sale, in course of transit, as per GST Act/Rules and the Contractors have prepared necessary documentation for handing over the same to Employer's authorized representative
- 33.3 The property of Plant & Equipment, Structures, Refractories, spares, tools & tackles, first fill of lubricants, etc. issued to the Contractors under Bailee Agreement / Bond is vested with the Employer all the time till erection,

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commissioning and completion of Performance Guarantee Tests as per the terms and conditions of the Contract.

- 33.4 The transfer of title to ownership for the steel structural work (fabricated at site) including glazing & sheeting, civil construction work and refractory work under this Contract shall pass on to the Employer on its accretion and release of payment.
- 33.5 Notwithstanding the transfer of ownership of the Plant and Equipment, the responsibility for care and custody thereof together with the risk of loss or damage thereto shall remain with the Contractor pursuant to **Clause 34** (Care of Facilities) hereof, until Commissioning of the Facilities in which such Plant & Equipment, Structures and Refractories are incorporated.

34. Care of Facilities

- 34.1 The Contractor shall be responsible for the care and custody of the Facilities or any part thereof until the date of commissioning and shall make good at its own cost any loss or damage that may occur to the Facilities or the relevant part thereof from any cause whatsoever during such period. The Contractor shall also be responsible for any loss or damage to the Facilities caused by the Contractor or its Sub-Contractors in the course of any work carried out, pursuant to **Clause 30** (Defect Liability) hereof. Notwithstanding the foregoing, the Contractor shall not be liable for any loss or damage to the Facilities or that part thereof caused by reason of any of the matters specified or referred to in paragraphs (a) & (b) of **Sub-Clause 34.2** & **Sub-Clause 40.1** hereof.
- 34.2 If any loss or damage occurs to the Facilities or any part thereof by reason of:
- a) any use or occupation by the Employer or any third party (other than a Sub-Contractor) authorized by the Employer.
 - b) any use of or reliance upon any design, data or specification provided by or on behalf of the Employer, or any such matter for which the Contractor has disclaimed responsibility herein,
- the Employer shall pay to the Contractor all sums payable in respect of the Facilities executed, notwithstanding that the same be lost,

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destroyed or damaged. If the Employer requests the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Contractor shall make good the same at the cost of the Employer in accordance with **Clause 41** (Change in the Facilities). The Employer shall either request a change in accordance with **Clause 41** (Change in the Facilities) hereof, excluding the performance of that part of the Facilities thereby lost, destroyed or damaged, or, where the loss or damage affects a substantial part of the Facilities, the Employer shall terminate the Contract pursuant to **Sub-Clause 44.1** (Termination for Employer's Convenience) hereof, except that the Contractor shall have no entitlement to profit in respect of any unexecuted Facilities as at the date of termination.

- 34.3 With respect to any loss or damage caused to the Facilities or any part thereof by reason of any of the matters specified in **Sub-Clause 40.1** hereof, the provisions of **Sub-Clause 40.3** hereof, shall apply.

35. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification

- 35.1 Subject to **Sub-Clause 35.2** hereof, the Contractor shall indemnify and hold harmless the Employer and its employees from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property (other than the Facilities whether accepted or not), arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its Subcontractors, or their employees, or agents, except any injury, death or property damage caused by the negligence of the Employer, its employees, or agents.

- 35.2 If any proceedings are brought or any claim is made against the Employer that might subject the Contractor to liability under **Sub-Clause 35.1** hereof, the Employer shall promptly give the Contractor a notice thereof and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such

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proceedings or claim, then the Employer shall be free to conduct the same on its own behalf at the risk of the Contractor.

The Employer shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all expenses incurred in so doing.

36. Insurance

36.1 The Contractor shall take out a composite and comprehensive Marine-cum-Erection Insurance Policy or separate insurance policies for transit and storage-cum-erection with an Insurance Regulatory and Development Authority (IRDA) registered Insurance Company(s). The policy shall cover total erected value of the Facilities (115% for the contracts with completion period up to 18 months or 125% for the contracts with completion period above 18 months, of Contract price excluding the design & engineering and supervision services price, training) and all risks specifically inclusive of the following.

36.1.1 All Risk Insurance: The policy shall cover all risks and escalations, and revisions.

36.1.2 Imported Cargo Insurance: For imported supplies, the policy shall cover all goods from FOB supply point, i.e., from the point of loading on ships at a foreign port till completion of erection and commissioning.

36.1.2.1 The policy shall cover the imported goods on replacement basis, i.e., inclusive of escalations, if any, payable to the foreign suppliers of the Contractor and / or exchange rate fluctuations and / or fluctuations in Ocean Freight, Customs Duty, clearing and forwarding charges, inland freight, etc.

36.1.3 Indigenous Cargo Insurance: For indigenous supplies, the policy shall insure the goods originating in India from the Contractor's / Supplier's warehouse to Plant's warehouse and up to completion of erection and commissioning. This will be inclusive of supplies to and from warehouse / factory of intermediate processors / suppliers. This policy will also cover the replacement items, if any.

36.1.4 Third Party Liability Insurance: The policy shall cover third party liability. The third-party liability shall cover the loss / disablement of human life (persons not belonging to the Contractor) and also cover the risk of damages to others' materials / equipment / properties during construction, erection and commissioning at site. The value of third-party liability for compensation for loss of human life or partial / full disablement shall be of required statutory value but not less than Rs. 2 lakh per death, Rs. 1.5 lakh per full disablement and Rs. 1 lakh

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per partial disablement and shall nevertheless cover such compensation as may be awarded by a Court of Law in India or abroad and cover for damage to others' equipment / property.

- 36.1.5 Automobile Liability Insurance: Covering use of vehicles / mobile equipment used by the Contractor or its Sub-Contractors (whether or not owned by them) in connection with the execution of the Contract.
- 36.1.6 Contractor shall ensure that where applicable, its Sub-Contractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such Sub-Contractors are covered by the policies taken out by the Contractor.
- 36.1.7 The Employer shall be the principal holder of the policy along with the Contractor. Sub-Contractors of the Contractor shall not be holders or beneficiaries in the policy, nor shall they be named in the policy. Employer reserves the exclusive right to assign the policy.
- 36.1.8 While the payment of premium may be phased in agreement with the insurance company, at no time shall goods and services required to be provided by the Contractor shall remain uninsured.
- 36.1.9 A copy of the Insurance policy shall be made available to the Employer before start of site activities or first dispatch, whichever is earlier, and policy shall be kept alive and valid at all times up to date of commissioning.
- 36.1.10 The Employer reserves the right to take out whatever policy that is deemed necessary by him if the Contractor fails to keep the said policy alive and valid at all times and / or causes lapses in payment of premium thereby jeopardizing the said policy. The cost of such policy(s) shall be recovered / deducted from the amount payable to the Contractor.
- 36.1.11 In cases where the erection, modification etc., are to be carried out in the existing shop of the Employer the 'surrounding value' shall be intimated by the Employer to the Contractor, who shall ensure that this value is included in the policy.
- 36.1.12 Marine & Transit Insurance policies shall also cover:
- Institute Cargo Clause 'A'
 - Institute War Clauses
 - Institute Strikes Clauses
 - Ware House to Ware House

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36.1.13 In case project gets delayed due to reasons not attributable to Contractor, the actual expenditure incurred by Contractor for additional Insurance Premium towards extension of insurance policies shall be reimbursed by the Employer.

36.2 Upon arrival of plant and Equipment / materials at site the Contractor shall assume custody thereof and remain responsible thereafter for safe custody until the whole plant is successfully commissioned.

36.3 In order to adequately cover the works under such composite and comprehensive insurance, the Contractor shall fulfill the necessary requirements / obligations.

36.4 The Contractor shall arrange Accident Insurance Policy for all his personnel including foreign Experts / Specialists / Personnel deputed to site and Contractor's / his sub-contractors' manufacturing works as well as for his Indian engineers & supervisory staff. The Contractor shall also take out for his Indian workmen a separate policy as per Workmen's Compensation Act.

36.5 The details of consignment along with its value and vessel's name and other shipping particulars shall be intimated by the Contractor to the Employer, Underwriter in India and clearing agent immediately after shipment of the consignment.

36.6 In all cases, the Contractor shall lodge the claims with the Underwriters and also settle the claims. All claims shall be settled in India. However, the Contractor shall proceed with the repairs and / or replacement of the equipment / components without waiting for the settlement of the claims. In case of seizure of materials by concerned authorities, the Contractor shall arrange prompt release against bond, security or cash as required. Employer will extend all assistance to the Contractor in such a case.

36.7 All the insurance claims shall be processed by the Contractor and the items which are missing / damaged in transit or during handling, storage, erection and commissioning, shall be replaced / repaired by them without any extra cost to the Employer.

36.8 The employer at its discretion may arrange for the insurance cover at its own expense. In such an event, the amount quoted towards

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'Comprehensive/ Transit, Storage cum erection insurance' in 'Summary Price Schedule', shall not be payable to the contractor. However, processing of all the insurance claims shall be the responsibility of the contractor. Also, the Contractor shall perform all the obligations as mentioned in sub-clauses above.

37. Negligence

- 37.1 If the Contractor does not execute the Facilities in accordance with the time schedule stipulated in the **Appendix-2** of the Contract Agreement and shall neglect to execute the Facilities with due diligence or expedition or shall contravene the provisions of Contract, the Employer may give notice in writing to the Contractor to make good the failure, neglect or contravention complained of within such time as may be deemed reasonable by the Employer and in default of compliance with the said notice, the Employer without prejudice to its rights under **Clause 37.2** hereof, may rescind or cancel the Contract holding the Contractor fully liable for the damages that the Employer may sustain.
- 37.2 Should the Contractor fail to comply with such notice, the Employer shall have at its option the right to take the affected Facilities wholly or in part out of the Contractor's hands and may complete the Facilities, as envisaged in the Contract either departmentally or by awarding fresh Contract(s) to execute the same, at the risk and cost of the Contractor.
- 37.3 In such event the Employer shall be entitled to use all materials, construction equipment, tools, tackles and other things of the Contractor and the Employer shall also be entitled to retain and apply any sum which may otherwise be then due as per the Contract or any other Contract from the Employer to the Contractor as may be necessary for the payment of the cost of execution of such Facilities as aforesaid.

If the cost of executing the Facilities as aforesaid shall exceed the sum due to the Contractor, the Contractor shall make payment for the same within the specified period

38. Change in Laws and Regulations

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- 38.1 If, after Effective Date of Contract Agreement, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the costs and expenses of the Contractor, the Contract Price and time of completion shall be correspondingly increased or decreased.

39. Force Majeure

- 39.1 “Force Majeure” shall mean any event beyond the control of the Employer or of the Contractor, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected, and shall include, without limitation, the following:
- a) war, hostilities or warlike operations (whether a state of war be declared or not), invasion, act of foreign enemy and civil war.
 - b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion, effect of Naxal activities and terrorist acts.
 - c) strike, sabotage, unlawful lockout, epidemics, quarantine and plague.
 - d) earthquake, fire, flood or cyclone, or other natural or physical disaster.
- 39.2 If either party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within 14 days after the occurrence of such event.
- 39.3 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party’s performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with **Clause 42** (Extension of Time for Completion) hereof.
- 39.4 The party or parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect thereof upon its or their performance of the Contract and to fulfill its or their obligations under the



Contract, but without prejudice to either party's right to terminate the Contract under **Sub-Clauses 39.6 and 40.5** hereof.

- 39.5 Any delay or non-performance by either party hereto caused by the occurrence of any event of Force Majeure shall not
- a) constitute a default or breach of the Contract
 - b) (subject to **Sub-Clauses 34.2, 40.3 and 40.4** hereof) give rise to any claim for damages or additional cost or expense occasioned thereby
- if and to the extent that such delay or non-performance is caused by the occurrence of an event of Force Majeure.
- 39.6 If the performance of the Contract is substantially prevented, hindered or delayed for a period of more than ninety (90) days on account of Force Majeure during the currency of the Contract, the parties will develop a mutually satisfactory solution.
- 40. War Risks**
- 40.1 "War Risks" shall mean any event specified in paragraphs (a) and (b) of **Sub-Clause 39.1** hereof.
- 40.2 Notwithstanding anything contained in the Contract, the Contractor shall have no liability whatsoever for or with respect to
- a) destruction of or damage to property of the Employer or any third party
 - b) injury or loss of life
- if such destruction, damage, injury or loss of life is caused by any **War Risks**, and the Employer shall indemnify and hold the Contractor harmless from and against any and all claims, liabilities, actions, lawsuits, damages, costs, charges or expenses arising in consequence of or in connection with the same.
- 40.3 If the Facilities or any Plant & Equipment, Structures and Refractories shall sustain destruction or damage by reason of any War Risks, the Employer shall pay the Contractor for
- a) any part of the Facilities or the Plant & Equipment, Structures and Refractories so destroyed or damaged (to the extent not already paid

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for by the Employer) so far as may be required by the Employer, and as may be necessary for completion of the Facilities.

- b) replacing or making good any such destruction or damage to the Facilities or the Plant and Equipment or any part thereof.

If the Employer does not require the Contractor to replace or make good any such destruction or damage to the Facilities, the Employer shall either request a change in accordance with **Clause 41** (Change in the Facilities) hereof, excluding the performance of that part of the Facilities thereby destroyed or damaged or, where the loss, destruction or damage affects a substantial part of the Facilities, shall terminate the Contract, pursuant to **Sub-Clause 44.1** (Termination for Employer's Convenience) hereof.

40.4 Notwithstanding anything contained in the Contract, the Employer shall pay the Contractor for any increased costs or incidentals to the execution of the Contract that are in any way attributable to, consequent on, resulting from, or in any way connected with any War Risks, provided that the Contractor shall as soon as practicable notify the Employer in writing of any such increased cost.

40.5 If during the performance of the Contract any War Risks shall occur that financially or otherwise materially affect the execution of the Contract by the Contractor, the Contractor shall use its reasonable efforts to execute the Contract with due and proper consideration given to the safety of its and its Subcontractors' personnel engaged in the work on the Facilities, provided, however, that if the execution of the work on the Facilities becomes impossible or is substantially prevented for a period of more than ninety (90) days on account of any War Risks, the parties will develop a mutually satisfactory solution.

H. CHANGE IN CONTRACT ELEMENT

41. Change in the Facilities

41.1 The Employer shall have the right to propose/ consider contractor's proposal, and subsequently order the Contractor from time to time during the performance of the Contract to make any change, modification, addition or deletion to, in or from the Facilities (hereinafter called

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“Change”), provided that such Change falls within the general scope of the Facilities and does not constitute unrelated work and that it is technically practicable, taking into account both the state of advancement of the Facilities and the technical compatibility of Change envisaged with the nature of the Facilities as specified in the Contract.

- 41.2 Notwithstanding **Sub-Clauses 41.1** hereof, no change made necessary because of any default of the Contractor in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Completion.
- 41.3 If the Employer proposes/ considers contractor’s proposal for a Change pursuant to **Sub-Clause 41.1** hereof, it shall send to the Contractor a “Request for Change Proposal,” requiring the Contractor to prepare and furnish to the Engineer as soon as reasonably practicable a “Change Proposal,” which shall include the following:
- (a) brief description of the Change
 - (b) effect on the Time for Completion
 - (c) estimated cost of the Change
 - (d) effect on Functional Guarantees (if any)
 - (e) effect on any other provisions of the Contract.
- 41.4 The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices included in the Contract. If such rates and prices are inequitable, the parties thereto shall agree on specific rates for the valuation of the Change.
- 41.5 Upon receipt of the Change Proposal, the Employer and the Contractor shall mutually agree upon all matters therein contained. Within fourteen (14) days after such agreement, the Employer shall, if it intends to proceed with the Change, issue the Contractor with a Change Order with the approval of competent authority.
- 41.5.1 If the Employer and the Contractor cannot reach agreement on the price for the Change, an equitable adjustment to the Time for Completion, or any other matters identified in the Change Proposal, the Employer may nevertheless instruct the Contractor to proceed with the Change by issue of a “Pending Agreement Change Order.”

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Upon receipt of a Pending Agreement Change Order, the Contractor shall immediately proceed with effecting the Changes covered by such Order. The parties shall thereafter attempt to reach agreement on the outstanding issues under the Change Proposal.

If the parties cannot reach agreement within one hundred & twenty (120) days from the date of issue of the Pending Agreement Change Order, then the matter may be referred to for the Conciliation / Arbitration as per **Clause 6** hereof.

41.5.2 If the Employer decides not to proceed with the Change for whatever reason, it shall, within the said period of fourteen (14) days, notify the Contractor accordingly.

42. Extension of Time for Completion

42.1 The Time(s) for Completion specified in the **Appendix-2** of the Contract Agreement shall be extended if the Contractor has delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:

- a) any Change in the Facilities as provided in **Clause 41** (Change in the Facilities) hereof
- b) any occurrence of Force Majeure as provided in **Clause 39** (Force Majeure) hereof, or other occurrence of any of the matters specified or referred to in paragraphs (a) and (b) of **Sub-Clause 34.2** hereof
- c) any suspension order given by the Employer under **Clause 43** (Suspension) hereof
- d) The default by the Employer under **Clause 10** hereof, if proved to be cause for delay in completion of the Facilities by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Contractor.

42.2 Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Engineer a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting

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particulars of the claim, the Employer and the Contractor shall agree upon the period of such extension. In the event that the Contractor does not accept the Employer's estimate of a fair and reasonable time extension, the Contractor shall be entitled to refer the matter for Conciliation / Arbitration.

- 42.3 The Contractor shall at all times use its reasonable efforts to minimise any delay in the performance of its obligations under the Contract.

43. Suspension

- 43.1 The Employer may, by notice to the Contractor, order the Contractor to suspend performance of any or all of its obligations under the Contract. Such notice shall specify the obligation of which performance is to be suspended, the Effective Date of the suspension and the reasons therefor. The Contractor shall thereupon suspend performance of such obligation (except those obligations necessary for the care or preservation of the Facilities) until ordered in writing to resume such performance by the Engineer.

If, by virtue of a suspension order given by the Engineer, other than by reason of the Contractor's default or breach of the Contract, the Contractor's performance of any of its obligations is suspended for an aggregate period of more than ninety (90) days, then at any time thereafter and provided that at that time such performance is still suspended, the Contractor may give a notice to the Engineer requiring that the Employer shall, within thirty (30) days of receipt of the notice, order the resumption of such performance.

If the Employer fails to do so within such period, the Contractor may, by a further notice to the Engineer, elect to treat the suspension as termination of the Contract under **Sub-Clause 44.1** (Termination for Employer's Convenience).

- 43.2 If the Contractor's performance of its obligations is suspended pursuant to this **Clause 43** hereof, then the Time for Completion shall be extended in accordance with **Sub-Clause 42.1** hereof, and any and all additional costs or expenses incurred by the Contractor as a result of such suspension shall be paid by the Employer to the Contractor in addition to Contract Price on mutually agreed basis.

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43.3 During the period of suspension, the Contractor shall not remove from Site any plant & equipment, any part of the Facilities or any Contractor's equipment, without the prior written consent of the Employer.

44. Termination

44.1 Termination for Employer's Convenience

44.1.1 The Employer may at any time terminate the Contract for any reason by giving the Contractor a notice of termination that refers to **Clause 44.1** hereof.

44.1.2 Upon receipt of the notice of termination under **Sub-Clause 44.1.1** hereof, the Contractor shall either immediately or upon the date specified in the notice of termination

- a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition
- b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii) below
- c) remove all Contractor's Equipment from the Site, repatriate the Contractor's and its Subcontractors' personnel from the Site, remove from the Site any wreckage, rubbish and debris of any kind, and leave the whole of the Site in a clean and safe condition
- d) In addition, the Contractor, subject to the payment specified in **Sub-Clause 44.1.3** hereof, shall
 - (i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination
 - (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant and Equipment as at the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors



(iii) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as at the date of termination in connection with the Facilities.

44.1.3 In the event of the termination of the Contract under **Sub-Clause 44.1.1** hereof, the Employer shall pay to the Contractor the Price, the properly attributable to the parts of the Facilities executed by the Contractor as of the date of termination. However, no consequential damages shall be payable by the Employer to the Contractor in the event of termination.

44.2 Termination for Contractor's Default

44.2.1 The Employer, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefor to the Contractor, referring to this **Sub-Clause 44.2** hereof:

- a) if the Contractor becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Contractor is a corporation, a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Contractor takes or suffers any other analogous action in consequence of debt.
- b) if the Contractor assigns or transfers the Contract or any right or interest therein in violation of the provision of **Clause 45** (Assignment) hereof.

44.2.2 If the Contractor

- a) has abandoned or repudiated the Contract
- b) has without valid reason failed to commence work on the Facilities promptly or has suspended the progress of Contract performance for more than twenty-eight (28) days after receiving a written instruction from the Employer to proceed



- c) persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause
- d) refuses or is unable to provide sufficient materials, services or labour (adequate resources) to execute and complete the Facilities in the manner specified in the program furnished under **Clause 18** (Program of Performance) hereof, at rates of progress that give reasonable assurance to the Employer that the Contractor can attain Completion of the Facilities by the Time for Completion as per **Clause 8** hereof.

then the Employer may, without prejudice to any other rights it may possess under the Contract, give a notice to the Contractor stating the nature of the default and requiring the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Employer may terminate the Contract forthwith by giving a notice of termination to the Contractor that refers to this **Sub-Clause 44.2** hereof.

44.2.3 Upon receipt of the notice of termination under **Sub-Clauses 44.2.1 or 44.2.2** hereof, the Contractor shall, either immediately or upon such date as is specified in the notice of termination,

- a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean & safe condition
- b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) below
- c) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination
- d) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant and Equipment as at the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its Subcontractors



e) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its Subcontractors as at the date of termination in connection with the Facilities.

44.2.4 The Employer may enter upon the Site, expel the Contractor, and complete the Facilities itself or by employing any third party at the risk and cost of the Contractor. The Employer may, to the exclusion of any right of the Contractor over the same, take over and use any Contractor's Equipment owned by the Contractor and on the Site in connection with the Facilities for such reasonable period as the Employer considers expedient for the supply and installation of the Facilities.

Upon completion of the Facilities or at such earlier date as the Employer thinks appropriate, the Employer shall give notice to the Contractor that such Contractor's Equipment will be returned to the Contractor at or near the Site and shall return such Contractor's Equipment to the Contractor in accordance with such notice. The Contractor shall thereafter without delay and at its cost remove or arrange removal of the same from the Site.

44.2.5 Subject to **Sub-Clause 44.2.6** hereof, the Contractor shall be entitled to be paid the Price attributable to the Part of the Facilities executed as at the date of termination, and the costs, if any, incurred in protecting the Facilities and in leaving the Site in a clean and safe condition pursuant to paragraph (a) of **Sub-Clause 44.2.3** hereof and rent of the Contractor's equipment, if any, used by the Employer pursuant to **Clause 44.2.4** hereof. Any sums due to the Employer from the Contractor accruing prior to the date of termination shall be deducted from the amount to be paid to the Contractor under this Contract.

44.2.6 If the Employer completes the Facilities, the cost of completing the Facilities by the Employer shall be determined.

If the sum that the Contractor is entitled to be paid, pursuant to **Sub-Clause 44.2.5** hereof, plus the reasonable costs incurred by the Employer in completing the Facilities, exceeds the Contract Price, the Contractor shall be liable for such excess.

If such excess is greater than the sums due to the Contractor under **Sub-Clause 44.2.5** hereof, the Contractor shall pay the balance to the Employer, and if such excess is less than the sums due the

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Contractor under **Sub-Clause 44.2.5** hereof, the Employer shall pay the balance to the Contractor.

The Employer and Contractor shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.

44.3 In this **Clause 44** hereof, the expression “Facilities executed” shall include all work executed, Installation Services provided, and all Plant & Equipment, Structures and Refractories, acquired (or subject to a legally binding obligation to purchase) by the Contractor and used or intended to be used for the purpose of the Facilities, up to and including the date of termination.

44.4 In this **Clause 44** hereof, in calculating any money due from the Employer to the Contractor, account shall be taken of any sum previously paid by the Employer to the Contractor under the Contract, including any advance payment paid pursuant to **Clause 12** (Terms of Payment) hereof.

45. Assignment

45.1 The Contractor shall not, without the express prior written consent of the Employer assign to any third party the Contract or any part thereof, or any right, benefit, obligation or interest therein or there under, except that the Contractor shall be entitled to assign under the Contract.

45.2 Should loan / financial agreement(s) require the Contractor to assign, by way of charge, any money due or to become due to it, to a bank / credit agency for the benefit of receiving payment by the Contractor under this Contract from such bank / credit agency, or if

Any partial assignment is necessary to be made to any insurer in terms of Insurance Policy approved by the Employer; the Employer may give consent in such cases.

46. Surplus Materials

46.1 For the purpose of removing surplus materials in its original form only, the Contractor shall submit the documents / records evidencing the entry of materials inside the Project/Plant by producing the Gate Entry Permits and

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RRs or LRs and consumption statements based on approved drawings after allowing for wastages, maximum 8% cutting allowance, and irrecoverable / unaccountable losses (wastages including loss factors being minimum 2% on Steel and reinforcement rods, minimum 5% on cement and minimum 3% on cables, pipes etc.) to establish the surplus quantity of the materials belonging to the Contractor. The Employer shall allow the Contractor to remove such materials from the Employer's premises after being satisfied regarding the evidence produced for such removal. Such removal may be permitted even before completion of the entire work.

Such removal shall also include Contractor's own construction materials brought inside the plant/project premises pursuant to fulfilment of their obligations under GCC Clauses 20.4.1.1 and 22.6.1.

- 46.2 The Employer may, on written request from the Contractor, allow him to take back imported surplus materials not covered under the contract. However, if Employer has incurred expenses for surplus items towards customs, freight or any other account etc., the same shall be reimbursed by the Contractor in case of taking back of such items.
- 46.3 Scrap in any form whatsoever shall not be removed from Plant/project premises and shall be the property of the Employer. No credit will be given for scrap.
47. **General:** The Employer shall allow the Contractor to take out construction equipment, tools & tackles and instruments brought by the Contractor on draw back basis provided the contractor has carried out necessary documentation at the time of taking such items inside the Plant/Project.

48. GUIDELINES FOR SETTLEMENT OF CLAIMS FOR COMPENSATION ON ACCIDENTS:

- 1. Title:** These guidelines would be called as guidelines for settlement of claims for compensation.
- 2. Effective date:** The guidelines would be effective from 08.08.2018.
- 3. Applicability:** These guidelines would govern the settlement of compensation claims arising out of accident due to negligence and/or unforeseen causes resulting

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into loss of life or permanent disability of a person, who has authorized entry to the premises of the company, and who is not covered under any provisions/rules/guidelines for any compensation on account of his/her not being employee or a contract worker who are covered under Employee compensation Act/ESI Act.

The compensation under these guidelines shall be in addition to the existing provision/compensation under various legislations or as per their eligibility for compensation form their respective employer.

4. Definitions:

- a. **Accident:** Any death or permanent disability resulting solely and directly from any unintended and unforeseen injurious occurrence caused during the maintenance, operation and provisioning of any public services undertaken by NMDC limited.
 - b. **Competent Authority:** Competent Authority means Head of the Project/Office/ Feasibility/ Unit of NMDC.
 - c. **Dependent:** As defined in the Employees' Compensation Act, 1923.
 - d. **Designated Officer:** An Officer designated by the Competent Authority of the Grade of minimum Asst. General Manger for the purposes of receiving and processing claims of compensation under the present guidelines.
 - e. **Victim:** Any person who suffers permanent disablement or dies in an accident as defined in these guidelines as per '**Applicability of Clause at 3**'.
 - f. **Permanent Disablement:** A disablement that is classified as permanent total disablement under the provision to Section 2 (I) of the Employee Compensation Act, 1923.
- 5. Detailed Accident Report:** The report prepared by the Police within a period of 30 days from the date of incident as per Schedule I of this guideline.

Explanation: for the purpose of the purpose of preparation of the detailed accident report, the word "injury" as referred in Schedule I refers to "Permanent disability" as mentioned in Clause 4 (i) of Guidelines.

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6. Extent of Liability: On the occurrence of any “accident” as defined under these Guidelines, NMDC Limited shall whether or not there has been anything contained in any other law, be liable to pay compensation to such extent as prescribed below:

- a. In the event of death or permanent disability resulting from loss of limbs: Rs. 10,00,000.00/- (Rupees Ten Lakhs)
- b. In the event of other permanent disability: Rs. 7,00,000/- (Rupees Seven Lakhs).

7. Procedure for settlement of claims in respect of compensation

a. The victim or his/her dependents would make an application within a period of 90 days of the accident to the Designated officer under whose jurisdiction the accident had occurred. The application should be accompanied by the following documents:

- i. Proof of age of the victim.
- ii. Death Certificate of the victim or permanent disability certificate issued by the Medical board authorized by the Government.
- iii. Certified copy of FIR lodged in respect of the accident
- iv. Proof of applicant’s relation with the victim/Dependency Certificate.

The Designated Officer may seek any further documents for settlement of claim to satisfaction.

Provided that where there are more than one dependent, the Applicant must mention their name, addresses and relations with the victim and the Designated Officer may at its own discretion issue notices to all before releasing the compensation.

- b. The Designated Officer on receipt of above application shall take into consideration the detailed Accident Report Submitted by the Police Authority would process the claim of compensation on priority basis but would not take more than 30 days for disposing off the same in any case.

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- c. The Designated Officer, in case where no application is received from the victim/dependents of victims may on receipt of the detailed accident report proceed suo-moto to initiate the process for consideration for grant the compensation to the victim/dependents of victim.
 - d. Any compensation paid under these guidelines shall be recoverable from/paid by the contractor.
 - e. In no case a claim for appointment of any of the dependents on the compassionate grounds would be entertained by the NMDC limited as provided by settlements already in vogue. In that case no compensation under this rules will be payable. Any compensation payable under any other Act/Stature/Settlement will be adjusted out of the above compensation for net payment.
- 8. Method of Disbursement of compensation:**
- a. The amount of compensation so awarded shall be deposited in a Nationalized Bank or if the branch of a Nationalized Bank is not in existence, it shall be deposited in the branch of scheduled commercial bank, in the joint or single name of the victim/dependent (s). Out of the amount so deposited, 75% of the same shall be put in a fixed deposit for a minimum period of one year and the remaining 25% shall be available for utilization and initial expenses by the victim/dependent(s) as the case may be.
 - b. In the case of a minor, 75% of the amount of compensation so awarded shall be deposited in the fixed deposit account shall be drawn only on attainment of the age of majority, but not before one year of the deposit. Provided that in exceptional cases, amount may be withdrawn for educational or medical needs of the beneficiary at the discretion of the Department.
 - c. The interest on the sum shall be credited directly by the bank in the savings account of the victim dependent(s) on monthly basis.
- 9. Appeal:** An appeal against the decision of the Designated Officer in respect in respect of the amount of compensation or rejection of such claim shall be made to Competent Authority within a period of 30 days of such decision. The Competent Authority within a period of 30 days of such decision would decide the same within 30 days of receipt of such appeal.

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Schedule –I

PARTICULARS OF THE ACCIDENT	
PART-I	
1.	Fir No. , Date and Under Section
2.	Name of Police Station
3.	Date, Time, Place of the Accident
4.	Who reported the accident to the Police
5.	Name of the person who took the victim to the hospital and Name of the Hospital
6.	Whether any hospital denied treatment to the Victim ?
7.	Name of the accident: - (i) Whether resulted in death or injury or both? (ii) Number of persons injured/died
8.	Name and Contract No. of the Investigating Officer
9.	Name of the Witness of the accident
10	Description of the accident

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IMPACT OF THE ACCIDENT ON THE VICTIMS		PART – II
1.	<p>Death Cases:</p> <p>a) Name and address of the deceased</p> <p>b) Age</p> <p>c) Gender</p> <p>d) Education</p> <p>e) Occupation</p> <p>f) Income (monthly)</p> <p>g) Legal Heirs/Guardian</p> <p>i. Name</p> <p>ii. Relationship</p> <p>iii. Age</p> <p>iv. Address</p> <p>v. Contact No.</p>	
2.	<p>Injury Cases (Permanent disablement)</p> <p>a) Name and address of the injured</p> <p>b) Age</p> <p>c) Gender</p> <p>d) Education</p> <p>e) Occupation</p> <p>f) Income (monthly)</p> <p>g) Details of family dependent of the victim MLC No.</p> <p>h) Nature of injuries</p>	

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IMPACT OF THE ACCIDENT ON THE VICTIMS		PART – II
	i) Name of the Hospital where the injured treated j) Whether victim refused medical treatment k) Period of Hospitalization l) Period of treatment m) Whether treatment continuing n) Name, address and contact number of the Doctor(s) who treated the injured o) Whether the injured underwent any surgery? If yes, then give particulars. p) Whether suffered any permanent disability q) Expenditure incurred on treatment, conveyance, special diet, attendant etc. give details if available r) Whether the injured got reimbursement of medical expenses from his employer or under a mediclaim policy, give details if available. s) Whether the injured was provided cashless treatment by the Insurance Company? Give details, if available	
3.	Any other relevant Information	
RELEVANT DOCUMENTS TO BE ATTACHED PART – III		
1.	First Information Report	
2.	Photographs of the scene of the accident from all angles	
3.	Statement of the witnesses recorded by the Police	

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IMPACT OF THE ACCIDENT ON THE VICTIMS		PART – II
4.	Scientific Report, If the Victim was under the influence of any liquor/drugs.	
5.	In case of death a) Post Mortem Report b) Death Certificate c) Photograph and Proof of the identity of the Dead d) Proof of legal representatives of the deceased e) Photograph, specimen, signatures attested by the bank and identity proof of the legal representatives of the deceased f) Treatment of the deceased with the name and address of the hospital g) Bank account No. of legal representatives of the deceased	
6.	In case of Injury a) MLC b) Multi angled photographs of the injured c) Photograph, specimen signatures attested by the bank and identify proof of the injured. d) Disability certificate	
7.	Any other relevant information	

Verification

Verified at On this of that the contents of the above report are true and correct and the documents mentioned in Part III have been verified.

Station House officer

(Name and Stamp)

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ANNEXURE - A

(Subject to Modifications by the Employer)

PROFORMA BANK GUARANTEE FOR CONTRACT PERFORMANCE
(on non – judicial stamp paper of value not less than Rs 100/-)
The non-judicial stamp paper should be in the name of issuing bank

Ref.

Bank Guarantee No.

Date

NMDC Limited,
Khanij Bhavan,
10-3-311/A, Castle Hills,
Masab Tank,
Hyderabad - 500 173.

Dear Sirs,

In consideration of the NMDC Ltd, (herein after referred to as the 'Employer' which expression shall unless repugnant to the Context or meaning thereof include its successors, administrators and assigns) having awarded to M/s. _____ with its Registered/Head office at _____ (hereinafter referred to as the 'Contractor' which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns), a contract by issue of Employer's Letter of Award of Contract no. dated.....for "..... valued at Rs. _____(Rupees _____ only) and the same having been unequivocally accepted by the Contractor resulting in a "Contract" and Contractor having agreed to provide a contract performance guarantee for the faithful performance of the entire contract equivalent to 3 % (three percent) of the said value of the contract to the owner i.e. Rs(Rupeesonly).

We having (Name and Address) its Head Office at (hereinafter referred to as the 'Bank', which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Owner, on demand any and all monies payable by the Contractor to the extent of _____ as aforesaid at any time up to _____ (days/month/year) without any demur,

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reservation, recourse or protest and/or without any reference to the Contractor. Any such demand made by the owner on the Bank shall be conclusive and binding not withstanding any difference between the Owner and Contractor or any dispute pending before any court, tribunal or any other authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Owner and further agrees that the guarantee herein contained shall continue to be enforceable till the Owner discharges this guarantee.

The Owner shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee from time to time to extend the time for performance of the contract by the Contractor. The owner shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any Employers, vested in them or of any right which they might have against the Contractor, and to exercise the same any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the contract between the Owner or any other course of or remedy or security available to the Owner. The Bank shall not be released of its obligations under these presents by any exercise by the owner of its liberty with reference to the matters aforesaid or any of them or by reason of any other acts of omission or commission on the part of the Owner or any other indulgence shown by the Owner or by any other matters or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.

The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the owner may have in relation the Contractor's liabilities.

Notwithstanding anything contained herein above our liability under this guarantee is restricted to _____ and it shall remain in force up to and including _____ * * and shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s. _____ whose behalf this guarantee has been given.

Dated this _____ day of _____ 2021 at _____.

WITNESS

Signature

Signature -----

(Bank's Rubber Stamp)

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(Name)

Official address

(Name) -----

Designation with Bank stamp

Attorney as per Employer of Attorney

No. -----

Dated -----

NOTE:

* This sum shall be **three percent (3%)** of the contract price

** The date will be as specified in the contract.

(Subject to Modifications by the Employer)

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ANNEXURE - B

**BANK GUARANTEE FOR RELEASE OF PAYMENT AGAINST COMMISSIONING
CERTIFICATE/ PERFORMANCE GUARANTEE CERTIFICATE/ FINAL ACCEPTANCE
CERTIFICATE**

(To be executed on Non-Judicial Stamp Paper of appropriate value)

..... *(Name of the
Bank)*

Address

Guarantee No.

A/c Messrs *(Name of
Contractor)*

Date of Expiry

Limit to liability *(currency & amount)*
.....

Contract No.
.....

For *(Name of
Facilities)*

**Sub: Release of Payment against Commissioning Certificate/ Performance Guarantee
Certificate/ Final Acceptance Certificate.**

Date 200..

To
.....
.....
.....
[Name and Address of Employer]

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Dear Sir,

We refer to the Contract Agreement (hereinafter called the "Contract") Reference No. Dated between you and M/s. (**Name of the Contractor**) (hereinafter called the "Contractor") for the design, civil, manufacture, supply of plant & equipment, refractories and structures, storage, insurance & handling, erection, testing, commissioning and performance guarantee tests of (**Name of the Facilities**).

Whereas, the Contractor has undertaken to produce additional Bank guarantee under the provisions of the Contract to secure Contractor's obligations to you for conducting the Commissioning/ Performance Guarantee Tests/ Final Acceptance Certificate (FAC) [**strikeout whichever is not applicable**] as per the provision of the Contract.

1. We (**Name of the Bank**) do hereby expressly irrevocably and unreservedly undertake to unconditionally pay to you merely on your written demand, without referring it to the contractor and without protest and demur an amount not exceeding (**currency and amount**). Any such demand made on us shall be conclusive as regards the amount due and payable by us under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding
2. Notwithstanding anything to the contrary we agree that your decision as to whether the Contractor has committed a breach of any terms and conditions of the contract shall be final and binding on us and we shall not be entitled to ask you to establish your claim or claims under this Guarantee but shall pay the same forthwith without any objection or excuse.
3. We undertake to pay to you any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) / supplier(s) in any suit or proceeding pending before any court or Tribunal or arbitration relating thereto, our liability under these presents being absolute and unequivocal.

The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment thereunder.

4. This guarantee shall come into force from the date of issue of this guarantee and shall remain irrevocably valid and in force upto the issue of the Commissioning/

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Performance Guarantee Tests/ Final Acceptance Certificate (FAC) [~~strikeout whichever is not applicable~~] provided always that unless extended this guarantee shall remain in force till _____ .

5. This guarantee shall not in any way be affected by you taking any securities from the Contractor or by the winding up, dissolution, insolvency or death as the case may be of the Contractor. We shall not be entitled to proceed against the assets of the Contractor at your site
6. In order to give full effect to the Guarantee herein contained, you shall be entitled to act as if we were your principal debtors in respect of all your claims against the Contractor, hereby guaranteed by us as aforesaid and we hereby expressly waive all our suretyship and other rights, if any, which are in any way inconsistent with the above or any other provisions of this Guarantee.
7. This guarantee is in addition to any other guarantee or guarantees given to you by us
8. This guarantee shall not be discharged by any change in the constitution of the Contractor or us, nor shall it be affected by any change in your constitution or by any amalgamation or absorption thereof or therewith but will ensure for and be available to and effaceable by the absorbing or amalgamated company or concern.
9. Notwithstanding anything contained herein before our liability under this guarantee is restricted up to a sum (**currency and amount**) and shall expire on unless a claim or demand is made on us in writing within three months of the expiry date all your rights shall be forfeited and we shall stand relieved and discharged from our liabilities hereunder.
10. We have full power to sign this guarantee under the delegations of powers and notification made under general regulation and resolutions in this regard.

Your faithfully

Dated day of 200..

For

(**Name of the Bank**)

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ANNEXURE – C

PROFORMA FOR CUSTODY CUM INDEMNITY BOND

(To be used for materials to be issued free/ or good/materials ownership of which passed on the Employer before construction/ erection/testing/commissioning)
(on Non-Judicial Stamp paper of appropriate value)

Proforma for custody-cum-Indemnity Bond for the work of -----

.....
.....
.....

[Name and Address of Employer]

In consideration of the NMDC Limited -----(hereinafter called this Company) which expression shall unless repugnant to the subject or content include his successors and assigns having agreed under the terms and conditions of the Contract no ----- dated-----made between-----and the Company in connection with-----to permit the Contractor to receive goods/materials (specify the quantity and name of the materials) of the contract rate of item for supply the value of Rs.-----interalia on production of Indemnity-cum-custody bond. We do hereby undertake and agree to indemnify and keep indemnified the company from time to time to the extent of Rs.----- (Rupees.-----only) against any loss or damage, costs, charges and expenses caused to or suffered by the company by reason of the -----failing to take proper care and custody of the goods/ materials and/ or failing to properly used in the job as per Contract and hand over the completed job in terms of the agreement aforesaid or not complying the instructions which may be given from time to time during the continuance of the agreement and we further undertake to unconditionally pay the amount claimed by the company on demand and without demur to the extent aforesaid.

We ----- hereby further undertake to use the said goods/ materials in terms of the Contract aforesaid and further keep safely, preserve and maintain or caused to be kept safely preserved or maintained all plant machinery equipment and all materials for erection till the date of the preliminary acceptance thereof in terms of the agreement and any damage, breakage, loss during this period will be solely to our Account and we

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would make necessary arrangement proper replacement/repair as desired by the Company.

We-----further agree that the company shall be sole judge of and as to whether there has been any breach of the terms and conditions of this bond and as to the extent of the loss, damage, costs, charges and expenses caused to or suffered by the Company.

We----- further agree that our liability under this bond shall not be discharged because of the change in the constitution of the Company/or the extension of the time or for any indulgence by the Company granted to us.



ANNEXURE – D

FORM OF PRELIMINARY ACCEPTANCE CERTIFICATE

Ref No. : _____

Date : _____

To :

.....
.....
.....

[Name and address of Contractor]

Contract Agreement No : _____

[Name of the Facilities]

Dear Sirs,

Pursuant to **Clause 24** (Preliminary Acceptance) of the General Conditions of the Contract entered into between yourselves and the Employer dated _____ ***[date]***, relating to the _____ ***[brief description of the facilities]***, we hereby notify you that the erection, testing & trial runs of the individual unit of the following part(s) of the Facilities was completed successfully on the date specified below. The Facilities are fit for start-up and commissioning. However, you shall liquidate all the outstanding defects and / or deficiencies and complete the balance items listed in the attachment hereto, as soon as possible, so that the Facilities are fully in accordance with the requirements of the Contract and commissioning activities of the Facilities can be started. Further, you shall be fully responsible for care and custody of the Facilities and the risk of loss thereof till the issue of commissioning certificate in terms of the Contract.

1. Description of the Facilities or part thereof : _____ ***[description]***
2. Date of Completion of Trial runs: _____ ***[date]***

This letter does not relieve you of your obligation to complete the execution, commissioning, establishment of performance guarantee parameters of the Facilities in accordance with the Contract nor of your obligations during the Defects Liability Period.

Yours faithfully,

Title

(Project Manager)

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ANNEXURE – E

FORM OF COMMISSIONING CERTIFICATE

Ref No. : _____

Date : _____

To :

.....
.....
.....

[Name and address of Contractor]

Contract Agreement No : _____

[Name of the Facilities]

Dear Sirs,

Pursuant to **Clause 25** (Commissioning of the Facilities) of the General Conditions of the Contract entered into between yourselves and the Employer dated _____ **[date]**, relating to the _____ **[brief description of the facilities]**, we hereby notify you that the following part(s) of the Facilities was (were) commissioned on the date specified below, and that, in accordance with the terms of the Contract, the Employer hereby takes over the said part(s) of the Facilities, together with the responsibility for care and custody and the risk of loss thereof but without prejudice to any of the rights of the Employer, on the date mentioned below.

1. Description of the Facilities or part thereof: _____ **[description]**
2. Date of Completion: _____ **[date]**

However, you are required to complete the outstanding items listed in the attachment hereto as soon as possible.

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defects Liability Period.

Yours faithfully,

Title
(Project Manager)

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ANNEXURE – F

FORM OF PERFORMANCE GUARANTEE CERTIFICATE

Ref No. : _____

Date : _____

To :

.....
.....
.....

[Name and address of Contractor]

Contract Agreement No : _____

[Name of the Facilities]

Dear Sirs,

Pursuant to **Clause 27** (Performance Guarantee Tests of the Facilities) of the General Conditions of the Contract entered into between yourselves and the Employer dated _____ ***[date]***, relating to the _____ ***[brief description of the facilities]***, we hereby notify you that the Performance Guarantee Tests of the following part(s) of the Facilities was (were) carried out and Performance Guarantee Parameters were satisfactorily attained on the date specified below, and that, in accordance with the terms of the Contract.

1. Description of the Facilities or part thereof : _____ ***[description]***

2. Date of Completion : _____ ***[date]***

3. Performance Guarantee Parameters :

<u>Description</u>	<u>Guaranteed</u>	<u>Achieved</u>
--------------------	-------------------	-----------------

a)

b)

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defects Liability Period.

Yours faithfully,

Title

(Project Manager)

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ANNEXURE – G

FORM OF FINAL ACCEPTANCE CERTIFICATE

Ref No. : _____

Date : _____

To :

.....
.....
.....

[Name and address of Contractor]

Contract Agreement No : _____

[Name of the Facilities]

Dear Sirs,

Pursuant to **Clause 28** (Final Acceptance of the Facilities) of the General Conditions of the Contract entered into between yourselves and the Employer dated _____ ***[date]***, relating to the _____ ***[brief description of the facilities]***, we hereby notify you that the following Facilities was (were) commissioned satisfactorily on the dates specified below, Performance Guarantee Tests are carried out successfully in accordance with the technical specifications and terms of the Contract and Performance Guarantee Certificate is issued by the Employer.

1. Description of the Facilities or part thereof: _____ ***[description]***
2. Date of Completion/Commissioning: _____ ***[date]***

Yours faithfully,

Title
(Project Manager)

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**FORM OF CHANGE ORDER
(Employer’s Letterhead)**

Ref No.: _____

Date: _____

To:

.....
.....
.....

[Contractor’s Name and Address]

Contract Agreement No : _____

[Name of the Facilities]

Dear Sirs,

We approve the Change Order for the work specified in the Change Proposal (No. [number]), and agree to adjust the Contract Price, Time for Completion and / or other conditions of the Contract in accordance with GCC Clause 41 of the General Conditions of Contract.

1. Title of Change: **[name]**
2. Change Request No. / Rev.: **[Request number/revision]**
3. Change Order No. / Rev.: **[Order number/revision]**
4. Originator of Change: Employer / Contractor: **[name]**
5. Authorized Price:

Ref. No.: **[number]**

Date: **[date]**

Foreign currency portion **[amount]** plus Local currency portion **[amount]**

6. Adjustment of Time for Completion

None Increase **[number]** days
days

Decrease **[number]**

7. Other effects, if any

Authorized by: _____
(Employer)

Date: _____

Accepted by : _____
(Contractor)

Date : _____

Title

Title

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SAFETY CODE

FOR SAFETY IN CONTRACT WORKS

1.0 SCOPE OF WORK

- 1.1 Safety is the responsibility of the Contractor and his staff / employees/ workmen engaged/ deployed for execution of work under the Contract, individually and collectively. For this purpose, the Contractor staff means and includes all his associates and sub-contractors / vendors/ sub-vendors and their staff/ employees/ workmen deployed for execution of the work covered under the contract. The Contractor shall ensure that his workmen participate in the safety awareness, health care and safety training programmes whenever such programmes are organized by the employer or the Contractor.
- 1.2 The Contractor's scope of work shall include, but not limited to execution of work/ contract, adequate safety arrangements for men machinery etc. engaged during the execution of the Contract.
- 1.3 While executing the Contract, the Contractor / his supervisor has to ensure safety of the surroundings with regard to employer's work place/ site and other contractor's men/ machine/ materials/ system etc.

2.0 DETAILED PROCEDURE/ PROTOCOL

- 2.1 Before starting the work, a safe work procedure/ protocol shall be prepared and signed jointly by the executing department, representative of Safety Deptt. and the Contractor or his representative. This procedure/ protocol shall be prepared by breaking the whole job into small elements and listing them separately in the sequence. Against these elements, the agency responsible for doing it, would be mentioned. Any other details about these elements, may also be mentioned in the remarks column.
- 2.2 Before starting of the work in railway premises, the contractor shall submit a detailed program related to works to be executed in the railway premises to Railways & NMDC

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in advance. He shall obtain necessary railway approvals in coordination with NMDC. The detailed program shall include safety precautions.

3.0 **MEMORANDUM OF UNDERSTANDING (MOU)**

3.1 A Memorandum of Understanding, placed at Enclosure-A, shall be signed between the Contractor and Employer after award of the Contract.

ENCLOSURE – A

(To be executed on non-judicial stamp paper of value not less Rs 100/-)

Memorandum of Understanding between the (Company/ Plant/Project) and the (Contractor) for safe execution of contract work.

This Memorandum of Understanding is made and executed by and between _____, a Company registered under the Companies Act 1956 and having its registered office at _____ or their authorised representative(s), hereinafter referred to as "Employer" (which expression shall wherever the context so requires or admits be deemed to mean and include its successor in business and assignees) of the one party

AND

M/s _____ having its registered office at _____ hereinafter referred to as the "Contractor" (which expression shall wherever the context so requires or admits be deemed to mean and include its successors in business and assigns) of the other party.

WITNESSETH THAT

Whereas the Employer gives highest importance to the safety in execution of work, seeks co-operation from the Contractor in this endeavour.

Thus, the Memorandum of Understanding is for promoting the safety aspects required to be followed at workplace/ site and will be applicable to any site job to be done by the Contractor.

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AND

Whereas the Contractor has read all the terms and conditions of the Employer and whereas the Contractor has studied the following documents.

- a) Tender documents, enquiry/ order specification including General Conditions
- b) "General Safety Rules", "Safety Rule for Construction work" and "Electrical Safety Guide".
- c) Factory Rules, Factories Act 1948, Indian Electricity Rules 1956.

The amendments to any of the above rules and any other rules and regulations or procedures, circulars, notices and advices laid down by the Employer from time to time whereas these documents are included as Annexure to this Memorandum of Understanding.

Now, it is hereby agreed and declared by and between the Employer and the Contractor as follows:

- Clause-I The Contractor shall abide by the terms and conditions stipulated in "Annexure to the Memorandum of Understanding between Employer and the Contractor for safe execution of the Contract work (_____ 20...)" .
- Clause-II The Contractor shall undertake full responsibility for safe execution of the job at work place/ site and safety of his personnel from the time he enters the gates of _____ till the time he leaves the works gates after his duty.
- Clause-III Without giving any prior notice, the Employer shall from time to time be entitled to add/ or amend any or all terms and conditions with a view to improving safety of personnel and safety of work, with immediate effect and shall be binding on the Contractor. The Contractor agrees to implement all such amendments which shall be laid down by the Employer.
- Clause-IV Besides following the guidelines, safety rules and regulations, safety codes given in various safety procedures/ documents mentioned above, the Contractor shall also prepare a job safety analysis wherever there are complicated and hazardous working involved. The Contractor shall consult executing agency, supervisors Safety and Accident Prevention Services Department and officers from specialised agency of Employer in preparing such documents.

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In witness thereof, the parties hereto by representatives duly authorised have executed this Memorandum of Understanding on _____ day of ____20....

Signed on
for and on behalf of (Company/Plant)
(Contractor)

Signed on
for and on behalf of

Signature

Signature

Name

Name

Title

Title

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GENERAL TERMS & CONDITIONS

1.0 SUPERVISOR

1.1 The Contractor shall engage qualified and competent supervisors for executing the Contract. The supervisor must be able to i) read drawing; ii) understand the safety aspect of the job; iii) take necessary precautionary measures; iv) ensure leadership for the safe execution of the job.

2.0 SAFETY SUPERVISION

2.1 The Contractor shall provide at least one competent full-time safety supervisor who shall be nominated for each contract depending on the number of persons employed and safety requirements of the job including round the clock supervision on safety aspects, wherever required.

3.0 GATE PASS

3.1 The Contractor shall, in accordance with prescribed procedure, obtain gate passes (photo passes) from Employer's Security Department who shall make it available to the Contractor, to enable the Contractor and his staff / employees/ workmen to enter the work area inside the project/plant as well as un-enclosed (open) work area like township. The Contractor shall make arrangement for instant photography for those contract workers who may be required to go to work in emergency and do not have photo passes.

4.0 SAFETY INDUCTION

4.1 In order to provide basic industrial safety training to the workers of Contractor, Employer will provide on request, the general safety induction to the workmen/ supervisor at Safety Engineering Department. The Contractor shall submit the list of persons with full details for the job of safety induction to the Engineer for arranging the same. The Contractor shall not engage untrained personnel for executing any Contract inside the works. Job safety induction is a compulsory thing for every job to start with.

4.2 If at any point of time, Contractor feels or needs any special safety
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training for carrying out a particular job the same shall be arranged by the concerned Engineer of the Employer. For this, the Contractor shall inform the concerned Engineer of the Employer well in advance of commencement of such job.

- 4.3 The Contractor shall motivate and encourage his employees/ workmen to make personnel contribution towards enhancing safety on the basis of their knowledge and experience.
- 4.4 The Contractor shall have adequate number of Pocket-Sized Safety Cards containing safety instructions prepared on the basis of Employer's model safety book for Contractors workers in Hindi or regional languages as may be required and shall issue them to all his employees/ workmen and ensure that they read it before commencing the work. The safety instructions from these Safety Cards shall be read and explained by the Contractor or his representative to those employees/ workmen who are illiterate and cannot read and ensure that they have been understood. If the employees are signing in the attendance register, the Contractor shall arrange to write "Safety Sentence" on the top of each page below which each employee will either sign or put his thumb impression as a token of his/ her attendance also for having read/ understood the safety instructions.

The "Safety Sentence" shall be "I have read/ understood the Safety Instructions and I shall work according to these instructions".

- 4.5 The work areas where a different system of keeping attendance exists, the Contractor or his representative shall furnish the list of employees/ workmen deployed on the job on any particular day and on top of which the following sentence will be recorded by the representative of the Contractor.
"I have explained the safety instructions to my workers mentioned below and assure that they have understood the instructions and shall work according to these instructions".
- 4.6 The Contractor shall provide **Safety toolbox talk** every day before start of the job i.e. briefing the nature of work to be carried and the necessary precautions to be taken while executing the job/ Contract during



the particular day.

- 4.7 Contractors shall follow all special safety precautions issued by the executing authority or his site engineer from time to time.

5.0 **LEGAL AND PENAL**

- 5.1 The Contractor shall abide by the provisions of all statutory acts and rules as applicable and maintain register/ documents, submit periodic reports and returns furnish information/ report relating to accidents occurring in the area of work to competent authority in time.

- 5.2 The Contractor shall be liable for prosecution and penalty in accordance with as prescribed under the law of land, terms & conditions of Contract as well as rules of the Company relating to safety, for not observing those provisions by the Contractor or his employees/ workmen.

- 5.3 The Contractor shall keep the Company indemnified against all losses/ claims due to accidents/ injuries/ damages caused at the Contractor's works site. He shall be fully responsible for accidents caused due to the Contractor or his agents or workmen's negligence or carelessness in regard to observance of the safety requirements and shall be liable to pay compensation for injuries.

- 5.4 The Engineer or Head of the Safety Department or their authorised nominees, upon their satisfaction that the Contractor is not conforming to the safety requirements, may direct stoppage of work and direct the Contractor to remedy the defects or supply the facility/ equipment as the case may be. The Contractor shall not proceed with the work until he has complied with such directions to the satisfaction of the Engineer/ Safety Department.

- 5.5 If a Driver or any staff of the Contractor is caught in theft case or in any unauthorised movement of materials or in the activity which is punishable under the law or not authorised by the project/plant, the Contractor shall bear the full responsibility for the loss and other consequences which may



result to the plant due to such illegal / unauthorised acts besides the action to terminate the Contract by the project/plant.

- 5.6 The Contractor shall be responsible to ensure that vehicles belonging to him are not driven in reckless or rash manner so as to become a potential threat to the safety of the traffic in the project/plant or township area. The drivers of the vehicles shall be made to adhere to the speed limits wherever applicable. Failure to comply with the above, may result in termination of the Contract.

In case of accident or injury or damage caused by the Contractor's vehicle or staff to any person or property, the financial responsibility to compensate be borne solely by the Contractor and this amount may, at the discretion of the Competent Authority of the Project/Plant, be recovered from the bills or security or other deposits of the Contractor.

- 5.7 The Contractor shall ensure that all his employees/ workmen are covered under "Workmen Compensation Act" and shall pay compensation to his workmen as and when the eventuality for the same arises.
- 5.8 To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the Contractor shall be open to inspection by the Engineer or his representatives, Safety Engineer and Labour Officer.
- 5.9 The Contractor shall enclose along with his first bill a true copy of the Safety Induction Form (Annexure-1A) duly certified by the Executing Authority regarding use of safety appliances, following of safety instructions and observance of all safety laws, failing which the bill will not be processed for payment.
- 5.10 Notwithstanding the above clauses, there is nothing in those to exempt the Contractor from the operation of any other Act or rule in Republic of India for the safety of men and materials.
- 5.11 The safety violations have been classified in to five categories (I to V) as



enlisted at Annexure-1. Without prejudice to the right conferred by the Clause 5.4 above for stoppage of work for violation of safety requirement, the contractor shall be liable for penalty at the rates indicated below depending upon the category of violation.

Category	Penalty Rs./Violation
I.	1000/-
II.	2500/-
III.	7500/-
IV.	20,000/-
V.	3 lakhs or 20% of the contract value whichever is lower.

In the event of repetition of violation for third time and onwards by the contractors, the penalty shall be imposed at double of the penalty rate for the second violation.

6.0 **PPE & SAFETY APPLIANCES**

- 6.1 The Contractor shall provide all the PPE (Personal Protective Equipment) and safety appliances required to carry out the job to all the workmen deployed by the Contractor and also ensure that his workmen use those PPE and safety appliances while on the job. The Contractor shall not pay any cash amount in lieu of PPE to the workers.
- 6.2 The PPE and safety appliances provided by the Contractor shall be of the standard as prescribed by Bureau of Indian Standards (BIS). If materials conforming to BIS standards are not available, PPE and safety appliances shall be procured by the Contractor as approved by the Employer.
- 6.3 If the Contractor fails to ensure provision of safety appliances required to carry out the job safely to the workmen and that his workmen do not use the PPE and safety appliances as needed for safe working, Engineer and the Safety Engineering Department upon the satisfaction that the Contractor is not conforming to the safety requirement may direct the Contractor for



stoppage of work and require the Contractor to remedy the defects.

The Contractor shall not proceed with the work until he has complied with each direction to the satisfaction of Engineer and Safety Engineering Department.

7.0 **SITE CLEARANCE**

7.1 Prior to commencement of work, the Contractor shall obtain a clearance from the Safety Engineering Department of the Employer and concerned department/ section of the Employer where the job is to be carried out. The Employer/ Engineer shall not permit the Contractor to commence the work unless Contractor or his representative produces such clearance certificate. The Department concerned shall grant such clearance after ensuring that :

- a) The Contractor himself has undergone Safety Induction Training organised by the Employer's Safety Engineering Department in the preceding twelve months.
- b) The Contractor's workers, identified for particular work / Department, have undergone Safety Induction Training in the preceding twelve months.
- c) The Contractor has arranged PPE and Safety appliances for himself and for all his workmen, as required.
- d) The Contractor possesses work permit issued by the Employer or Employer's representative for which the "Work Clearance Form" (Annexure-1B) shall be filled in triplicate by the Contractor for record of :
 - i) Safety
 - ii) Department/ Section of the Employer granting clearance and
 - iii) Contractor
- e) The Contractor and his supervisors along with the Contract documents and job instructions received from the employer, will

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come to Employer's Safety Engineering Department where the Contractor will obtain Safety Rule Book for Contractor and seek clarifications, if any. The Contractor is not permitted to stop the job without clearance from Employer's Safety Engineering Department.

- f) The Contractor shall possess handling equipment, tools & tackles of adequate capacity and tested quality.

7.2 Contractor shall obtain specific permission from the Engineer of the company or the companies Safety Department before commencing the following:

- a) Working in an operating plant / equipment;
- b) Working at height;
- c) Working in areas expected to have toxic/ poisonous gases;
- d) Major site activities irrespective of the clearance already obtained;
- e) Wherever there are hazardous of electricity moving.

The Contractor shall obtain the copies of the above procedures from the Engineer or the Safety Engineering Department.

The, PERMIT TO WORK (PTW) system of Employer shall be followed while working at site.

7.3 The executing department shall take necessary shut down of operating plant/equipments before commencement of job in that area. The Contractor shall ensure that shut down/ clearance is taken before sending workers to such locations particularly in the area where there are hazardous of gases, electricity, moving machinery etc.

The LOCK OUT AND TAGOUT (LOTO) Procedure shall be followed while isolating any energy sources, while issuing PERMIT TO WORK (PTW).

8.0 SKILL AND COMPETENCE OF WORKMEN

8.1 The Contractor shall be responsible to engage competent and skilled workers.

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8.2 Before starting of the day's job, the Contractor shall ensure that safety briefing has been done to his workers by himself or his supervisors who have been imparted safety induction earlier and also maintain records to this effect.

9.0 **PHYSICAL FITNESS OF WORKMEN**

9.1 The Contractor shall ensure that his employees/ workmen subject themselves to such medical examination as required under the law or under the company's rule and keep a record of the same.

9.2 The Contractor shall not permit any employee/ workmen to enter the work area under the influence of alcohol.

10.0 **DEALING WITH ACCIDENT**

10.1 The Contractor shall maintain a safety register, keep records of all minor and major accidents, serious or averted (near miss) accidents, with or without injuries to human beings and shall submit a report about the accident to the Engineer promptly, on the form prescribed by the Employer.

10.2 The Contractor's supervisor/ officer in charge shall arrange to take the injured person first to Project/Plant Medical Unit with IOW (Injury on Work) form given on Annexure-1C and under no circumstances, take the injured person directly to his own doctors. The information of fatal accident shall be given on Annexure-1D.

10.3 The Contractor shall not interfere with the site of accident, unless inspected and / or permitted by the competent authorities.

10.4 The Contractor shall arrange to avoid any sort of commotions at site in the event of an accident.

10.5 Near miss incidents shall be reported in the format attached at Annexure-1E



11.0 MISCELLANEOUS

11.1 Safety Records (Statutory Records)

The Contractor shall keep record of:

- i) Test certificates of all lifting tools & tackles, pressure vessels etc.
- ii) Periodical inspection report of safety appliances,
- iii) Maintaining accident analysis report in proper format in consultation with Employer's Engineer.
- iv) Safety record as per Factory Rules/ Safety Codes or any other Statutory provision shall also be maintained. However, necessary help in this regard can be taken from concerned Safety Organization.

11.2 Gas Lines

To work in dangerous gas Employer will provide job safety induction to the Contractor's personnel. For this the Contractor shall give in writing the list of personnel likely to work in gas line (new/old) to the Engineer who in turn will arrange the safety induction to the Contractor's personnel inside Employer's Works. The Contractor shall ensure the presence of his personnel at place of safety induction (normally Central Gas Safety Station, E&E Department) and follow the steps, General rules & regulations as imparted during the training.

11.3 Electrician/ Other Electrical Personnel

The Contractor shall engage qualified and competent electricians and other electrical personnel while working on electrical lines (which may be High Tension, Medium Tension and Low Tension electrical lines) for safe execution of Contract. The electricians and other electrical personnel must possess requisite certificate issued from competent authority.



Electrical Equipment

- a) The Contractor shall ensure proper earthing of all electrical equipment/ machinery prior to start of the machine. The Contractor shall also ensure daily examination of the earthing of equipment/ machinery prior to start of the job in order to avoid electrical hazards.
- b) The Contractor shall ensure use of proper cable (may be welding cable or power cable or control cable). The joints of the cables shall be perfectly insulated. The Contractor shall also ensure the use of proper plugs, sockets and other electrical fittings while executing any Contract. ELCB of appropriate rating shall be used by the Contractor in the power distribution system for safety of personnel working.

11.4 Scaffolding/ lifting/lowering / dismantling of equipment or fabricated structural or any other materials.

- i) For safe execution of the Contract, Contractor shall make a programme of a piece/ whole job, in sequence of steps involved in execution the required safety measures to be taken during the execution of the job.
- ii) The Contractor shall ensure the use of sufficiently strong scaffolding with sufficiently strong hand railings during the execution of the job. The Employer will provide prints of "Standard Scaffolding Drawing" on request by the Contractor. Scaffold/ platform to be used by more than 2 persons has to be approved by the Site Engineer and the concerned Safety Organization, jointly. The Contractor shall ensure the use of scaffoldings at construction site by his personnel working at height, fabricated as per standard drawing for scaffolding. If the scaffolding as per the standard drawing is not found suitable at site, the Contractor shall make necessary modification to strengthen the same. For any civil engineering job, the Contractor will provide adequate support before casting or any superstructure and provide approach, scaffolding etc., in such a manner that is safe, easy for movement



of men, women and materials.

- iii) The Contractor shall make his own arrangement for the area lighting/ spot lighting at fabrication yard. The Employer will provide power source at one point only near to the fabrication yard.
- iv) The Employer will provide area lighting at erection site only. The Contractor shall make his own arrangement for spot lighting. The source of power supply at the nearest possible point will be shown by the engineer at site.

11.5 **House keeping**

- i) The Contractor shall ensure good housekeeping in his working area, fabricating yard as well as at erection site. The safe approach to the working place must be ensured. Place for keeping raw materials, semi-finished materials should be clearly marked with proper identification. Machine component shall be kept properly under shed.
- ii) The Contractor shall keep the scrap material at one place duly barricaded and shall remove the same regularly from the work place.
- iii) The Contractor shall stack properly the fabricated or any other items likely to be erected very shortly at erection site, in such a way that the materials do not cause congestion at site or create unsafe condition for free and safe approach.
- iv) The Contractor should put up a board (minimum 4' x 3') indicating the name of the Contractor, details of the job, order No., starting date and likely completion date of the job. On completion of the job, the Contractor shall clear the site (good materials and scrap). The board so displayed shall be taken out of the site. Any material left after the job is over will be picked up by the Employer and the Contractor will be charged back for the same.

v) **Barricade**

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The Contractor shall ensure barrication of the unsafe area, which can lead to accidents to any unknown person working in that area. In order to remove unsafe condition and prevent accidents, this unsafe area such as trench/ pit/ foundation, any type of opening made or left in any floor of the building including staircase etc. must be barricaded.

The hand railings shall be immediately provided in all the floors, stairs etc. before proceeding for erection/ dismantling.

- vi) Removal of muck shall be done within 24 hours from road sides.
- vii) The Contractor shall be responsible for removing all unwanted materials /scaffolds from the work site.
- viii) The Contractor shall issue written as well as oral instructions from time to time, in addition to the precautions, measures spelt out above so as to ensure that the workers adhere to safety norms specifically needed for the particular job during the execution of the work.

- 11.6 The Contractor shall ensure that compressed air is not used for removing the dust from one's clothes. Compressed air shall not be blown against any one as it may injure or even kill him / her.
- 11.7 The Contractor shall provide, maintain and arrange for periodical checking of adequate numbers of fire extinguishers of appropriate type and other facilities (e.g. sand buckets, asbestos covering etc.) in fire prone areas.
- 11.8 The Contractor shall provide clearly demarcated access and exits at work site to take care in case of outbreak of fire or any other eventualities.
- 11.9 The Contractor shall ensure that smoking or keeping of naked light near gas lines, valves and any other equipment connected with gas distribution system and handling of all inflammable material is strictly prohibited.

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- 11.10 The Contractor shall ensure that no one takes rest/ shelter below any dumped slag, boulder or any other cut pit/ excavation near any stock of materials, electrical installations and gas lines etc.
- 11.11 The Contractor shall ensure the availability of first aid box at the working sites.
- 11.12 Make available all necessary personal safety equipments/ appliances such as safety helmets, safety boots, full body harness, gloves, leather gloves for welders, clear glass, safety goggles and other relevant PPEs as advised by Safety Department or Departmental Safety Officer for the use of persons employed at the site of work and maintain in condition suitable for immediate use and shall take steps to ensure proper use of equipment by the workers.
- 11.13 Usage of full body harness and anchoring it at rigid place is to be ensured by the Contractor or his supervisor who shall be present all the time on working spot.
- 11.14 Use only steel pipe scaffolding.
- 11.15 Contractor shall also ensure the presence of supervisor at site during the execution of the job.
- 11.16 Obtain passes from Safety Department for those persons who will be required to work at height of above 2 meters.
- 11.17 In case of contracts involving deployment of workers at a height exceeding 10 meters, the following clauses will also apply –
- A) Persons carrying out such jobs should be selected by the contractors within age group of 20 years to 50 years with doctors' certificate about fitness to work at height in the format prescribed by NMDC.
- B) All such persons should be medically examined for fitness and fit certificate may be issued by Project Hospital. Rs.500/- per contract labour

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will be charged from the Contractors towards this medical examination by Project Hospital.

C) Special Training is to be imparted by Safety Department for such persons.

11.18 (I) Operating Authority will assess the penalty amount having regard to all the circumstances, in particular the nature and gravity of the violation on the advice of the Head of Safety Department and will issue a show cause notice specifying therein the proposed penalty. Considering the cause shown by the contractor, if any, the Operating Authority shall pass final orders which shall then be binding on the contractor. The penalty amount shall be recoverable from any bill and or SD of the contractor without any further reference to him.

(II) In case of violations from Category (I) & Category (II) i.e. occasional violation and minor violation, if repeated for the second time and onwards, the penalty will be recovered, the penalty will be recovered from the dues of the contractor on the advice from SED (Safety Engineering Department) officials and the Operating Authority will be kept informed only.

(III) For the violations of Category-III and Category-IV as mentioned above and detailed in the Annexure, if repeated for the second time and onwards, the penalty will be recovered by the Finance Department against an advice from SED (As decided in consultation with the Operating Authority within 3 days from the date of violation).

(IV) In case of violation of Category-V i.e. Fatal cases, SED officials will impose fine of Rs.3,00,000/- or 20% of the contract value whichever is lower on the contractor without consulting Operating Authority and direct Finance Deptt. to deduct from the contractor's dues. The Enquiry Committee of the fatal cases may recommend suspension/ banning business dealing with the contractor, if found appropriate.

11.19 Contractors should ensure that his workers follow all jobs specific safety precautions as instructed from time to time by Contract Operating Authority or his representative.

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- 11.20 a) Persons working on platform above 02 meter from the ground level and persons working on the ground level on the periphery of the pit which is 02 meter or more deep must wear ISI safety belt and persons working on the platforms which are 05 meter above the ground level, but less than 10 meters, must undergo safety training for 'Working at height' being imparted by Safety Engineering Department and must also wear safety belt. A certificate for such safety training for 'Working at height' will be issued to the person by Safety Engineering Department valid for a maximum period of one year.
- b) Persons working on the platform above 10 meter from the ground level and persons working on the ground level on the periphery of the pit which is 10 meter or more deep must use ISI Safety Belt and obtain medical / mental fitness certificate from the Medical Officer of the company/ Civil Surgeon at Project site. On the basis of this certificate, Safety Engineering Department will impart safety training for working at height and issue height pass. Height pass issued will be in the name of individual worker and its validity will be for a maximum period of 01 year only.
- c) On expiry, certificates of safety training for working at height as per 4(a) and height passes as per 4(b) will be renewed after the workers passes the tests and imparted training once again

12.0 Operational Control Procedures:

Purpose:

To establish and maintain the procedure and to ensure that –

- i. Operational controls as applicable to the organizations and its activities
- ii. Controls related to purchased goods, equipments and services
- iii. Controls related to Contractors
- iv. Documented procedures to cover situations where their absence could lead to deviations from OHS policy
- v. Stipulating operating criteria

Procedure:

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- i. Identify those activities, operation and services that are having hazards and risk assessed and identified and prioritized significant risks where operational control is required.
- ii. Documented operational control procedures shall be prepared to cover the activities, operations and services.
- iii. Operational Control Procedures shall be made available at the place of work in printed or electronic form.
- iv. Critical equipment, machinery and other sources from point of OH & S shall be identified and their preventive maintenance schedule shall be laid down in order to reduce / control or prevent incidents. Machines and equipment shall be operated, monitored as per the Operational Control Procedures and laid down criteria and records shall be maintained.
- v. Controls related to contractors for adherence to all safety precautions and applicable guidelines.

13.0 Safety Guidelines by Ministry of Steel;

The Contractor shall adopt the Safety guidelines issued by Ministry of Steel while working at site, the guidelines are available in the following website;
<https://steel.gov.in/safety/safety-guidelines-iron-steel-sector>



Annexure - I

Category	Violations	Fine
I	1. Occasional violation of not wearing crash helmet in works/ office area	₹ 1000/-
II	<p><u>Minor Violations.</u></p> <ol style="list-style-type: none"> 1. Height pass not made/ available. 2. Unauthorized entry at height/ hazardous location. 3. Proper ladder/ steps not provided for descending. 4. Shuttering not done (below 2 Mtr level) of excavation. 5. Over hanging burden in pit not removed in excavation. 6. Power cable clamped with GI wires to post/ pillar. 7. Power cable tied on reinforced rod/ structure without proper insulation. 8. Loose connection taken from board without proper board plug. 9. Fitness certificate of cranes/ hydramoc/ heavy vehicles not available. 10. Crane rope conditions not OK. 11. Rope of crane not clamped properly. 12. Tyres of vehicle having patching/ bolting. 13. Not wearing safety helmet at site. 14. Working in slippers/ barefoot. 15. Hand gloves not used. 16. Gas cutting without goggle. 17. Rolling/ lifting of cylinder/ dragging on the ground (without cage). 18. Welding with non-standard holder. 19. Welding machine earthing not done (double body earthing). 20. Gas Hose Pipe clamping done by wires. 21. LPG cylinder date expired/ over. 22. Wet bags not put on gas cylinder. 23. Loading/ unloading of cylinder – cushion not given. 24. Condition of hose pipe not good. 	₹ 2500/-

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	<p>25. Working with leaking cylinder.</p> <p>26. Using non power cable instead of welding cable.</p> <p>27. Working without work permit/ shut-down.</p> <p>28. Not putting red flags/ stopper.</p> <p>29. Dismantling of structure without authorized plan.</p> <p>30. Unauthorized Oxygen tapping.</p> <p>31. Working on NMDC installation without permission.</p> <p>32. Not having proper gate passes/ other area passes.</p> <p>33. Use of damaged slings/ tools/ ropes.</p> <p>34. Hand grinders/ mixer machines without guard.</p> <p>35. Not reporting of accident.</p> <p>36. Taking shelter behind electrical panel.</p> <p>37. Driving of heavy vehicles on the main road during restricted hours.</p> <p>38. Parking at unauthorized place.</p> <p>39. Truck side panel/ broken, not OK.</p> <p>40. Dropping/ spillage of material on the road.</p> <p>41. No number plate on the vehicle.</p> <p>42. No indicator light/ brake light on vehicles.</p> <p>43. Repeated Unsafe condition and Unsafe practice observed at site. (Repeated safety violations)</p>	
III	<p><u>Major Violations</u></p> <p>1. Using bamboo / or other non-standard material for scaffolding.</p> <p>2. Railing not given at platforms or opening of floor.</p> <p>3. Scaffolding planks not tied.</p> <p>4. Throwing / dropping of material from height.</p> <p>5. Proper ladder/ approach not given for working at height.</p> <p>6. Walkway/ cross over path not provided.</p> <p>7. No barricading of excavated pits.</p> <p>8. No top cover on power distribution board.</p> <p>9. Sleeping under truck.</p> <p>10. Absence of supervisor at work site.</p> <p>11. Welding screen not used.</p> <p>12. Major Near Miss incidents due safety lapses,</p>	₹ 7500/-

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	having serious potential safety risks.	
IV	High Risk Violations 1. Full body harness (FBH) not wearing. 2. Life line of FBH not anchoring. 3. Floor opening left unguarded in the area of work. 4. Working at roof without daily permit. 5. Major incidents and accidents due to safety lapses. 6. Lapses in LOTO compliance at site.	₹ 20000/-
V	Fatal Accident cases	Rs.3,00,000/- Or 20% of contract value whichever is lower.

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ANNEXURE-1A

(Name of the Organization)
(Name of the Unit)

SAFETY INDUCTION FORM

Safety induction to the Contractor for starting a job.

1.	Name and address of the Contractor	:	
2.	Contract/ Award Letter/ Work Order No.	:	
3.	Name of the Department awarding Contract.	:	
4.	a) Probable date of starting the job	:	
	b) Duration	:	
5.	Place & nature of work	:	
6.	Name & designation of supervisors	:	
	i) Departmental (1) (2)		
	ii) Contractual (1) (2)		
7.	Necessary safety precautions explained.	:	
8.	Safety appliances advised for usage to the workers.	:	

Safety Engineering
Department or
Engineer's
representative

I have gone through the Safety Rules Book for Contractors and received a copy of the same. I shall follow all safety precautions/ instructions given to me and shall be responsible for safety of my staff/ employees/ workmen.

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Signature of Contractor

Certified that requisite Safety Appliances are available with workers and Contractor is permitted to start the work.

Signature of Engineer

Certified that requisite Safety Appliances are being used and safety precautions/ measures are being adopted.

Safety Officers of Employer

Copy to :

1. Safety Department.
2. Operation/ Works Department.
3. Contractor with one spare copy.



ANNEXURE-1B

(Name of the Organization)

(Name of the Unit)

WORK CLEARANCE FORM FOR CONTRACTORS

1. Name of Contractor's firm with address :
2. Engaged by which Department :
3. Name of the representative / supervisor of the Contractor supervising the job. :
4. Precise nature of work to be carried out / work order reference. :
5. Precise location of work :
1. Proposed date and time of commencement of work. :
2. Expected No. of days required for the work. :
3. Whether Contractor's workers are to be engaged in G/A/B/C shifts and No. of people engaged. :

I accept responsibility for ensuring that all men under my control shall observe the statutory safety requirement and follow the safety instructions of the plant/project.

Date :
Contractor

Signature of the

Certified that the Contractor has been engaged by us for the work described above.

Date :
Engineer

Signature of the

(Certificate to be given by the
Department/ Section where work
is to be carried out)

You are authorized to carry out the work described below:

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Date : _____ Signature of the Safety Officer of the Employer.
Note :

1. The form shall be filled-in in triplicate by the Contractor for the record of (I) Safety Engineering Department, (ii) Department/Section granting clearance, (iii) Contractor.
2. These certificates are not a substitute for the electrical permits and do not give permission to use masked lights or work in gas hazardous areas or enter closed vessels or for explosives, which shall be taken separately whenever required.

**ANNEXURE-1C**

(Name of the Organization)
(Name of the Unit)
INJURY ON WORK
(Contractor's Employees)

1.	Name of the firm	:	
2.	Name of the Contractor	:	
3.	Name of Department (Awarding Contract)	:	
4.	Name of the injured person	:	
5.	Designation, gate pass No./ Token No.	:	
6.	Date and time of accident	:	
7.	Department where accident happened	:	
8.	Exact place of occurrence	:	
9.	Eye witness (name & designation)	:	1)
			2)
10.	Persons appraised of	:	1)
			2)
11.	Brief account of the accident	:	

Date:
Contractor /

Signature of the

Contractor's
supervisor

(Particulars to be filled in by the Medical Officer)

1. Nature of injury :
2. Injured person is fit/ unfit to return to duty. :
3. If unfit, period of rest recommended :

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4. This employee has been notified that _____ :
he is fit/ unfit as per SI.
No.2. (strike out which is
not applicable).

Date:

Signature of the Medical Officer.

Name:

Seal:

Annexure- 1C (contd.)

Note:

1. When an injury occurs to a Contractor's employee while inside the factory, the injured person should be sent to Project/Plant Medical Unit immediately, with this form in triplicate.
2. The Medical Officer on duty at Project/Plant Medical Unit will retain one copy and send one copy to Safety Engineering Department. The third copy shall be returned to the Contractor concerned after duly filling up the forms.

In case, the Contractor takes the injured person to his private doctor, he shall do so by giving a written undertaking to the doctor in Project/Plant Medical Unit and to the Manager, Safety Engineering Department.

If the private doctor declares the injured person unfit for duty more than 2 days, this becomes a reportable accident under the Factories Act and the Contractor shall immediately report this to the Manager, Safety Engineering Department for sending reports to concerned Government agencies.

The Contractor shall also keep the manager (Safety) inform about:

- a) The condition of the injured person;
- b) The period of disability and
- c) Any loss of earning capacity certified by the doctor.

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The Contractor shall produce the fitness certificate from the attending doctor after the injured person is declared fit for duty.



ANNEXURE-1D

(Name of the Organization)

(Name of the Unit)

NOTICE OF FATAL ACCIDENT

(Contractor's Employees)

Date:

From

(Name and address of the Contractor)

To

The Engineer

(Superintendent/ Manager)

Dear Sir,

We regret to inform you that _____ an employee of

M/s _____ met with a fatal accident at _____AM/ PM, dated
_____ at _____. At the time of accident, he was engaged in

(Description of work)

Yours faithfully,

Signature of the Contractor /
Contractor's supervisor

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ANNEXURE-1E

NMDC LIMITED
.....
(NEARMISS INCIDENT REPORT)

1	Name of the Department	
2	Name of the location / place, where the incident occurred	
3	Brief description of the Incident.	
4	Date and Time of the incident	
5	Name(s) & Designation(s) of the person(s) escaped due to the incident	
6	Names of the persons who witnessed the incident	
7	Probable Cause of the Incident.	
8	Suggestions by the department to avoid such incident in future	

Place:

Signature of Head of the Department

Date:

Name, Designation & Department.

To: 1. Head of Safety
2. Head of Personnel

Copy to: 1. Head of Project, -For kind information

Note:

1. All near miss incidents are to be reported to Head of Safety by the head of the Department immediately.

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NMDC LIMITED

(A Government of India Enterprise)
Khanij Bhavan, Castle Hills,
Masab Tank, Hyderabad- 500028, INDIA.

TENDER DOCUMENT

FOR

Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years

VOLUME – II

(SCOPE OF WORK AND TECHNICAL SPECIFICATIONS)

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Supply, Installation and Commissioning of 4 sets of 25 kWp Grid Interactive Hybrid Rooftop Solar Power Plant at Bailadila Iron Ore Mine (BIOM), Kirandul Complex on Lump Sum Turnkey (LSTK) basis and Comprehensive AMC (CAMC) for 5 years

1.0 INTRODUCTION:-

Harnessing of Non-Polluting Renewable Energy Resources to Control Green House Gases is receiving importance from the Government of India. The Solar mission, which is part of the National Action Plan on Climate Change has been set up to promote the development and use of Solar Energy for Power Generation and other uses with the ultimate objective of making solar energy competitive with fossil-based energy options.

It has been proposed to set up 4 sets of 25kWp Grid Interactive Hybrid Rooftop Solar Power Plants complete with all Mountings and Accessories with 5 years CAMC after the expiry of Warranty Period of **twenty-four (24) calendar months commencing from the date of successful commissioning or 30 months after supply whichever is earlier**, on Turnkey basis for the following four locations of BIOM Kirandul Complex: -

1. Kailash Nagar Barrack : 01 Set
2. Camp Office Dep-11/C : 01 Set
3. Time Office Dep-11/B : 01 Set
4. Service Center of Dep-14 : 01 Set

List of Annexures: -

- | | |
|-----------------|--|
| 1. Annexure-I | Site Conditions Information of BIOM Kirandul |
| 2. Annexure-II | Scope of Work & Technical Specifications |
| 3. Annexure-III | Bill of Quantity (BOQ) |
| 4. Annexure-IV | Questionnaire-Technical |

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ANNEXURE-I

2.0 SITE CONDITIONS INFORMATION OF BIOM KIRANDUL

Brief description:

The Bailadila range of hills situated in the district of South Bastar Dantewada has large iron ore reserves spread across 14 Deposits. NMDC Limited has been operating in this range for about 45 years by setting up mechanized open cast iron ore mines along with the iron ore Crushing, Screening & Loading plants. The BIOM Kirandul complex consists of the mine and OCSL plant of iron ore Deposit 14, Deposit 11/C & Deposit 11/B.

LOCATION:

Kirandul is located at a distance of about 40 km south-west of Dantewada, the district headquarters in Chhattisgarh State.

Accessibility:

Kirandul is easily and well connected to Raipur, Visakhapatnam and Hyderabad by all-weather roads. It can also be reached by rail from Vishakhapatnam which is about 450 km away. The project can also be reached by road from Hyderabad which is about 550 km away. There is regular iron ore movement from this sector to Vishakhapatnam port by rail. The railway line known as KK line runs at the foot hills of Bailadila-14, 11C, 11B.

Climate:

The region enjoys mild summer and winter is also not severe. The maximum temperature in summer rises up to 40°C between May & June whereas minimum temperature in winter drops to 10°C. The area receives heavy rains during monsoon from June to October. Weather during rainy season is stormy accompanied by gales and the hilltops are covered with thick clouds and dense fog which reduces visibility. The average wind speed is approx. 80 KMPH.

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ANNEXURE-II

Scope of Work & Technical Specifications

3.0 - SCOPE OF WORK AT EACH LOCATION :

The scope of this specification shall cover Design/ Engineering, Manufacture, Quality Surveillance, Testing, Packing, Supply, Erection and Commissioning of **4 sets of 25 kWp** Grid Interactive Hybrid Roof Top Solar Power Plant with associated components on Turnkey basis **at four locations of BIOM Kirandul Complex (ie., 1 set of 25kWp at each location)** namely, Kailash Nagar Barrack, Camp Office Dep-11/C, Time Office Dep-11/B and Service Center of Dep-14.

- a) Each set of these 25kWp systems shall be complete with PV Modules, Inverter, Metering, Junction Boxes, AC, DC Distribution Boards and Cables, Communication Interface, Battery Banks, Lightening Protection System and any other equipment necessary for Safe and Efficient Operation of the Solar Power Plants.
- b) The work shall also include Interconnection of Solar Plant with the Grid at each location.
- c) The Civil, Fabrication works required for the successful Installation and Commissioning of complete system shall also be in scope of Supplier.
- d) It is not the intent of this specification to specify completely herein all the details of Design and Construction of equipment as it is on Turnkey basis. However, the equipment offered shall conform in all respects to High Standards of Engineering, Design and Workmanship.
- e) All the fittings and accessories that might not have been mentioned specifically in the specification but are necessary for equipment's of the Plant shall be deemed to be included in the specification and shall be supplied and furnished by the Contractor without any extra charge.
- f) It shall be the responsibility of the Bidder to ensure that all the works as per scope of the specification are completed for safe and efficient working of the system.

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- g) The Bidder shall carry out all the necessary co-ordination with regard to sub- contracted items. NMDC Limited will communicate only with the Bidder for all matter pertaining to this contract.
- h) It shall be responsibility of the Bidder to obtain all necessary Statutory and Regulatory clearances from the Competent Authorities.
- i) The Total Price Quoted for this contract shall cover all items and service necessary for successful completion of the contract. Even if all components of a system included in this specification are not explicitly identified and /or listed herein, these shall be supplied under this contract to ensure completion of the system and facilitate proper operation and easy maintenance of the Solar Power Plants.
- j) It shall be responsibility of the Bidder to co-ordinate along with required support with the Competent Authorities to obtain the Subsidy.
- k) It shall be the responsibility of the bidder for imparting on-site training for 2 days to our staff for regular usage of the equipment supplied.

On completion of warranty period from the date of commissioning, the all four 25 Kwp Grid Interactive Hybrid Rooftop Solar Power Plants shall be on Comprehensive AMC for the next five years.

3.1 SPECIFICATIONS FOR 25KW SOLAR POWER PLANT AT EACH LOCATION: -

This specification covers the requirements of Design, Manufacture, Installation, Testing, Supply and Commissioning of **4 Sets** of 25Kwp Grid Interactive Hybrid Solar Power Plants complete with all Mountings and Accessories on Lump Sum Turnkey basis (*ie., 1 set of 25 kWp at each of the 4 locations*).

The Hybrid Solar Power Plant shall consist of following equipment's: -

- Solar PV Modules consisting of required number of PV Cells.
- Power Conditioning Unit/ Inverters with LCD display.
- Synchronizing Equipment.

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- Mounting Structures (GI)
- Metering Equipment.
- Cables and Hardware.
- Junction Box and Distribution Boxes as required.
- Earthing Kit.
- Lightning Arrestors.
- Battery Banks.
- PVC Pipes and Accessories.
- Tool Kit.

A. Photovoltaic Modules (PV Modules)

Standards and Codes

Photovoltaic Modules shall comply with the specified edition of the following standards and codes or equivalent Indian Standards, wherever applicable.

Standard	Description
IEC 61215-1 Ed. 1.0	Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1: Test requirements
IEC 61215-1-1 Ed. 1.0	Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-1: Special requirements for testing of crystalline silicon photovoltaic (PV) modules
IEC 61215-1-2 Ed. 1.0	Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-2: Special requirements for testing of thin-film Cadmium Telluride (CdTe) based photovoltaic (PV) modules

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IEC 61730-1 Ed. 2.0	Photovoltaic (PV) module safety qualification - Part 1: Requirements for construction
IEC 61730-2 Ed.2	Photovoltaic (PV) module safety qualification - Part 2: Requirements for testing
IEC TS 62804-1:2015 Ed.1	Photovoltaic (PV) modules - Test methods for the detection of potential-induced degradation - Part 1: Crystalline silicon under conditions of 85oC/85% RH.

PV Modules shall be framed/flexible type conforming to following specifications:-

Parameter	Specification
Cell type	High efficiency Mono-crystalline PERC with silicon Nitride anti-reflection coating and anisotropically etched surface
Application Class as per IEC 61730	Class A
Glass (not applicable for flexible)	
Thickness	> 4 mm for 72 cell modules
ROHS compliance	Yes. Cell should be checked for 100% reverse current.

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Transmittance	> 90%
Soldering peel strength	≥ 1.0 N/mm bus bar width
Frame (not applicable for Flexible Module)	
Material	Anodized Aluminum (anodization thickness >15 micron) with silver front contact bars.
Junction Box	
Degree of Protection	IP-65
Connectors	MC4 Compatible

The offered PV Modules shall have the following features: -

- (a) The PV Modules convert the light reaching them into DC Power. The amount of power they produce is roughly proportional to the intensity and the angle of the light reaching them. Bidders has to ensure the proper positioning of the Modules to take maximum advantage of available Sunlight within site constraints with the Sun's movements during the day.
- (b) Bidders shall follow the latest Engineering Practice; ensure long-term compatibility requirements and continuity of equipment supply and the Safety of the Operating Staff.
- (c) Bidders are required to optimize generation of electricity in terms of kWh generated with available Solar Radiation at the site (may be obtained through use of efficient electronics, lower cable losses, maximization of power transfer from PV Modules to Converter and the Grid etc.).
- (d) The PV System shall support Remote Monitoring of important Parameters. The system shall be designed such that personnel without any background knowledge in Microprocessor-based Technology are able to Operate the System. The operator interface shall be such that operating personnel shall be able to operate the system easily after having received some basic training.
- (e) The SPV Cells shall be manufactured using unique highly efficient diffusion process or any other technology so as to ensure uniform diffusion profiler to achieve close spread and higher efficiency for each cell.

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- (f) Stabilized net output of the Solar PV Array for the Solar Power System should not be less than the Nominal design level for the System under Standard Test Condition.
- (g) Each Solar PV Module shall be warranted by the Manufacturer for at least 95% of its rated power for 10 Years and 80% of initial rated power output at the end of 25 Years from the date of System acceptance as per MNRE guidelines.
- h) The Bidder shall provide the sample Solar PV Module electrical characteristics including current-voltage (I-V) performance curves and temperature co-efficient of power, voltage and current. However, the tabulated document with all the relevant data like voltage, current, power output for all the modules also to be provided.
- i) The PV Modules shall be suitable for continuous outdoor use.
- j) The PV Module shall be made of high quality laminated in ultra violet stabilized polymer material such as Ethyl Vinyl Accelerate (EVA), Tedler and toughened glass. The size of single crystalline silicon PV Cells shall be so chosen so as to maximize energy density and align with economies of scale.
- k) PV Module shall be provided with frame of anodized channels for size and simplicity in installation offered as a single module or series parallel combination of modules. The PV Module shall be provided with screen-less frame with Solar Cable and Connector.
- l) The PV Modules shall be made of light weight cells, resistant to abrasion, hail impact, rain, water and environmental pollution. The PV Modules shall be provided with anti-reflection coating and Back Surface Field (BSF) structure to increase conversion efficiency.
- m) The PV Module shall use lead wire with weatherproof connector for output terminal.
- n) The terminal box on the module should have a provision for opening for replacing the cable, if required.

Warranty

PV modules must be warranted with linear degradation rate of power output except for first year (up to 3% including LID) and shall guarantee minimum 80% of the initial rated power output at the end of 25 years.

The modules shall be warranted for minimum of 10 years against all material/ manufacturing defects and workmanship.

B. Power Conditioning Unit (PCU)

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Standards and Codes

Power Conditioning Unit (PCU) shall comply with the specified edition of the following standards and codes.

Standard	Description
IEC 61683 Ed. 1	Photovoltaic systems - Power conditioners - Procedure for measuring efficiency
IEC 62109-1 Ed. 1	Safety of power converters for use in photovoltaic power systems - Part 1: General requirements
IEC 62109-2 Ed. 1	Safety of power converters for use in photovoltaic power systems - Part 2: Particular requirements for inverters
IEC 60068-2-1:2007	Environmental testing - Part 2-1: Tests - Test A: Cold
IEC 60068-2-2:2007	Environmental testing - Part 2-2: Tests - Test B: Dry heat
IEC 60068-2-14:2009	Environmental testing - Part 2-14: Tests - Test N: Change of temperature
IEC 60068-2-30:2005	Environmental testing - Part 2-30: Tests - Test Db: Damp

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heat, cyclic (12 h + 12 h cycle)

Power Conditioning Unit (PCU) shall consist of an electronic three-phase inverter along with associated control, protection, filtering, measurement and data logging equipment along with solar charge controllers, compatible with Environmental conditions (Temperature, Humidity, Elevation etc) prevailing at site as per following specifications:-

Parameter	Specification
Rated AC power	25 kW
No. of phases	Three Phase
Rated AC output voltage	415V \pm 2%,
Rated frequency	50 Hz \pm 0.5%
Power factor control range	More than 0.9
Frequency regulation (Stand Alone)	\pm 0.5Hz
Efficiency	Minimum 96%
Total Harmonic Distortion	Less than 3% at 100% load

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Voltage Regulation (Stand Alone)	±2%
Frequency regulation (Stand Alone)	±0.5Hz
Output Waveform	Pure Sine wave

Environment

Temperature Range (Operating)	10 deg to 40°C
Humidity	0-95% Non-Condensing
<u>Enclosure</u>	
Degree of protection	IP 65
Noise	<50dB
DG Compatibility	Required
Auto Bypass feature	Required

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INDICATIONS

LED	<ul style="list-style-type: none"> (i) Grid On (ii) PV On (iii) Grid Charger On (iv) Load On Inverter (v) Bypass (vi) Fault (vii) DC input power
	<ul style="list-style-type: none"> (viii) DC input voltage (ix) DC input current
	<ul style="list-style-type: none"> (x) AC output power (xi) AC output voltage (xii) AC output current (xiii) Frequency (xiv) Power Factor
Alarm	Audible For Fault And Warnings
PROTECTIONS	
PV	DC Reverse Polarity Indication, Surge Protection



Battery, LMLA, T-Gel, 150Ah, 2V, 120 Nos with suitable stand.	Reverse Polarity, Over/ Under Voltage, Over Temp, Over Charge
Grid	Over/ under Voltage, Over/ Under Frequency, Surge Protection
Load	Overloads, Short circuit
Circuit Breakers	Grid Input MCB/MCCB, Battery Input MCB/MCCB, PV Input MCB/MCCB
Temperature	Inverter Over Temperature
Self-Protection	The self-protective features shall not allow signals from the PCU front panel to cause the PCU to be operated in a manner which may be unsafe or damaging.
Communication Port	RS232/ RS 485

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Solar Charge Controller

Charge Controller Type	MPPT
Charger Topology	BUCK
MAX PV Connection Capacity	25Kwp
Max Battery Amps during PV charging	Full Capacity in Boost Mode / Current Control in Float Mode as per Battery AH
Battery type Supported	Lithium titanium Oxide
Peak Charging Efficiency	Greater than 94%

Diesel Charge Controller

Grid Frequency Sync Range	50Hz \pm 6%
Charger Peak Efficiency	>90%
Self-Consumption	<4%

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The offered PCU shall have the following features: -

The DC power produced is fed to hybrid inverter for conversion into AC. Conversion shall be achieved using an electronic hybrid Inverter and the associated control and protection devices. All these components of the system are termed the “Power Conditioning Unit (PCU)”. In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the hybrid Inverter, to the power conditioning unit/inverter should also be DG set interactive. If necessary, hybrid Inverter output should be compatible with the grid frequency. In a grid interactive system AC power shall be fed to the grid at three phase 415/380 V AC bus. Power generated from the solar system during the daytime is utilized fully by powering to the grid as long as grid is available Typical technical features of the hybrid inverter shall be as follows: -

- Switching devices : IGBT/MOSFET
- Control : Microprocessor /DSP
- Nominal AC output voltage and frequency : 415V, 3 Phase, 50 Hz
- Output frequency: 50 Hz
- Grid Frequency Synchronization range : + 3 Hz or more
- Ambient temperature considered : -20° C to 50° C
- Humidity : 95 % Non-condensing
- Protection of Enclosure : IP-20(Minimum) for indoor.
: IP-65(Minimum) for outdoor.\
- Grid Frequency Tolerance range : + 3 or more
- Grid Voltage tolerance : - 20% & + 15 %
- No-load losses: Less than 1% of rated power
- Inverter efficiency(minimum): >93% (In case of 10kW or above)
- Inverter efficiency (minimum):> 90% (In case of less than 10kW)

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- THD: < 3%
 - PF: > 0.9
- (a) The output of the inverter must synchronize automatically its AC output to the exact AC voltage and frequency of the grid.
 - (b) Inverter shall continuously monitor the condition of the grid and in the event of grid failure; the inverter automatically switches to off-grid supply within a cycle. The solar system is resynchronized with the grid within two minutes after the restoration of grid or DG set.
 - (c) Grid voltage shall also be continuously monitored and in the event of voltage going below a preset value and above a preset value, the solar system shall be disconnected from the grid within the set time.
 - (d) Metal Oxide Varistors (MOVs) shall also be provided on DC and AC side of the inverter.
 - (e) The inverter control unit shall be so designed so as to operate the PV system near its Maximum Power Point (MPP), the operating point where the combined values of the current and voltage of the solar modules result in a maximum power output.
 - (f) The inverter shall be a true sine wave inverter for a grid interactive PV system.
 - (g) Following shall also be displayed : Protective function limits (AC over voltage, AC under voltage, Over frequency, under frequency, ground fault, PV starting voltage, PV stopping voltage, over voltage delay, under voltage delay, over frequency, ground fault delay, PV starting delay, PV stopping delay.)
 - (h) Nuts & bolts and the inverter enclosure shall have to be adequately protected taking into consideration the atmosphere and weather prevailing in the area.
 - (i) All doors, covers, panels and cable exit shall be gasketed or otherwise designed to limit the entry of dust and moisture. All doors shall be equipped with locks.
 - (j) The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power, inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
 - (k) Built-in meter and data logger to monitor plant performance through external computer shall be provided.
 - (l) The PCU/ inverters should be tested from the MNRE approved test centres / NABL /BIS /IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.
 - (m) **Operation Mode:-**
 - The system should automatically ‘WAKEUP’ during daytime and “SLEEP” during night.



- **Night or Sleep Mode:** where the Inverter is almost completely turned off, with just the timer and control system still in operation, losses shall be less than 2 W per 5 kW
- **Standby Mode:** where the control system continuously monitors the output of the solar generator until pre-set value is exceeded (typically 10 W).
- **MPP tracking mode:** The control system shall continuously adjust the voltage of the generator to optimize the power available. The power conditioner shall automatically reenter standby mode as input power reduces below the standby mode threshold. Front panel shall provide display of status of the inverter.

3.2 PCU/ARRAY SIZE RATIO:-

- a) The combined wattage of all inverters should not be less than rated capacity of power plant under STC.
- b) Maximum power point tracker shall be integrated in the PCU/inverter to maximize energy drawn from the array.

4.0 SYNCHRONISING EQUIPMENT

Solar PV Systems shall be provided with synchronizing equipment having three input for comparison i.e. grid supply vs. solar output, DG output vs solar output so as to connect the SPV systems in synchronism with grid or DG. In case of grid failure, solar PV system shall be disconnected from the grid and out of synchronization for a period DG supply is not restored. PV system shall be synchronized with the DG supply after DG is started.

5.0 METERING EQUIPMENT AND GRID CONNECTIVITY

Digital Energy Meters to log the actual value of AC/ DC voltage, Current & Energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.2 accuracy class.

Metering, grid connectivity and synchronization of the hybrid roof top solar PV system would be the responsibility of the Bidder in accordance with the prevailing guidelines of the Chhattisgarh State Power Distribution Company Ltd (DISCOM)/CSEB/Electrical Inspectorate and / or CEA (if available by the time of implementation). NMDC will facilitate connectivity; however the entire responsibility lies with bidder only.

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6.0 PROTECTIONS AND CONTROL

PV system software and control system shall be equipped with all the protections as described above. In addition to disconnection from the grid (islanding protection i.e. on no supply), under and over voltage conditions, PV systems shall be provided with adequate rating fuses, fuses on inverter input side (DC) as well as output side (AC) for overload and short circuit protection and disconnecting switches to isolate the DC and AC system for maintenances are needed. Fuses of adequate rating shall also be provided in each solar array module to protect them against short circuit. A manual disconnect switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personal to carry out any maintenance. This switch shall be locked by the utility personal.

7.0 POWER QUALITY REQUIREMENTS

The injection of DC power into the grid shall be avoided by using an isolation transformer at the output of the inverter. It is proposed to limit DC injection within 1% of the rated current of the inverter as per IEC 61727.

Harmonic distortion is caused principally by non-linear load such as rectifiers and arc furnaces and can affect the operation of a supply system and can cause overloading of equipment's such as capacitors, or even resonance with the system leading to overstressing (excessive voltage & current). Other effects are interference with telephone circuits and broadcasting, metering errors, overheating of rotating machines, overheating of delta connected winding of transformer due to excessive third harmonics or excessive exciting current. The limits for harmonics shall be as stipulated in the CEA Regulations for on grid connectivity, which are as follows:

- Total Voltage harmonic Distortion= 5%
- Individual Voltage harmonics Distortion=3%
- Total Current harmonic Distortion=8%

Voltage Unbalance - The Voltage Unbalance in the grid shall not exceed 2.0%

Voltage Fluctuations - The permissible limit of voltage fluctuation for step changes, which may occur repetitively, is 1.5%. Occasional fluctuations limit is 3%.

8.0 MOUNTING STRUCTURES

Hot dip galvanized iron mounting structures may be used for mounting the modules / panels/arrays. These mounting structures must be suitable to mount the SPV modules/panels/ arrays on the roof top, on the ground or on the poles/masts, at an

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angle of tilt with the horizontal in accordance with the latitude of the place of installation. The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759. Anti-theft Nut & Bolts must be used for modules.

On roof surface: Structure to be capable of withstanding a wind load of 100 km / hr with proper grouting.

9.0 POWER, COMMUNICATION AND CONTROL CABLES

Power Cables of adequate rating shall be required for interconnection of: - Modules/panels within array. The minimum size of power cables shall be chosen taking into account Fault level contribution to the system and full load current. However, power cables size for 415 V systems shall be chosen taking into account the full load current & voltage drop. The allowable voltage drop at terminal of the connected equipment shall be max. 2.5% at full load. The derating factors viz. group duration of temp. duration shall also be considered while choosing the conductor size.

Control cables shall be 1.1KV grades, heavy duty, stranded copper conductor, PVC type insulated, flame retardant low smoke (FRLS) extruded PVC type ST-1 outer sheathed. The cables shall, in general conform to IS- 1554 P+I & other relevant standards (IEC 60227/IS 694, IEC 60502/IS1554 standards).

The permissible voltage drop from the SPV Generator to the Charge controller shall not be more than 2% of peak power voltage of the SPV power source (generating system). In the light of this fact the cross-sectional area of the cable chosen is such that the voltage drop introduced by it shall be within 2% of the system voltage at peak power. All connections should be properly terminated, soldered and/or sealed from outdoor and indoor elements. Relevant codes and operating manuals must be followed. Extensive wiring and terminations (connection points) for all PV components is needed along with electrical connection to lighting loads.

10.0 EARTHING MATERIAL

Each array structure of the PV yard should be grounded/ earthed properly as per IS:3043-1987. In addition, the lighting arrester/masts should also be earthed inside the array field. Earth Resistance shall be tested in presence of the representative of NMDC Ltd as and when required after earthing by calibrated earth tester. PCU, ACDB and DCDB should also be earthed properly.

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Earthing is essential for the protection of the equipment & manpower. Two main grounds used in the power equipment's are:

- System earth
- Equipment earth

The provision for lightning & surge protection of the SPV power source is required to be made. In case the SPV Array cannot be installed close to the equipment to be powered & a separate earth has been provided for SPV System, it shall be ensured that all the earths are bonded together to prevent the development of potential difference between any two earths.

Earth resistance shall not be more than 3 ohms. The earthing conductor shall be rated for the maximum short circuit current. & shall be 1.56 times the short circuit current. The area of cross-section shall not be less than 1.6 sq mm in any case.

The array structure of the PV modules shall be grounded properly using adequate numbers of earthing pits. All metal casing/ shielding of the plant shall be thoroughly grounded to ensure safety of the power plant.

11.0 JUNCTIONS BOXES OR COMBINERS

Dust, water and vermin proof junction boxes of adequate rating i.e. IP-65 and adequate terminal facility made of Poly Carbonate Fire-Resistant Plastic (FRP) shall be provided for wiring. Each solar PV panel shall be provided with fuses of adequate rating to protect the solar arrays from accidental short circuit.

12.0 DC DISTRIBUTION BOARD

The DC DB shall be provided in between Solar Array and Power Conditioning Unit. It shall consist of MCCB of suitable ratings for connection and disconnection of array input and also Volt meters, Ammeters & Charging Discharging Amp Hour Meters. There should be LED indication for ON and OFF status as per requirement.

Enclosure material	: Sheet Steel Epoxy Powder coated
Mounted type	: Wall mounting type
Cable entry	: Bottom
No. of glands with cable size	: Bidder to Specify
MCCB	: Bidder to Specify
DC Ammeter display	: 1 nos. (0 to 150 A) for measuring Solar
DC Ammeter	: 1 no. (-150 to 0 & 0 to +150 A) for measuring Battery Charge & discharge display

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DC Volt Meter	: 2 no. (0 to 400 V DC) for SPV & Battery
DC Ampere Hour Meter	: 1 no.
Earthing terminal size	: M75
Accessories	: As per requirement

13.0 **AC DISTRIBUTION BOARD**

Sheet metal enclosure with powder coating painting having AC MCB / MCCB. ACDB also have LED Indicator. One Multifunction Meter with Class 0.2S accuracy, ISI make, Three Phase, of good quality shall be installed in ACDB suitably placed to measure the consumption of power from SPV Power Plant.

Enclosure material	: Sheet Steel Epoxy Powder coated
Mounted type	: Wall mounting type
Earthing terminal size	: M20
Cable entry	: Bottom
No. of glands with cable size	: Bidder to Specify
Accessories	: As per requirement
	: MCB/ MCCB for connection & disconnection of PCU from load
	: MCB for power supply to control room & Battery room loads
Feeder:	Output to control panel through MCB

14.0 **LIGHTNING AND OVER VOLTAGE PROTECTION SYSTEM**

The SPV Power Plant is provided with lightning and over voltage protection connected with proper earth pits. The lightning conductor is made of 20-25 mm diameter, 3000-3500 mm. long GI spikes as per provisions of IS.

The lightning conductor is grounded through 25 mm. X 5 mm. thick GI strip with earth pit. There shall be required nos. of suitable lightning arrestors installed in array field.

15.0 **SURGE PROTECTION**

Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and -ve terminals to earth (via Y arrangement).

16.0 **DANGER BOARDS AND SIGNAGES**

Danger boards should be provided as and where necessary as per IE Act. /IE rules as amended up to date. Three signage shall be provided one each at battery -cum- control room, solar array area and main entry. Text of the signage may be finalized in consultation with NMDC Ltd.

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17.0 FIRE EXTINGUISHERS

The firefighting system for the proposed power plant for fire protection shall be consisting of:-

- a) Portable fire extinguishers in the control room for fire caused by electrical short circuits
- b) Sand buckets in the control room
- c) The installation of Fire Extinguishers should confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCUs as well as on the Roof or site where the PV arrays have been installed.

18. DRAWINGS & MANUALS

- i. Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. Bidders shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the power plant and power evacuation, synchronization along with protection equipment.
- ii. Approved ISI and reputed makes for equipment be used.
- iii. For complete electro-mechanical works, bidders shall supply complete design, details and drawings for approval to NMDC Ltd before progressing with the installation work

19.0 PLANNING AND DESIGNING

- i. The bidder should carry out Shadow Analysis at the site and accordingly design strings & arrays layout considering optimal usage of space, material and labor. The bidder should submit the array layout drawings along with Shadow Analysis Report to NMDC Ltd for approval.
- ii. NMDC Ltd reserves the right to modify the landscaping design, Layout and specification of sub-systems and components at any stage as per local site conditions/requirements.
- iii. The bidder shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The bidder should submit three sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

20.0 DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT

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- i. The Contractor shall furnish the following drawings Award/Intent and obtain approval
- ii. General arrangement and dimensioned layout
- iii. Schematic drawing showing the requirement of SV panel, Power conditioning Unit(s)/ inverter, Junction Boxes, AC and DC Distribution Boards, meters etc.
- iv. Structural drawing along with foundation details for the structure.
- v. Itemized bill of material for complete SV plant covering all the components and associated accessories.
- vi. Layout of solar Power Array
- vii. Shadow analysis of the roof

21.0 DOCUMENTATION

5 Sets of operation, instruction, maintenance manual in English should be provided with the Solar Power Plants. The following minimum details must be provided in the manual:

- (i) **Photovoltaic cells.**
- (ii) **Solar Power Plant** – its components and expected performance
- (iii) **PV Module** - In case of imported modules, it is mandatory to provide a copy of the international product qualification certificate to the test centre
- (iv) **About PCU/Inverter.** The make, model number and technical characteristics of PCU/Inverter should be stated in the product data sheet and furnished to the test centers
- (v) **Battery and electronics** used
- (vi) **Clear instructions** about Mounting of PV Module(s)
- (vii) DO's and DON'Ts
- (viii) Clear instructions on operation, Regular Maintenance and Trouble Shooting of SPP
- (ix) Name and address of the person or service center to be contacted in case of failure or complaint.

22.0 DATA ACQUISITION SYSTEM / PLANT MONITORING

- i. Data Acquisition System shall be provided for each of the solar PV plant.
- ii. Data Logging Provision for plant control and monitoring, time and date stamped system data logs for analysis with the high quality, suitable PC. Metering and Instrumentation for display of systems parameters and status indication to be provided.
- iii. Solar Irradiance: An integrating Pyranometer / Solar cell based irradiation sensor (along with calibration certificate) provided, with the sensor mounted in

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- the plane of the array. Readout integrated with data logging system.
- iv. Temperature: Temperature probes for recording the Solar panel temperature and/or ambient temperature to be provided complete with readouts integrated with the data logging system
 - v. The following parameters are accessible via the operating interface display in real time separately for solar power plant:
 - a. AC Voltage.
 - b. AC Output current.
 - c. Output Power
 - d. Power factor.
 - e. DC Input Voltage.
 - f. DC Input Current.
 - g. Time Active.
 - h. Time disabled.
 - i. Time Idle.
 - j. Power produced
 - k. Protective function limits (Viz-AC Over voltage, AC Under voltage, Over frequency, Under frequency ground fault, PV starting voltage, PV stopping voltage.
 - vi. All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values, previous values for up to a month and the average values) should be made available for energy auditing through the internal microprocessor and should be read on the digital front panel.
 - vii. PV array energy production: Digital Energy Meters to log the actual value of AC/ DC voltage, Current & Energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.2 accuracy class.
 - viii. Computerized DC String/Array monitoring and AC output monitoring shall be provided as part of the inverter and/or string/array combiner box or separately.
 - ix. String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.
 - x. Computerized AC energy monitoring shall be in addition to the digital AC

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- energy meter.
- xi. The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular and graphical form.
 - xii. All instantaneous data shall be shown on the computer screen.
 - xiii. Software shall be provided for USB download and analysis of DC and AC parametric data for individual plant.
 - xiv. Provision for Internet monitoring and download of data shall be also incorporated.
 - xv. Remote Server and Software for centralized Internet monitoring system shall be also provided for download and analysis of cumulative data of all the plants and the data of the solar radiation and temperature monitoring system.
 - xvi. Ambient / Solar PV module back surface temperature shall be also monitored on continuous basis.
 - xvii. Simultaneous monitoring of DC and AC electrical voltage, current, power, energy and other data of the plant for correlation with solar and environment data shall be provided.
 - xviii. Remote Monitoring and data acquisition through Remote Monitoring System software at a centralized location with latest software/hardware configuration and service connectivity for online / real time data monitoring/control complete to be supplied and **operation and maintenance**/control to be ensured by the supplier. Provision for interfacing these data on NMDC's ERP server and portal in future shall be kept.

23.0 TRANSFORMER "IF REQUIRED" & METERING:-

- a) Dry/oil type relevant kVA, 11kV/415V, 50 Hz Step up along with all protections, switchgears, Vacuum circuit breakers, cables etc. along with required civil work.
- b) The bidirectional electronic energy meter (0.2 S class) shall be installed for the measurement of import/Export of energy.
- c) The bidder must take approval/NOC from CSPDCL for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network and submit the same to NMDC Ltd before commissioning of SPV plant.
- d) Reverse power relay shall be provided by bidder (if necessary), as per the local CSPDCL requirement.



24.0 SITE VISIT CERTIFICATE: - Before submission of tenders, the tenderers has to visit the site to get themselves acquainted with the site conditions & other requirements for the erection & commissioning of 4 Sets of 25 KW Grid Interactive Solar Power Plants to avoid any complications later on while executing the work. Copy of site visit/ site survey certificate issued by engineer-in-charge to be enclosed with the tender.

25.0 Time Schedule: -

1: - The basic consideration and important factor of the contract shall be strict adherence to the time schedule for performing the specified works.

2: - The Action plan for completion of works is as given below: -

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26.0 ACTION PLAN FOR IMPLEMENTATION: -

Sl. No	Activities	0-30 days	31-90 days	91-120 days	121-150 days
1.	Approval of all engineering layout drawings and designs after issue of Purchase order				
2.	Delivery of material to site stores				
3.	Structural works, erection of Panels, PCU's, J.B's, Power & control cables etc.				
5.	Installation and Pre-Commissioning of Equipment's				
6.	Complete Installation, Commissioning & Testing				

27.0 GENERAL: -

27.1 All equipment's supplied shall conform to applicable Standards / Indian Electricity Act and CEA regulations.

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- 27.2 No damage should be caused to the existing equipment's and such damage if any shall be made good by the contractor / tenderer at his own cost.
- 27.3 All the equipment used for the installation shall be brand new and of High quality in design, quality and performance. The use of second-hand equipment and materials or sub-standard materials shall not be accepted.
- 27.4 All equipment shall conform to the latest Indian Electricity Rules and Indian Electricity Act 1910 with latest amendments as regards safety, earthing and other essential provisions specified therein for the installation and operation of such item.
- 27.5 The installation of all equipment shall conform to the applicable codes and practices as per the Indian Standards and shall be executed to comply with the latest Indian Electricity Rules as regards safety, earthing and other essential provisions specified therein.
- 27.6 All installation work shall be done in an approved manner acceptable to NMDC.
- 27.7 **All necessary statutory clearances have to be obtained by the bidder before start of work. Any help in this regard will be extended by NMDC with reimbursement of fees.**
- 27.8 The bidder / tenderer should be holder of electrical first class license.
- 27.9 All facilities like electricity and water will be provided free of cost during construction period. However accommodation will be provided on request during CAMC period based on availability on chargeable basis.
- 27.10 The minimum required roof area of 2500 sq. ft per 25kwp for each location is available for installation of the roof top solar system.
- 27.11 Separate weather monitoring stations to be deployed for each 25kwp plant.

Note: - All the Parameters included in the descriptions for PV Modules and PCU are basic requirements for present tender. However, equipment's with similar descriptions or improved versions/ efficiency or items having better features will also be accepted.

28.0 Preliminary Acceptance

- 28.1 On satisfactory completion of erection & Pre- commissioning of the system, Preliminary acceptance tests shall be taken up within one month by the CONTRACTOR to prove that the System has been supplied as per the Contract and after erection is fit to be started up and commissioned.
- 28.2 Tests shall be performed on the individual Sub-assemblies of the unit and shall be designed to conduct the systematic check of the components and of the functional operation thereof.

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- 28.3 Tests shall be conducted by the CONTRACTOR as per contract specifications under his sole responsibility and employing his personnel. Results of tests shall be recorded jointly by the CONTRACTOR and the owner. The CONTRACTOR shall handover all the test certificates obtained by them during execution of the work.
- 28.4 A detailed program of tests shall be drawn up by the CONTRACTOR and shall be subject to the approval of the owner. Such program may be revised and adjusted as may be required by the owner during the test run.
- 28.5 On successful completion of Preliminary Acceptance Tests and liquidation of the defects list, Preliminary Acceptance Certificate shall be issued by the owner.

Note: - The PAT certificate shall be issued based on certification by acceptance of engineer-in-charge.

29. Commissioning Cum Final Acceptance

Final acceptance certificate shall be issued by the owner within 30 days from the date of issue of Preliminary Acceptance Test certificate and fulfillment of the following conditions: -

- a) On Completion of satisfactory Preliminary Acceptance Tests.
- b) The CONTRACTOR has rectified in a definitive manner all defects/ objections/ observations mentioned in the Commissioning Certificate;
- c) The PV modules are generating the guaranteed output of 95% power.
- d) All other supplies and services have been completed as per the Contract;
- e) Final documentation incorporating latest modifications has been submitted by the CONTRACTOR in requisite copies;
- f) The CONTRACTOR has met any and all other obligations under this Contract;

Note: - 1. The FAT certificate shall be issued based on certification by acceptance of engineer-in-charge/ his representative.

2. The system will be deemed as commissioned & accepted only after issuance of FAT certificate.

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30.0 Liquidated Damages for delay in completion:-

Time is an important factor of the contract. It shall be the responsibility of the Tenderer to complete the work within the stipulated period of completion.

In case the tenderer fails to complete the work (i.e. Supply, Erection, Testing, Pre-commissioning, issuance of PAC & FAC and final Commissioning) up to within the period of completion for reasons attributable to the tenderer, he shall be liable to pay to the purchaser, as liquidated damages and not as a penalty, a sum at the rate of 1/2% (half percent) of the total contract value of the work excluding CAMC charges for every week or part thereof which shall be elapsed between the scheduled time of completion of work and the actual date of completion of work.

Provided always that the total amount of such liquidated damages for delay to be paid under this condition shall not exceed 10% (Ten) percent) of the total contract value, excluding CAMC charges as awarded.

31.0 GUARANTEE: -

i) The Tenderer guarantees that all equipment and items supplied by him except PV modules shall be new and in accordance with the Contract Documents and shall be free from defects in material and workmanship for a period of **twenty-four (24) calendar months commencing from the date of successful commissioning or 30 months after supply whichever is earlier**. The Tenderer shall be liable for the replacement of any defective parts in the equipment under normal use and arising due to faulty design, materials, and/or workmanship or any other reason attributable to the Tenderer.

ii) For solar PV modules (item at Sr.No. 3.1 A of Annexure II), the tenderer guarantees that the items supplied by him shall be free from defects in material and workmanship for a **period of one hundred and twenty (120) calendar months commencing from the date of successful commissioning** of the system. The Tenderer shall be liable for the replacement of any defective parts in the equipment under normal use and arising due to faulty design, materials, and/or workmanship or any other reason attributable to the Tenderer.

32.0 LIQUIDATED DAMAGES FOR NON-AVAILABILITY DURING GUARANTEE PERIOD

The equipment availability shall be 7884 hrs (90%) for every year for 24 x 7 operation of the entire 4 x 25 KW Grid Interactive Solar Power Plant of BIOM Kirandul Complex during the guarantee period. For every 24 hrs or part there of non-performance of the

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entire system / part thereof below 7884 hrs, penalty @ 1% of total contract value excluding CAMC charges will be levied subject to a maximum of 10% of the total contract price excluding CAMC charges.

33.0 Maximum liability on account of Liquidated Damages for delay in completion & Penalty for shortfall in performance/availability during the guarantee period of the system

LD for delay in completion & penalty for non-availability during Guarantee Period are independent of each other and are applicable separately and concurrently subject to total maximum limit of **15 % (Fifteen percent)** of the total contract value excluding CAMC charges.

In case the tenderer fails to satisfy any one of the conditions mentioned at **Clause No. 29 i.e., Commissioning Cum Final Acceptance**, one more chance would be given to the tenderer to satisfy all the conditions. If the tenderer again fails to satisfy all the conditions in second chance within one-month, Clause for rejection of Plant & Facilities as mentioned in the bid elsewhere will be applicable.

34.0 COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT-05 YEARS

The Comprehensive Annual Maintenance Contract (CAMC) will be for a period of 5 years after expiry of the guarantee/warranty period. The AMC is comprehensive in nature and includes supply, E&C of all spares required for the operation of the system.

NMDC will not maintain or procure any spares during the above mentioned 5 years AMC period. The successful tenderer, six months before the completion of the AMC period, shall submit an analysis report of field failures of equipment during the guarantee and AMC period (YOY basis).

General Conditions for Annual Maintenance Contract:-

1. This is a comprehensive AMC.
2. Solving the reported hardware problems, replacement of parts and components as and when necessary for maintenance and break-down maintenance are to be done at no extra cost to the owner.
3. Repair, replacement or maintenance of the equipment as deemed necessary will be done by the party on all days including Sundays and other holidays declared by the Central/State Government or local authorities.
4. Breakdown calls are to be attended to within 72 hours of reporting even on holidays.

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5. In Case of breakdown call from project, the successful Bidder may provide either Online Support through Team Viewer, Whatsapp etc. or to attend physically the breakdown within 72 hours. Non rectification of fault within 72 hours of breakdown will attract penalty clause, subject to yearly availability falling below 7884 hours as per Clause No. 20 (C).
6. Record of works carried out during the period certified by engineer – in – charge should be enclosed along with the invoice.
7. The successful bidder will use company trained and appropriately skilled personnel to maintain the equipment in efficient, reliable and safe operating condition.
8. This service SHALL NOT BE subcontracted but shall be performed by the supplier only.
9. The bidder should deploy sufficient skilled (Qualified service engineer) and un skilled man power (i.e. one no. of each category) as required based on the necessity and in any case, should ensure the availability of the equipment as per norms.
10. It will be responsibility of the successful bidder to ensure proper support for third party equipment's/ stores used for normal operation of the system and any lapses on this account will also be construed as willful default for penalty calculations.
11. The system should be maintained at par for 24 x 7 operations of BIOM Kirandul Complex.
12. The payment for CAMC will be made proportionately on quarterly basis on certification by Engineer-in-charge.
13. Corrective / Preventive action to be done on a continuous basis for which proper records to be maintained.
14. The manpower deployed for CAMC will have to be got certified by the engineer-in-charge before deployment and accommodation for the same will be provided in the project on chargeable basis.
15. The manpower deployed for AMC will be provided entry into the mines with suitable identification passes but they will be required to follow the guidelines given by engineer-in-charge/ Mines manager at all times.
16. The MTBF (Mean Time Between failures) report for every quarter should also be made available to the engineer-in-charge.
17. A list of consumables for the AMC period as per the OEM standards of usage to be handed over to the engineer-in-charge for his understanding before commencement of AMC period.
18. Bidder's representative has to visit the site once in three months for routine maintenance in addition to the breakdown calls raised during the period.
19. **Tender will only be evaluated, if the tenderer is ready to take up AMC for 5 years.**
20. **(a) Penalty for Normal Visit:** - Non-deployment of sufficient man power for Normal Visit during AMC period in a particular year will attract penalty @1 % of AMC value for such shortfall in visit.

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(b) Penalty for Breakdown Calls: - Non-deployment of sufficient manpower for breakdown calls beyond 72 hours of breakdown will attract a penalty @ $\frac{1}{2}$ % of total AMC value for breakdown period of every 24 Hrs. or Part thereof.

The maximum penalty in above two cases is limited to 10% of total AMC value.

(c) Penalty for non- availability during AMC period: -The equipment / system availability shall be 7884 hours (90%) for entire year YoY for 24 x 7 operation of Solar Plant of Kirandul Complex during the AMC period. For performance of the System below 7884 hrs, a penalty of 1 % of total contract value of AMC shall be levied for non-performance of every 24 hours or part thereof subject to a maximum of 10% of the total AMC price.

Maximum liability on account of penalty for non-availability during AMC period and penalty for non-deployment of sufficient man power during the AMC period are independent of each other and are applicable separately and concurrently subject to total maximum limit of 10% (Ten percent) of the total AMC Value.

The tenderer shall furnish along with the offer the enclosed questionnaire (Annexure IV) duly filled and signed. No blank shall be left. All technical details, catalogues and drawings shall be furnished along with the offer for understanding of the owner without fail and non-submission of the same may likely to lead to rejection of offer for reasons of insufficient technical information.



ANNEXURE- III

Bill of Quantity for *Design, Manufacture, Supply, Installation, Testing & Commissioning of 4 Sets of 25KW Grid Interactive Rooftop Hybrid Solar Power Plant complete with all Mountings and Accessories with 5 Years CAMC on Turnkey basis for Kailash Nagar Barrack, Camp Office Dep-11/C, Time Office Dep-11/B & Service Center of Dep-14 of BIOM Kirandul Complex*

SL. No.	Description of item	Qty
1.	<p><u>Supply & Services: -</u></p> <p>Design, Manufacture, Installation, Testing, Supply, Commissioning and obtaining statutory clearances for 4 Sets of 25KW Grid Interactive Hybrid Solar Power Plants complete with all Mountings and Accessories on Lump Sum Turnkey basis as per enclosed detailed Scope of Work & technical specifications at Annexure-II.</p> <p>Each set of the 25 kWp Solar Power Plant shall consist of following equipment's: -</p> <ul style="list-style-type: none"> • Power Conditioning Unit (PCU) consisting of an electronic three-phase inverter along with associated control, protection, filtering, measurement and data logging equipment along with solar charge controllers, compatible with Environmental conditions (Temperature, Humidity, Elevation etc) prevailing at site • Synchronizing Equipment. • Metering Equipment. 	LS
2.	Supply of Solar PV modules containing required No's of PV cells for each set of 25kW Grid Interactive Rooftop Hybrid Solar Power Plant	LS
3.	<p>Supply, installation, & commissioning including all Civil works of :- (for each set of 25kW Grid Interactive Rooftop Hybrid Solar Power Plant)</p> <ul style="list-style-type: none"> • Mounting Structures. <ul style="list-style-type: none"> i. Cables and Hardware. ii. Junction Box and Distribution Boxes as required. iii. Earthing Kit. iv. Lightning Arrestors. 	LS

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	<p>v. Battery Banks with LMLA, 2V, T-gel, 150AH, 120Nos batteries.</p> <p>vi. PVC Pipes and Accessories.</p> <p>vii. Tool Kit.</p>	
4.	<p>5 Years Comprehensive Annual Maintenance Contract for 4 Sets of 25KW Grid Interactive Rooftop Hybrid Solar Power Plant after expiry of 24 months Guarantee Period.</p>	LS
5.	<p>Imparting on-site training to NMDC executives & staff free of cost for operation, maintenance of equipments supplied and monitoring of power generation.</p>	-

Note: - The bill of quantities mentioned above is indicative only.

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ANNEXURE- IV

QUESTIONNAIRE – TECHNICAL

- Note : 1 Please State “C” For Confirmed.
“NC” For Not Confirmed.
- Note : 2 All questions are to be duly filled by the tenderer.
- 3 The questionnaire is to be duly signed by authorized signatory.

Sl.No.	WHETHER : - Description	State C/NC.
01.	Compliant with IE Rules.	
02.	Compliance for providing all necessary test certificates from OEM.	
03.	Compliant to technical specifications & BOQ.	
04.	List of bought out items furnished.	
05.	Compliance & understanding of scope of work, specifications and technical aspects.	
06.	List of technical details, catalogues and drawings furnished.	
07.	Compliance to obtaining statutory approvals / clearances from Chhattisgarh state Electricity Board/ distribution company/electrical Inspectorate as required for completion of work.	

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