Further any such decision of engineer-in-charge shall not, in any way, absolve the contractor of his responsibilities, and in case, use of such a container or entry there of into the site area is forbidden by engineer-in-charge, the contractor shall use alternative methods with the approval of engineer-in-charge without any cost implication to Company or extension of work schedule.

- 31.3 Where it is necessary to provide and/or store petroleum products or petroleum mixtures and explosives, the contractor shall be responsible for carrying out such provision and/or storage in accordance with the rules and regulations laid down in Petroleum Act 1934, Explosives Act 1948, and Petroleum and Carbide of Calcium Manual Published by the Chief Inspector of Explosives of India. All such storage shall have prior approval of the engineer-in-charge. In case, any approvals are necessary from the Chief Inspector (Explosive) or any statutory authorities, the contractor shall be responsible for obtaining the same.
- 31.4 All equipment used in construction and erection by contractor shall meet Indian, Inter-national Standards and where such standards do not exist, the contractor shall ensure these to be absolutely safe. All equipment shall be strictly operated and maintained by the contractor in accordance with manufacturer's operation manual and safety instructions and as per Guidelines/Rules of the Company in this regard.
- 31.5 Periodical Examinations and all tests for all lifting/hoisting equipment and tackles shall be carried out in accordance with the relevant provisions of Factories Act 1948, Indian Electricity Act 1910 and associated Laws/Rules enforced from time to time. A register of such examinations and tests shall be properly maintained by the contractor and will be promptly produced as and when desired by engineer -in- charge or by the person authorized by him.
- 31.6 The contract shall be fully responsible for the safe storage of his and his subcontractor's radio-active sources in accordance with BARC/DAE Rules and other applicable provisions. All precautionary measures stipulated by BARC/DAE in connection with use, storage and handling of such material will be taken by contractor.
- 31.7 The contractor shall provide suitable safety equipment of prescribed standard to all employee and workmen according to the need, as may be directed by engineer-in-charge who will also have right to examine these safety equipment to determine their suitability, reliability, acceptability and adaptability.
- 31.8 Where explosives are to be used, the same shall be used under the direct control and supervision of an expert, experienced, qualified and competent person strictly in accordance with the code practices/rules framed under

Indian Explosives Act pertaining to handling, storage and use of the explosives.

- 31.9 The contractor shall provide safe working conditions to all workmen and employees at the site including safe means of access, railings, stairs, ladders, scaffoldings etc. The scaffoldings, stairs, ladders etc. shall be erected under the control and supervision of an experienced and competent person. For erection, good and standard quality of material only shall be used by the contractor.
- 31.10 The contractor shall not interfere or disturb electric fuses, wiring and other electrical equipment belonging to the owner or other contractors under any circumstances, whatsoever, unless expressly permitted in writing by the Company to handle such fuses, wiring or electrical equipment.
- 31.11 Before the contractor connects any electrical appliances to any plug or socket belonging to the other contractor or owner, he shall:

a. satisfy the Engineer-in-Charge that the appliances is in good working condition

- b. inform the Engineer-in-Charge of the maximum current rating, voltage and phases of the appliances.
- c. obtain permission of the Engineer-in-Charge detailing the sockets to which the appliances may be connected.

31.12 The Engineer-in-Charge will not grant permission to connect until he is satisfied that:

- a. the appliance is in good condition and is fitted with a suitable plug.
- b. the appliance is fitted with a suitable cable having two earth conductors, one of which shall be an earthed metal sheath surrounding the cores.
- 31.13 No electric cable in use by the contractor/owner will be disturbed without prior permission. No weight of any description will be imposed on any cable and no ladder or similar equipment will rest against or attached to it.
- 31.14 No repair work shall be carried out on any live equipment. The equipment shall must be declared safe by engineer-in-charge and a permit to work shall be issued by engineer-in-charge before any repair work is carried out by the contractor. While working on electric lines/ equipment whether alive or dead, suitable type and sufficient quantity of tools will have to be provided by contractor to electricians/workmen/officers.
- 31.15 The contractor shall employ necessary number of qualified, full time electricians/electrical supervisors to maintain in his temporary electrical installations.
- 31.16 The contractor employing more than 250 workmen whether temporary,

casual, probationer, regular or permanent or on contract, shall employ at least one full time officer exclusively as safety officer to supervise safety aspects of the equipment and workmen who will co-ordinate with the project safety officer. In case of work being carried out through sub-contractor's, the sub-contractor's workmen/employees will also be considered as the contractor's employees/workmen for above purpose. The name and address of a such safety officer of contractor will be promptly informed in writing to engineer-in -charge with a copy to safety officer-in charge before he starts work or immediately after any change of the incumbent is made during currency of the contract.

- 31.17 In case any accident occurs during the construction /erection or other associated activities undertaken by the contractor thereby causing any minor or major or fatal injury to his employees due to any reason, whatsoever, it shall be the responsibility of the contractor to promptly inform the same to the company's engineer-in-charge in prescribed form and also to all the authorities envisaged under the applicable laws.
- 31.18 The engineer-in-charge shall have the right at his sole discretion to stop the work, if in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and/or property, and/or equipment. In such cases, the contractor shall be informed in writing about the nature of hazards and possible injury/accident and he shall comply to remove short comings promptly. The contractor after stopping the specific work, can, if felt necessary, appeal against the order of stoppage of work to the General Manager of the project within 3 days of such stoppage of work and decision of the project G.M in this respect shall be conclusive and binding on the contractor.
- 31.19 The contractor shall not be entitled for any damages/compensation for stoppage of work due to safety reasons as provided in para 31.18 above and the period of such stoppage of work will not be taken as an extension of time for completion of work and will not be the ground for waiver of levy of liquidated damages.
- 31.20 The contractor shall follow and comply with all the Company safety rules relevant provisions of applicable laws pertaining to the safety of workmen, employees, plant and equipment as may be prescribed from time to time without demur, protest or content or reservation. In case of any inconformity between statutory requirement and the Company safety rules referred above, the later shall be binding on the contractor unless the statutory provisions are more stringent.
- 31.21 If the contractor fails in providing safe working environment as per the Company safety rules or continues the work even after being instructed to stop work by engineer -in-charge as provided in para 31.18 above, the contractor shall promptly pay to the Company, on demand i.e. by the owner compensation at the rate of Rs. 5,000/- per day or part there of

till the instructions are complied with and so certified by engineer-in-charge. However in case of accident taking place causing injury to any individual, the provisions contained in para 31.22 shall also apply in addition to compensation mentioned in this para.

31.22 If the contractor does not take all safety precautions and/or fails to comply with the safety rules as prescribed by the Company or under the applicable laws for the safety of the equipment and plant and for the safety of personnel and the contractor does not prevent hazardous conditions which cause injury to his own employees or employees of other contractors, or the Company employees or any other person who are at site or adjacent thereto, the contractor shall be responsible for payment of compensation under the relevant provisions of the workmen's compensation act and rules framed thereunder or any other applicable laws as applicable from time to time.

Permanent disablement shall have same meaning as indicated in workmen's compensation act. The compensation mentioned above shall be in addition to the compensation payable to the workmen/employees under the relevant provisions of the workmen's compensation act and rules framed thereunder or any other applicable laws as applicable from time to time.

In case the owner is made to pay such compensation then the contractor is liable to reimburse the owner such amount.

#### 32.0 CODE REQUIREMENTS

The erection requirements and procedures to be followed during the installation of the equipment shall be in accordance with the relevant Indian Standard codes of practice or in their absence appropriate International Standard, Indian Boiler Regulations, ASME codes and accepted good engineering practice, the Engineer-in-Charge's drawings and other applicable Indian recognized codes and the laws and regulations of the Government of India.

#### 33.0 FOUNDATION DRESSING AND GROUTING

- 33.1 The surfaces of foundations shall be dressed to bring the top surface of the foundations to the required level, prior to placement of equipment/equipment bases on the foundations.
- 33.2 All the equipment bases and structural steel base plates shall be grouted and finished as per these specifications unless otherwise recommended by the equipment manufacturer.
- 33.3 The concrete foundation surfaces shall be properly prepared by chipping, grinding as required to bring the type of such foundation to the required level, to provide the necessary roughness for bondage and to assure

enough bearing strength. All laitance and surface film shall be removed and cleaned.

#### 33.4 GROUTING MIX

The grouting mixtures shall be composed of Portland cement, sand and water. The Portland cement to be used shall conform to ISI No. 269 or equivalent, sand shall conform to ISI No.383/2386 or equivalent. The grout proportions for flat based where the grouting space does not exceed 35 mm shall be 50 Kg bag of cement to 75 Kg of sand. Only the required quantity of water shall be added so as to make the mix quaky and flow able and the mix shall not show excess water on top when it is being puddled in place. For thicker grout beds upto 65 mm, the amount of sand shall be increased to 105 Kg per bag of cement. Bases which are hollow and are to be filed full of grouting shall be filled to a level of 25 mm above the outside rim with a mortar mix in the volumetric proportions of one bag of cement and 1.5 bags sand and 1.5 part 6 mm granite gravel. An acceptable plasticiser may be added to the grout mixes in a proportion recommended by the plasticisers manufacturer. All such grouts shall be thoroughly mixed for not less than five minutes in an approved mechanical mixer and shall be used immediately after mixing.

## 33.5 PLACING OF GROUT

- 33.5.1 After the base has been prepared, its alignment and level has been checked and approved and before actually placing the grout a low dam shall be set around the base at a distance that will permit pouring and manipulation of the grout. The height of such dam shall be at least 25 mm above the bottom of the base. Suitable size and number of chains shall be introduced under the base before placing the grout, so that such chains can be moved back and forth to push the grout into every part of the space under the base.
- 33.5.2 The grout shall be poured either through grout holes if provided or shall be poured at one side or at two adjacent sides giving it a pressure head to make the grout move in a solid mass under the base and out in the opposite side. Pouring shall be continued until the entire space below the base is thoroughly filled and the grout stands at least 25 mm higher all around than the bottom of the base. Enough care should be taken to avoid any air or water pockets beneath the bases.

#### 33.6 **FINISHING OF THE EDGES OF THE GROUT**

The poured grout should be allowed to stand undisturbed until it is well set. Immediately thereafter, the dam shall be removed and grout which extends beyond the edges of the structural or equipment base plates shall be out off flush and removed. The edges of the grout shall then be pointed and finished with 1:2 cement mortar pressed firmly to bond with the body of the grout and smoothed with a tool to present a smooth vertical surface. The work shall be done in a clean and scientific manner and the adjacent floor spaces, exposed edges of the foundations, and structural steel and equipment base plates shall be thoroughly cleaned of any spillage of the grout.

#### 33.7 CHECKING OF EQUIPMENT AFTER GROUTING

After the grout is set and cured, the contractor shall check and verify the alignment of equipment, alignment of shafts of rotating machinery, the slopes of all bearing pedestals, centring of rotors with respect to their sealing bores, couplings, etc. as applicable and the like items to ensure that no displacement had taken place during grouting. The values recorded prior to grouting shall be used during such post grouting check-up and verifications. Such pre and post grout records of alignment details shall be maintained by the contractor in a manner acceptable to the Engineer-in-Charge.

## 34.0 SHAFT ALIGNMENTS

All the shafts of rotating equipment shall be properly aligned to those of the matching equipment to as perfect an accuracy as practicable. The equipment shall be free from excessive vibration so as to avoid over-heating of bearings or other conditions which may tend to shorten the life of the equipment. All bearings, shafts and other rotating parts shall be thoroughly cleaned and suitably lubricated before starting. All alignment should be checked through alignment checker or condition monitoring equipment in the presence of the engineer-in-charge.

#### 35.0 DOWELING

All the motors and other equipment shall be suitably doweled after alignment of shafts with tapered machined dowels as per the direction of the Engineer-in-Charge.

#### 36.0 CHECK OUT OF CONTROL SYSTEMS / POWER SUPPLY

After completion of wiring, cabling furnished under separate specifications and laid and terminated by the owner, the contractor shall check out the operation of all control systems for the equipment furnished and installed under these specifications and documents. The contractor shall get the drawings pertaining to the control system, power supply etc. approved from Directorate General of Mine Safety (DGMS) or any other appropriate authority as necessary, wherever required as per the rules and regulations of the of Indian Mines Act governed by D.G.M.S.

#### 37.0 COMMISSIONING SPARES

The contractor shall make arrangement for an adequate inventory at site of necessary commissioning spares prior to commissioning of the equipment furnished and erected so that any damage or loss during these commissioning activities necessitating the requirements of spares will not come in the way of timely completion of the works under the contract.

#### 38.0 CABLING

- 38.1 All cables shall be supported by conduits or cable tray run in air or in cable channels. These shall be installed in exposed runs parallel or perpendicular to dominant surfaces with right angle turn made of symmetrical bends or fittings. When cables are run on cable trays, they shall be clamped at a minimum interval of 2000 mm or otherwise as directed by the Engineer-in-Charge.
- 38.2 Each cable, whether power or control, shall be provided with a metallic or plastic of an approved type, bearing a cable reference number indicated in the cable and conduit list (prepared by the contractor), at every 5 metre run or part there of and at both ends or the cable adjacent to the terminations. Cable routing is to be done in such a way that cables are accessible for any maintenance and for easy identification.
- 38.3 Sharp bending and kinking of cables shall be avoided. The minimum radii for PVC insulated cables 1100 V grade shall be 15D, where D is the over all diameter of the cable. Installation of other cables like high voltage, coaxial, screened, compensating, mineral insulated shall be in accordance with the cable manufacturer's recommendations. Wherever cables cross roads and water, oil, sewage or gas lines, special care should be taken for the protection of the cables in designing the cable channels.
- 38.4 In each cable run some extra length shall be kept at a suitable point to enable one to two straight through joints to be made should the cable develop fault at a later date.
- 38.5 Control cable terminations shall be made in accordance with wiring diagrams, using identifying codes subject to Engineer-in-Charge's approval. Multicore control cable jackets shall be removed as required to train and terminate the conductors. The cable jacket shall be left on the cable, as far as possible, to the point of the first conductor branch. The insulated conductors from which the jacket is removed shall be neatly twined in bundles and terminated. The bundles shall be firmly but not tightly tied utilizing plastic or nylon ties or specially treated fungus protected cord made for this purpose. Control cable conductor insulation shall be securely and evenly cut.
- 38.6 The connectors for control cables shall be covered with a transparent insulating sleeve so as to prevent accidental contact with ground or adjacent terminals and shall preferably terminate Elmex terminals and washers. The insulating sleeve shall be fire resistant and shall be long enough to over pass the conductor insulation. All control cables shall be fanned out and connection made to terminal blocks and test equipment for proper operation before cables are corded together.

# **SECTION - 6**

# SPECIAL CONDITIONS OF CONTRACT

Section	Clause	Aspect	Specific Terms
		Completion Schedule	• The time of completion and Commissioning of the Plant is Three Hundred Sixty Five (365) Days from the date of issue of Letter of Award (LOA). The O&M Contract Period is for five (5) years from the start date of PG Test period. After completion of five (5) years of the O&M period, the same may be extended on mutually-agreed terms between the Employer and the Contractor.
			<ul> <li>The Contractor shall inform the Company at least thirty (30) days advanced written notice of the date on which it intends to synchronize the Project to the grid.</li> </ul>
2	or Failure to		<ul> <li>Any delay in completion of the work shall attract liquidated damage/ penalty for late completion.</li> </ul>
		Supply	• If the Contractor fails to deliver the plant or fails to start the work within specified time frame after issue of LOA or fails to carry out the work as per agreed schedule or leaves the work site after partial execution of the work, the Company shall have the right to get the work done through any other agency at the risk and cost of the Contractor. Further to this, the Company may, without prejudice to the right of the Contractor to recover damages for breach of trust of the Contract, may impose penalties.
			• Notwithstanding anything contained in this tender document, bidders to note that the Completion time of the Project is the essence of the Contract. It is envisaged that the Contractor shall plan and achieve progress of the Project on or before the prescribed timeline/schedule without fail.

Section	Clause	Aspect	Specific Terms
			<ul> <li>If, at any time, the Contractor's actual progress falls behind or is likely to fall behind the agreed schedule of the break-up/detailed Project activities, the Contractor shall submit to the Company, a revised programme with catch up schedule, taking into account the prevailing circumstances and delay in the respective activities / milestones. The Contractor shall, at the same time/forthwith notify promptly to the Company of the steps being taken to expedite progress of the Project activities, so as to achieve completion of such activities within the agreed Time schedule for Completion. The Contractor shall in order to overcome the situation, forthwith mobilize required additional resources like manpower, materials, machineries etc. to achieve the prescribed timeline/schedule at his risk and cost.</li> </ul>
			• In case further slippage is observed in the progress of Project activities, as per agreed time schedule or failure by the Contractor, at any stage of the Contract, to perform the Contract diligently to fulfil his obligations as per the Contract, the Company reserves the right to engage any other Contractor(s)/sub-contractor(s) at any time, at the risk and cost of the original Contractor to ensure completion of the Project activities in line with the agreed time schedule.
2	15, 16	Liquidated Damages for Delay and	<ul> <li>A. Delay in Commissioning and COD</li> <li>In case the Contractor fails to achieve successful Commissioning/ COD of the Project within 365 days from the date of LOA, then the</li> </ul>
4	3.2	Underperformance	Company shall levy the Liquidated Damages on the Contractor. Part commissioning shall be allowed with minimum allowed part capacity being 25 MW(AC). However, Performance Guarantee Test shall start only when the full capacity of 100 MW (AC) will be commissioned by the Contractor.
			<ul> <li>Completion time is the essence of the Contract and the same shall be firm and binding. For calculation of Liquidated Damages (LD),</li> </ul>

Section	Clause	Aspect	Specific Terms
			Project schedule shall be considered as 365 Days i.e. project shall be completed (COD with full capacity) within 365 Days from the Zero Date.
			<ul> <li>In case the EPC Works of solar PV project (COD with full capacity) is not completed within the stipulated time period and the delay is due to reason attributable to the Contractor, then the Contractor shall pay to the Company compensation for delay subject to following:</li> </ul>
			• Delay up to 30 days: Amount of INR 20,000/MW/Day shall be deducted as penalty for the first 30 days of delay, calculated on per day basis and proportionate to the capacity not commissioned as COD with appropriate authority.
			<ul> <li>Delay of more than 30 days and up to 60 days: Amount of INR 30,000 /MW/day shall be deducted on per day basis and proportionate to the capacity not commissioned as COD with appropriate authority</li> </ul>
			<ul> <li>Delay of more than 60 days: Amount of INR 45,000 /MW/day shall be deducted on per day basis and proportionate to the capacity not commissioned as COD with appropriate authority.</li> </ul>
			<ul> <li>For delay of more than 180 days from the LOA date will cause the Contractor's Event of Default to occur.</li> </ul>
			<b>Maximum applicable Liquidated Damages</b> : The upper ceiling for total liquidated damages for delay shall be maximum 10% of the EPC Contract Price.
			• The said right of the CIL to levy damages on account of delay shall be without prejudice to and in addition to the right of the Company to get the concerned work done from a third party at the complete risk and cost of the Contractor.

Section	Clause	Aspect	Specific Terms
			• The Contractor shall indicate duration of all the activities in activity chart in conformity with the overall schedule of the completion of project. The Contractor shall submit the activity chart in form of Bar Chart which shall be discussed and finalized and shall be a part of Contract.
			• Any strike / lockouts at works or site of the Contractor or his sub- supplier/sub-contractor shall not be considered as force majeure condition.
			<ul> <li>For calculation of penalty, date of issue of LOA shall be the reference date.</li> </ul>
			B. Delay in sourcing of solar PV modules:
			<ul> <li>The Contractor shall mandatorily source the solar PV modules within 31.03.2022 in order to prevent levy of Basic Customs Duty (BCD). If there is any delay by the Contractor in sourcing the modules within the specified timeline due to any reason attributable to the Contractor, then the BCD levied on the module price shall not be reimbursed by the Employer to the Contractor.</li> </ul>
			This above clause is applicable only when the Contractor imports the solar PV modules.
			<ul> <li>C. Underperformance</li> <li>For each Contract Year, the Contractor shall demonstrate "Actual Energy Delivered" at the Metering Point as compared to the quoted NEEGG.</li> </ul>
			<ul> <li>If for any Contract Year, it is found that the "Actual Energy Delivered" is less than the quoted NEEGG for the particular year, the Contractor shall pay the compensation to the Company equivalent to INR (GUVNL PPA x 2) per kWh of under-generation. The same shall be recovered from payment yet to be made by the</li> </ul>

Section	Clause	Aspect	Specific Terms
			Company to the Contractor and/ or from the Bank Guarantees available with the Company.
			<ul> <li>In case the Project fails to generate any power continuously for ninety (90) days any time during the O&amp;M period, it shall be considered as an "Event of Default".</li> </ul>
			• Upon occurrence of any Event of Default mentioned in this Section, CIL shall have the right to encash the entire amount of O&M Bank Guarantee submitted by the Contractor and withheld any other pending payment.
2	17	Force Majeure	<ul> <li>Neither Party (the "Contractor" or the "Company") shall be responsible or liable for or deemed in breach hereof because of any delay or failure in the performance of its obligations hereunder (except for obligations to pay money due prior to occurrence of Force Majeure events under this Agreement) or failure to meet milestone dates due to any event or circumstance (a "Force Majeure Event") beyond the reasonable control of the Party experiencing such delay or failure, including the occurrence of any of the following:</li> </ul>
			<ul> <li>a) acts of God;</li> <li>b) typhoons, floods, lightning, cyclone, hurricane, drought, famine, epidemic, plague or other natural calamities;</li> <li>c) acts of war (whether declared or undeclared), invasion or civil unrest;</li> <li>d) any requirement, action or omission to act pursuant to any judgment or order of any court or judicial authority in India (provided such requirement, action or omission to act is not due to the breach by the Power Producer or GUVNL of any Law or any of their respective obligations under this Agreement);</li> </ul>

Section	Clause	Aspect	Specific Terms
			<ul> <li>e) inability despite complying with all legal requirements to obtain, renew or maintain required licenses or Legal Approvals;</li> <li>f) earthquakes, explosions, accidents, landslides; fire;</li> <li>g) expropriation and/or compulsory acquisition of the Project in whole or in part by Government Instrumentality;</li> <li>h) chemical or radioactive contamination or ionizing radiation; or</li> <li>i) damage to or breakdown of transmission facilities of GETCO/DISCOMs;</li> <li>j) Exceptionally adverse weather condition which are in excess of the statistical measure of the last hundred (100) years.</li> <li>Force Majeure Exclusions:</li> </ul>
			<ul> <li>Force Majeure shall not include the following conditions, except to the extent that they are consequences of an event of Force Majeure:</li> </ul>
			<ul> <li>a) Unavailability, Late Delivery or Change in cost of plants and machineries, equipment, materials, spares parts or consumables for the project;</li> <li>b) Delay in performance of the Contractor or its sub contractor or their agents;</li> <li>c) Non performance resulting from normal wear and tear experience in power generation materials and equipments;</li> <li>d) Strike or Labour Disturbances at the facilities of affected parties;</li> <li>e) Insufficiency of finances or funds or the agreement becoming onerous to perform, and</li> <li>f) Non performance caused by, or concerned with, the affected party's</li> </ul>
			<ul> <li>Negligent and intentional acts, errors or omissions;</li> <li>Failure to comply with Indian law or Indian Directive; or</li> </ul>

Section	Clause	Aspect	Specific Terms
			<ul> <li>iii. Breach of, or default under this agreement or any Project agreement or Government agreement.</li> <li>The affected Party shall give notice to other party of any event</li> </ul>
			of Force Majeure as soon as reasonably practicable, but not later than 7 days after the date on which such Party knew or should reasonably have known of the commencement of the event of Force Majeure. If any event of Force Majeure results in a breakdown of communication rendering it not reasonable to give notice within the applicable time limit specified herein, then the party claiming Force Majeure shall give notice as soon as reasonably practicable after reinstatement of communication, but not later than one day after such reinstatement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed, and the Affected Party shall give the other Party regular (and not less than monthly) reports on the progress of those remedial measures and such other information as the other party may reasonably request about the situation.
			<ul> <li>The affected Party shall give notice to the other Party of (1) cessation of relevant event of Force Majeure; and (2) cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this agreement, as soon as practicable after becoming aware of each of these cessations.</li> </ul>
			<ul> <li>To the extent not prevented by a Force Majeure event, the affected party shall continue to perform its obligations pursuant to this agreement. The affected party shall use its reasonable efforts to mitigate the effect of any event of Force Majeure as soon as practicable.</li> </ul>
			Available Relief for a Force Majeure Event:

95			
Section	Clause	Aspect	Specific Terms
			<ul> <li>No Party</li> </ul>
			agreeme
			was prev
			event. Ho
			allowed c

Section	Clause	Aspect	Specific Terms
			<ul> <li>No Party shall be in breach of its obligations pursuant to this agreement to the extent that the performance of its obligations was prevented, hindered or delayed due to a Force Majeure event. However, adjustment in quoted prices shall not be allowed on account of Force Majeure event.</li> </ul>
			<ul> <li>For avoidance of doubt, neither Party's obligation to make payments of money due and payable prior to occurrence of Force Majeure events under this Agreement shall be suspended or excused due to the occurrence of a Force Majeure Event in respect of such Party.</li> </ul>
2	16, 18	Event of Default	• <b>Contractor's Default:</b> The occurrence of any of the following events at any time during the term of the Contract shall constitute an Event of Default by the Contractor:
			<ul> <li>a) Failure to commission the project by the timeline mentioned in the Contract;</li> <li>b) Fails to supply power at the Delivery Point for a period as specified in the Contract;</li> <li>c) Failure or refusal by the Contractor to perform any of its material obligations under the Contract;</li> <li>d) Failure to furnish any of the Bank Guarantees as specified in the Contract;</li> <li>e) Failure to pay penalty or any other payment, as applicable, to the Company as per the terms of the Contract;</li> <li>f) If the Contractor (i) assigns or purports to assign its assets or rights in violation of this agreement; or (ii) transfers or novates any of its rights and / or obligations under this agreement, in violation of this agreement;</li> <li>g) If the Contractor becomes voluntarily or involuntarily the subject of proceeding under any bankruptcy or insolvency laws or goes into liquidation or dissolution or has a receiver</li> </ul>

Section	Clause	Aspect	Specific Terms
			<ul> <li>appointed over it or liquidator is appointed, pursuant to Law, except where such dissolution of the Contractor is for the purpose of a merger, consolidation or reorganization and where the resulting entity has the financial standing to perform its obligations under the Contract and creditworthiness similar to the Contractor and expressly assumes all obligations under this agreement and is in a position to perform them; or</li> <li>h) The Power Producer repudiates the Contract.</li> <li>i) Occurrence of any other event which is specified in this Agreement to be a material breach / default of the Contractor or commits any other acts or omissions as laid down in the Contract PPA and is also unable to cure any of the aforesaid within the cure period, as may be provided in the Contract, the Contractor shall be construed to be in default.</li> <li>Company's Default: The occurrence of any of the following events at any time during the term of the Contract shall constitute an Event of Default by the Company:</li> </ul>
			<ul> <li>a) Failure or refusal by the Company to pay any portion of an undisputed bill, raised by the Contractor under the Contract, for a period of 90 days after due date;</li> <li>b) Failure or refusal by the Company to perform any of its material obligations under the Contract;</li> <li>c) The Company repudiates this Agreement;</li> <li>d) If the Company becomes voluntarily or involuntarily the subject of proceeding under any bankruptcy or insolvency laws or goes into liquidation or dissolution or has a receiver appointed over it or liquidator is appointed, pursuant to Law, except where such dissolution of the Company is for the purpose of a merger, consolidation or reorganization and where the resulting entity has the financial standing to</li> </ul>

Section	Clause	Aspect	Specific Terms
			perform its obligations under this Agreement and creditworthiness similar to the Company and expressly assumes all obligations under this agreement and is in a position to perform them.
2	19.2	Hindrance Register	The Contractor shall maintain a Hindrance Register where reasons for delay may be recorded from time to time and at the time of occurrence of the hindrance and get it duly certified by the Engineer-in-Charge of the Company or his authorized representative.
		Handing Over	<ul> <li>After Commissioning of the Project by the Contractor, the Contractor to intimate the same to the Company and subsequently, appropriate authorities from the Company will check the Project as per terms and conditions of the Contract and will give punch points to the Contractor, which shall be attended by the Contractor. Further after commissioning, the Contractor shall submit the following to the Company:</li> </ul>
			<ol> <li>All as- Built Drawings;</li> <li>Detailed Engineering Document with detailed specification, schematic drawing, circuit drawing and test results, manuals for all deliverable items, Operation, Maintenance &amp; Safety Instruction Manual and other information about the project;</li> <li>Bill of material; and</li> <li>Inventory of spares at projects Site.</li> <li>Copies of all warranties/guarantees.</li> <li>After Commissioning, the Contractor to perform Operation &amp; Maintenance for a period as mentioned in the RFP document.</li> </ol>
			<ul> <li>Prior to the completion of the O&amp;M period, the Company shall conduct a plant audit by self or the third party as per the Company's discretion, and any defects identified during such</li> </ul>

Clause	Aspect	Specific Terms
		audits or inspection shall be rectified by the Contractor at its own cost prior to handing over.
	Change in Law	• If, after the Bid Submission Deadline, in the country where the Site is located, 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 and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the Contract. However, these adjustments would be restricted to direct transactions between the Company and Contractor and Bought out items (to be dispatched directly from the sub-vendor's works to the Project Site). These adjustments shall not be applicable on procurement of raw materials, intermediary components, and intermediary services etc. by the Contractor. Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with the Contract Agreement.
		<ul> <li>Introduction / modification / changes in rates of safeguard duty and/or antidumping duty and/or custom duty including surcharge thereon after the Bid Submission Deadline and having direct effect on the cost of solar PV modules shall also be construed as Change in Law and shall be dealt with the manner specified in the previous paragraph.</li> </ul>

Section	Clause	Aspect	Specific Terms
2	39	Progress Report of Work	<ul> <li>The Contractor shall submit a weekly progress report on execution of works conforming to bar/ PERT Chart and format provided by the Company. In case of any slippage(s) or delay in execution of work reasons for such delay along with details of hindrances will be submitted by the Contractor along with modified Bar/ PERT Chart mentioning the action plan being taken to keep the due date of completion of project unchanged. If required, the Contractor shall use additional manpower to keep the due date of completion of Project unchanged.</li> </ul>
			• The authorized representative of the Contractor shall review the progress of the Project work every fortnight on a prefixed day at project site with the Company or its representative as per the network and record the minutes.
4	13 4	Inspection and Testing	<ul> <li>The Company or its authorized representative including appointed Consultant for the project shall have, at all times, access to the Contractor's premises and also shall have the power to inspect and examine the materials and workmanship of project work during its manufacture, shop assembly and testing. If part of the plant is required to be manufactured in the premises other than the Contractor's, the necessary permission for inspection shall be obtained by the Contractor on behalf of the Company or its duly authorized representative.</li> </ul>
			The Contractor shall offer following Test / Inspection to the Company:
			I. The Company may depute its Engineer or representative or hire an agency for Third-Party Inspection, for pre-dispatch inspection at the manufacturing facility of the Contractor all items under this RFP as per applicable standards, approved QAP and documents. Samples for testing shall be drawn randomly in presence of the Company/ inspecting agency from

Section	Clause	Aspect	Specific Terms
			<ul> <li>the lot offered for inspection. After Test/Inspection of the Items at factory, the Contractor is to submit the inspection &amp; test reports to the Company for review. After review of the inspection &amp; test reports, the Company will give dispatch clearance in writing. The Contractor shall not dispatch any item without dispatch clearance from the Company, in writing.</li> <li>II. The Company may depute its Engineer or representative or third party inspection agency for inspection during manufacture and in assembled condition prior to dispatch in accordance with the standard practice/ QAP of the manufacturer and applicable Standards, at no additional cost to the Company for demonstration and performing the test/inspection. The Contractor shall raise inspection call with internal test reports in advance for all items like PV Modules, MMS, cables, SJBs, Inverters, Transformers, HT &amp; LT switchgears, DC system, Switchyard equipment, earthing system, SCADA, RMU etc.</li> <li>III. Upon delivery of the photovoltaic modules on site, they shall be sampled randomly and tested for performance through an approved testing agency shall be binding to both the parties and shall be considered final performance measurement report for the guarantee / warrantee conditions of this contract.</li> <li>In case of underperformance or rejection of the photovoltaic modules during above inspection or during operational lifetime of project, the Company shall notify the Contractor of such underperformance or rejection by email or in writing.</li> </ul>
			I. Consecutively, the Contractor shall immediately replace such PV modules by supplying a new PV module of similar specification conforming to the required performance criteria and warranty to the Company within a period of 10 days from the date of intimation by email or written notice.

Section	Clause	Aspect	Specific Terms
			<ul> <li>II. Upon receipt of the new PV module, the Contractor shall arrange to collect the rejected/defective photovoltaic module from site.</li> <li>III. The cost of transportation of the PV modules from the supplier to the site of CIL, and return shall be borne by the Contractor.</li> <li>The Company shall have the right to serve notice in writing to the Contractor on any grounds of objections, which he may have in respect of the work. The Contractor has to satisfy the objection, otherwise, the Company at his liberty may reject all or any component of plant or workmanship connected with such work.</li> </ul>
			<ul> <li>The Contractor shall issue request letter to the Company or his authorized representative for testing of any component of the plant, which is ready for testing at least fifteen (15) days in advance from the date of actual date of testing at the premises of the Contractor or elsewhere. When the inspection and the tests have been satisfactorily completed at the Contractor's works, the Company shall issue a certificate to that effect. However, the Owner at its own discretion may waive the inspection and testing in writing under very special circumstances. In such case, the Contractor may proceed with the tests which shall be deemed to have been made in the Company's presence, and it shall forthwith forward six (6) sets of duly certified copies of test results and certificates to the Company for approval of the Company. The Contractor, on receipt of written acceptance from the Company, may dispatch the equipment for erection and installation.</li> </ul>
			<ul> <li>For all tests to be carried out, whether in the premises of the Contractor or any Subcontractor or the supplier, the Contractor, shall provide labor, materials, electricity fuel, water, stores, apparatus and instruments etc. free of charge as may reasonably be demanded to carry out such tests of the plant in accordance with the Contract. The Contractor shall provide all facilities to the</li> </ul>

Section	Clause	Aspect	Specific Terms
			Company or its authorized representative to accomplish such testing.
			• The Company or his authorized representative shall have the right to carry out inward inspection of the items on delivery at the Site and if the items have been found to be not in line with the approved specifications, shall have the liberty to reject the same.
			• If the Company desires, testing of any component(s) of the plant be carried out by an independent agency, the inspection fee, if any, shall be paid by the Owner. However, the Contractor shall render all necessary help to the Company whenever required free of charge.
			<ul> <li>The Contractor has to provide the necessary testing reports to the Company as and when required.</li> </ul>
			• Neither the waiving of inspection nor acceptance after inspection by the Company shall, in anyway, absolve the Contractor of the responsibility of supplying the plant and equipment strictly in accordance with specification and drawings etc.
			<ul> <li>If any item is not found conforming to standards during test / inspection, the same shall be replaced / rectified by Contractor without any cost to the Company and shall be re-offered for inspection.</li> </ul>
			• The work is subject to inspection at all times and at all places by the Company. The Contractor shall carry out all instructions given during inspection and shall ensure that the work is carried out according to the relevant codes of practice
			<ul> <li>Decision of the Company in regard to the quality of work and materials and performance to the specifications and drawings shall be final.</li> </ul>

Section	Clause	Aspect	Specifi	c Terms	
		Authorized Test Centres	dep the lab Cer suc rep	e PV modules, inverters, transformers, panels, ployed in the power plants shall have valid test ir qualification as per IEC/ BIS Standards by on s of the respective equipment (preferably NABL ntres) in India. In case of module or other equip th Test facilities may not exist in India, test certi uted ILAC Member Labs abroad or from test re ustry best practices in India will be acceptable.	certificates for the reputed Accredited Test oment for which ificates from
2	41.6	Terms of Payment	Ter and	Owner shall pay the Contractor in the followinn der is a comprehensive EPC Contract of Supple O&M. The payment schedules are given below     ule of payment for Supply:     Submission of Report on Land survey,     Transmission Route survey, Soil test, Site selection	ly, Works, Land
			2	Submission of Design Basis Report and GA drawing Supply of MMS on Pro rata basis	10% of Supply
			3	Dispatch of PV Modules from the port(s) of origin country(ies)	Price 10% of Supply Price
			4	Receipt of PV Modules at the destination port	15% of Supply Price
			5	Supply of PV Modules at the Project Site on pro- rata basis	35% of Supply Price
			6	Supply of BOS and other items on Pro rata basis except SI. No. 2 to 5 above	20% of Supply Price
			7	Supply of tools, tackles and measuring instruments	5% of Supply Price

Section	Clause	Aspect	Specific Terms	
			Schedule of payment for Works:	
			1Against monthly RA bills for the Works executed at site with respect to the milestones achieved as per the project schedule75 % of Works Price1Furnished by the ContractorPrice	
			2 Upon Successful Commissioning of the entire 15 % of Works Project Price	;
			3 Upon Successful Performance Guarantee 10 % of Works Test Price	;
			Schedule of payment for Land:         1       Upon handover of acquired Land on pro-rata basis         1       Upon handover of acquired Land on pro-rata Cost         1       Schedule of payment for Operation and Maintenance (O&M):	 
			Schedule of payment for Operation and Maintenance (O&M):         1       On Monthly basis for Successful Operation and Maintenance of the Project throughout the O&M Period based on the "O&M Contract Price"	

Section	Clause	Aspect	Specific Terms
Section 2	Clause 41.1, 41.2, 41.3, 41.4, 41.5	Aspect Payment Procedure	<ul> <li>Subject to any deduction which the Employer may be authorized to make under this Contract, and or to any additions or deductions provided for this Contract, the Contractor shall be entitled to payment as follows:         <ol> <li>All payments shall be made in Indian Rupees (INR), unless otherwise specified in the LOA/Contract Agreement. All payment shall be made on the basis of actual measurement for the quantified items as per schedule of works.</li> <li>The Contractor shall submit the Tax Invoice for claim in three copies with relevant GST details and all supporting documents as per the Contract condition to the Employer.</li> </ol> </li> </ul>
			<ul> <li>After due verification and recommendation, the Employer shall process verified bills for release of payment. Payments shall be released in 30 (Thirty) days by A/c payee cheque / RTGS/ NEFT or any other mode as communicated by the Employer from date of submission of clear invoice.</li> <li>III. The Contractor shall give complete shipping information concerning the weight, size, content of each package including any other information the Employer, may require.</li> <li>a. For offshore supplies by the Contractor, following documents shall be air-mailed to the Employer within (7) days from the date of shipment. The advance copy of</li> </ul>
			<ul> <li>these documents shall be sent through e-mail:</li> <li>i. Insurance certificates (6 copies)</li> <li>ii. Bill of lading (5 non-negotiable copies)</li> <li>iii. Invoice (6 copies)</li> </ul>
			<ul> <li>iv. Packing list (6 copies)</li> <li>v. Test certificate (3 copies)</li> <li>vi. Certificate of Origin (six copies)</li> </ul>
			vii. One copy of the packing list shall also be enclosed in each case. viii. O & M Manuals &/or Catalogues

Section	Clause	Aspect	Specific Terms
			<ul> <li>b. For onshore supply, the following documents shall be submitted through registered post to the Employer within 3 days from the date of shipment, the advance copy of these documents shall be sent through e-mail. <ol> <li>Invoice (4 copies)</li> <li>IR copies</li> <li>Packing list (4 copies)</li> <li>Test Certificate (3 copies)</li> <li>One copy of the packing list shall also be enclosed in each case.</li> <li>O &amp; M Manuals &amp;/or Catalogues</li> </ol> </li> <li>IV. The Contractor shall submit the Tax Invoice for the work executed showing separately GST and any other statutory levies in the Tax Invoice.</li> <li>V. Any discrepancy and delay, which result in demurrage and other charges for the consignment (for incomplete/incorrect documentation) will be to the account of the Contractor. All the formalities for custom clearance are in the Contractor's scope.</li> <li>VI. All taxes and deductions shall be applicable as per prevailing statutory rules and provisions in force.</li> <li>VII. In case the Contractor fails to submit the invoice with all the required documents to process payments, the Employer reserves the right to hold the payment of the Contractor against such invoices.</li> </ul>
2	13, 33, 34	Warranty/ Guarantee	<ul> <li>The Plant shall perform as per the Guaranteed Performance indicated by the Bidder in its Bid.</li> <li>PV modules used in grid connected solar power plants must be warranted for peak output power at Standard Testing Condition</li> </ul>

Section	Clause	Aspect	Specific Terms
			(STC), which shall not be less than 90% at the end of ten (10) years and not less than 80% at the end of twenty-five (25) years. The first-year degradation shall not be more 2.5% of the PV Module capacity and in subsequent years it shall not be more than 0.7% per annum.
			• All plant equipment and components and overall workmanship of the grid solar power plants shall be warranted for a minimum of 5 years except solar PV Modules for which product warranty shall be for 10 years and performance warranty shall be for 25 years.
			• The Contractor shall ensure that the goods supplied under the Contract are new, unused and of most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.
			• At the end of Contract period, the Contractor's liability shall cease. CIL shall be entitled to the benefit of such warranty given to the Contractor by the original contractor or manufacturer or supplier of such goods.
			• During the Contract period, the Contractor shall be responsible for any defects in the work due to faulty workmanship or due to use of substandard materials in the work. Any defects in the work during the Contract period shall therefore, be rectified by the Contractor without any extra cost to CIL within a reasonable time as may be considered from the date of receipt of such intimation from CIL failing which CIL shall take up rectification work at the risk and cost of the Contractor.
		Project Management Consultant and Third-Party Inspection Agency	• A Project Management Consultancy (PMC) or Third-Party Inspection agency (TPI) may be appointed by the Company, at its sole discretion, to conduct any kind of inspection regarding procurement, fabrication, installation, hook-up, quality, execution, commissioning, operation and maintenance during the span of the

Section	Clause	Aspect	Specific Terms
			Project. The Contractor shall provide necessary access and coordination to conduct such inspections. The Contractor shall provide all necessary access and cooperation for inspection by any National or State agency.
5	14.2, 14.3	Power and Water Supply during	• The Contractor shall arrange for the temporary Power Supply at the site for construction purpose at its own cost.
		Construction	<ul> <li>Cost of water shall be as per prevailing rate and to be borne by the Contractor.</li> </ul>
			• Cost of electricity required during construction shall be payable by the Contractor. For construction, temporary connection from Distribution Company shall be arranged by the Contractor as per applicable tariff.
			• The Company shall not provide facility for storage of material, and accommodation for labors at site. The Contractor shall make his own arrangement for the same.
		Contractor's obligations	<ul> <li>The Contractor shall be responsible towards any obligation of CIL related to operation and maintenance of the Project as per the terms and conditions of the Power Purchase Agreement (PPA) between CIL and GUVNL for the Project and the Request for Selection [ RfS No. GUVNL / 500 MW / Solar (Phase XII) dated 23.01.2021 ] issued by GUVNL, in so far as not explicitly mentioned in the Contract.</li> </ul>
2	1	Definitions	<ul> <li>"Actual Energy Delivered" means the net energy in kilo-watt hour (kWh) from the Project as measured at the Metering Point at Grid/delivery point.</li> </ul>
			<ul> <li>"Applicable Law" means any statute, law, regulation, ordinance, notification, rule, regulation, judgment, order, decree, bye-law, approval, directive, guideline, policy, requirement or other governmental restriction or any similar form of decision of, or</li> </ul>

Section	Clause	Aspect	Specific Terms
			determination by, or any interpretation or administration having the force of law in the Republic of India and the State Government, by any Government Authority or instrumentality thereof, whether in effect as of the date of this Contract or thereafter.
			"Bid" shall mean the bid submitted by the Bidder in response to this Tender.
			<ul> <li>"Bidder" shall mean Bidding Company or a Bidding Individual submitting the Bid. Any reference to the Bidder includes Bidding Company / Bidding Individual including its successors, executors and permitted assigns severally, as the context may require;</li> </ul>
			<ul> <li>"Capacity Utilization Factor (CUF)" shall have the same meaning as provided in CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020 as amended from time to time.</li> </ul>
			"CERC" means Central Electricity Regulatory Commission.
			<ul> <li>"Change in Law" shall have the meaning ascribed thereto in this Tender document.</li> </ul>
			• "Chartered Accountant" shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949.
			<ul> <li>"Commercial Operation Date (COD)" shall be the date certified by GEDA upon successful commissioning of the full capacity of the Project or the last part capacity of the Project as the case may be.</li> </ul>
			<ul> <li>"Commissioning" with respect to the project or part thereof as certified by GEDA shall mean when all equipment as per rated capacity has been installed and energy has flown into the grid.</li> </ul>

Section	Clause	Aspect	Specific Terms
			<ul> <li>"Completion" means that the Facilities (or a specific part thereof where specific parts are specified in the Scope of Work) have been completed operationally and structurally and put in a tight and clean condition and that all work in respect of Commissioning of the Facilities or such specific part thereof has been completed as per the Scope of Work.</li> </ul>
			• "Completion Certificate" shall mean the certificate to be issued by the owner or his representative when the works have been completed to his satisfaction.
			<ul> <li>"Contract" or "Contract Agreement" means the Contract signed between the Company (CIL) and the Contractor to execute the entire Scope of Work as given in this RFP document.</li> </ul>
			• "Contracted Capacity" shall mean 100 MW (AC) contracted with GUVNL for supply at the Delivery Point from the Project. It is to clarify that in any 15 minute time block, the injected power shall not exceed the Contracted AC Capacity plus 5% as well as the inverter capacity shall not exceed Contracted AC Capacity plus 5%.
			• "Contracted CUF" shall mean the % capacity utilization factor of the project measured at the Delivery Point as specified in the Contract.
			• "Contractor" means the person(s) whose bid to perform the Contract has been accepted by the Company and is named as such the Contract Agreement, and includes the legal successors or permitted assigns of the Contractor.
			<ul> <li>"Contractor's Equipment" means all plant, facilities, 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 Contractor, but does not include Plant and Equipment, or other things intended to form or forming part of the Facilities.</li> </ul>