ii) The PV modules must confirm to the latest edition of any of following IEC/equivalent BIS standards for PV module design qualification and type approval.

Crystalline silicon PV module: IEC 61215/ISI4286

In addition the modules must confirm to IEC 61730 Part-I: requirement for construction & part-2: requirement for testing, for safety qualification or equivalent IS (Under dev.)

iii) If PV modules to be used in a highly corrosive atmosphere (coastal areas etc) it must qualify Salt mist corrosion testing as per IEC 61701/IS 61701

iv) The amount of power produced by PV module is roughly proportional to the intensity and the angle of the light reaching them. They are therefore required to be positioned to maximum advantage of available sunlight within string constraints. Bidder will position the PV modules in such a manner that the maximum power is obtained with the sun's movements during the day. PV modules and associated accessories shall be suitable for continuous outdoor use and capable to withstand weather condition of the particular site location.

v) Module deployed must use a RF identification tag as per latest MNRE specification. Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.

vi) PV module must be tested and approved by one of the IEC authorized test centre.
Module frame shall be made of corrosion resistant materials preferably having anodized Aluminium.

vii) The module vendor should have experience of installation of solar plant of at least 15 Kwp and above Capacity.

**~~b) Battery bank~~**

~~LMLA (tall tubular solar battery 12 volt, battery type C 10) / VRLA tubular Gel/SMF type suitable for 15 KWP solar plant to provide minimum 6 hrs power backup shall be as per relevant Bureau of standard codes (BIS) specifications/latest Ministry of new and renewable energy (MNRE) specification confirming to latest edition of IEC and make of the battery should be as per MNRE approved vendors list along with appropriate cabinets for battery banks, provision of racks for batteries should also be done, battery room (control room) of adequate size as per drawing shall have to be constructed. The batteries shall be designed for operating in very low temperature (-15 degree) of the particular site. Battery bank connection to the PCU will be provided through proper protection for preventing damage to the batteries.~~

**c) Module Mounting Structures (MMS)**

MMS shall be as per site condition and shall be so designed to withstand the speed of the wind of the particular location (minimum design wind speed of 170 KM/ Hour) with clamps and accessories. Necessary civil works, as per relevant bureau of Indian standard codes (BIS) specifications/Ministry of new and renewable energy (MNRE) specifications will be executed. Each structure should have angle of inclination as per the site condition to take maximum insolation. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance. It must be ensured that the design has been certified by recognized lab/institute. In this regard wind loading sheet will be submitted to SSB. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed. The PV array structure design shall be appropriate with a factor of safety of min 1.5. The structure shall be designed to withstand operating environmental conditions for a period of minimum 25 years.

Civil work for module mounting structure in flood prone area and other locations shall be constructed as per site requirement & as per the instruction of Engineer- in- charge. Foundation shall be provided considering the flood prone area and structure should be designed to save guard against the flood, with providing the RCC footing like pilling/raft footing etc. and columns to be braced with beam at top column as per structural design/site requirement. Contractor shall be totally responsible against any damages occurs to the structure due to flood and natural climate like tornado etc. the height of the base of module shall be as per drawing.

The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m2. Approved structural engineer should certify after the building inspection that the building on which PV plant is to be installed is able to take such loads. The total responsibility is with contractor to check and verify the same. Water proofing of roofs should not be tampered for installation of grid structure for solar PV mounting. In the event of any seepages/leakages, contractor has to rectify the same with standard water treatment mechanism to the satisfaction of SSB.

Array/module/panels support structure shall be fabricated using corrosion resistant hot dip galvanization with minimum thickness of coating not less than 80 micron on each side. The mounting structure steel shall be as per latest IS 2062 : 1992 and galvanization of mounting structure shall be in compliance of the latest IS: 4759,2629, 4736 as applicable.

Material of Structure shall be corrosion, resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.

The ground mounting structure design must follow the existing land profile. The proper clearance between lower edge of PV panel and ground level shall be maintained for allowing proper ventilation for cooling, also ease of cleaning and maintenance of panel. The PV panel structures shall be designed in such a way that cleaning of the panels shall be carried out safely.

Each PV panel structures shall incorporate one bird repellent spike at a level higher than the panel edge. The location of the spike should be selected for minimum shadow effect.
All fasteners should be primarily of stainless steel to resist corrosion. The support structure shall be fee from corrosion when installed.

PV modules shall be secured to support structure using screw fasteners and/or metal clamps. Screw fasteners shall use existing mounting holes provided by modules manufacturer, adequately treated to resist corrosion.

The gird structure should be installed in manner to leave sufficient space for repair and maintenance aspect of the roof top, particularly for leakages.

**d) ~~Solar inverters/ power conditioning unit~~**

~~The Solar inverter shall be Hybrid inverter (with provision to charge the battery from main source) having 240 V, D.C. input and 415 V, A.C. output (suitable for 15 KWP solar plant), programmable, smart inverter, hybrid as per relevant bureau of Indian standard (BIS) codes (IEC 61683/IS 61683 & IEC 60068-2 (1, 2, 14, 30). Specifications of inverter shall be as per Ministry of new and renewable energy (MNRE) specifications.~~

**~~Power conditioning unit (PCU)~~**

~~SPV array produces direct current (DC) and it is necessary to convert this to alternating current (AC) and adjust the voltage levels before powering the equipments designed for AC supply. Conversion shall be achieved by using an electronic inverter and the associated control and protection devices. All these components of the system are termed as power condition unit (PCU). In addition, the PCU shall also house MPPT (maximum power point tracker), to maximize solar PV array, controller and inverter. This shall be supplied as integrated unit or different units of charge controller and inverter depending on rating & size of the power plant.~~

**~~Maximum power point tracker (MPPT) :~~**

~~Maximum power point tracker (MPPT) shall be integrated into the PCU to maximize energy drawn from the SPV array. The MPPT should be Microprocessor/Microcontroller based to minimize power losses.~~

**CHARGE CONTROLLER :**

DC electricity from the array is used to feed inverter as well as charge the battery bank for use during night. The total energy received from the array is depending on the availability of sunlight during the day which in turn varies from season to season. There may be occasions when the power plant generates surplus energy. Similarly in monsoon season, prolonged overcast sky could drain out the battery bank beyond the maximum allowed depth of discharge (DOD). Therefore to guard against battery overcharge or deep discharge, the charge controller shall be incorporated by the contractor.

~~**INVERTER :**~~

~~Inverter shall be hybrid inverter/ based on PWM technology. It must have built-in meter and data logger to monitor plant performance through external computer. The DSP controller is used for controlling the whole unit in quick time. Rating of the inverter should be suitable for 15 KWP plant and should have suitable D.C./AC voltage rating, pure sine wave inverter with inbuilt MPPT charge controller with the output power of 15 KWP. The output voltage should have good quality sine wave. External battery charging facility through AC is also to be provided.~~

**e) Junction boxes (JBs)**

JBs shall be as per equivalent BIS standard, IP 65 (for outdoor use) and IP 54 (for indoor use). The junction boxes are to be provided in the PV array for termination of connection cable. The JBs shall be made of GRP/FRP/Powder coated Aluminium/ cast Aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cables lugs. The JBs shall be such a way that the input & output terminated can be made through suitable cable glands. Copper bus bars/terminal blocks housed in the junction box with suitable termination threads conforming to IP65 standard and IEC 62208 hinged door with EPDM rubber gasket to prevent water entry. Single/double compression cable glands. Provision of earthlings. It should be placed at feet height or above for ease of accessibility.
Each junction Box shall have high quality suitable capacity metal oxide varistors (MOVs)/SPDs, suitable reverse blocking diodes. The junction boxed shall have suitable arrangement monitoring and disconnection for each of the groups. Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification.

**f) AC/DC DISTRIBUTION BOARD** : The board shall be as per equivalent BIS standard/latest MNRE specification. DC distribution panel shall receive the DC output from the array field. DC DPBs shall have sheet from enclosure of dust & MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.

**AC DISTRIBUTION PANEL BOARD :**

AC Distribution panel board (DPB) shall control the AC power from PCU/inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT bus bar of exiting building through proper size cable. All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/IS60947 part I, II and III. The changeover switches/panels, cabling work should be undertaken by the contractor as part of the project.

All the panel's shall be metal clad, totally enclosed, rigid, floor mounted, air-insulated, cubical type suitable for operation on three phase/single phase, 415 or 230 volts, 50Hz. The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius 80 percent humidity and dusty weather. All indoor panels shall have the protection of IP54 or better. All outdoor panels shall have the protection of IP 65 or better. It should conform to Indian electricity act and rules (till last amendment).

All the 415 AC or 230 volts devise/equipment like bus support insulators, circuit breakers, SPDs, VTs etc. mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions.

**g) Cables:**

Cables shall be as per relevant bureau of Indian standard codes (BIS) std. (IEC 60227/IS 694 & IEC 60502/IS 1554 (Pt. I &II)/ ministry of new renewable energy (MNRE) specifications.

All cables/wires shall be routed in a G.I. cable tray/raceway/conduit suitably tagged and marked with proper power cable of adequate rating shall be required for interconnection of : Modules/panels within array.

- Array & DCDB
- DCDB / inverter/Battery bank
- Inverter & ACDB & interconnection of existing buildings with ACDB/SOLAR PV plant
- Any other cable as per site requirement

The cables shall be of 1100 volt grade, copper conductor, XLPE/PVC insulated, PVC sheathed, armoured and overall PVC sheathed, strictly as per IS: 7098 (Part I & II) – 1976 or IS 1554. Colour of the outer sheath shall be black. Power cables size for 1.1 KV 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. 3% at full load. The de-rating factors viz group duration of temperature shall also be considered while choosing the conductor size. Control cables shall be RFLS type 1100 volts grade, copper conductor, PVC insulated, PVC sheathed, amoured and overall PVC sheathed, strictly as per IS: 1554 (Part I) and other relevant standards. The permissible voltage drop from the SPV generator to the charge controller shall not be more than 1% 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 in 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. The cable with suitable rating from PV module to inverter to battery bank, inverter to ACDB, ACDB to panel and panel to existing building etc. shall be provided by the bidder as per the site requirement. The rate shall be inclusive in the quoted amount in the bill of quantities. Nothing extra will be paid in this regard.

**h) LIGHTING PROTECTION**

The SPV power plants and control room shall be provided with lightning & overvoltage protection. The main aim of this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lighting, atmosphere disturbances etc. the entire space occupying the SPV array and control room shall be suitably protected against lighting by deploying required number of lighting arrestors. Lighting protected against induced high-voltages shall be provided by the use of suitable numbers of early streamer emission air terminal (ESE) air terminal/conventional lighting protection and suitable maintenance free chemical earthing (minimum 4 nos.) such that induced transients find an alternate route to earth.

**SURGE PROTECTION**

Internal surge protection shall consists of three MOV type surge-arrestors connected from +ve and – ve terminals to earth (via Y arrangement)

**i) EARTHING PROTECTION**

Each array structure of the PV yard shall be grounded/earthed properly as per IS 3043-1987 in addition the lighting arrester/masts shall also be earthed inside the array field. Earth resistance shall be tested in presence of the representative of SSB as and when required after earthing by calibrated earth tester. PCU, ACDB and DCDB etc. shall also be earthed properly.

**j) ~~Fire extinguishers, Danger Boards, rubber mat 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 in each at battery cum control room solar array area and main entry from BOP. Text of the signage may be finalized in consultation with Engineer-in-charge. Firefighting system for the proposed power plant for fire protection shall consist the following:~~

~~a) Portable fire extinguishers in control room for fire caused by electrical short circuit.~~

~~b) Sand bucket in control room~~

~~The installation of fire extinguisher should conform 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 PV array have been installed.~~

**k) ~~Control room for solar plant:~~**

~~Pre fabricated/Load bearing/RCC structure for Battery bank/control room of suitable size having plinth height minimum up to 0.6 meter from natural ground level as per drawing and direction of engineer-in0-charge shall be constructed. This must withstand the load of batteries and other equipments. Suitable gate must be installed in control room. Roof of control room must be so designed to prevent water logging etc. The specifications shall be as per CPWD/IS standards and as per drawing and direction of Engineer-in-charge. The control room should be completed with internal electrification (as per CPWD specifications) which include following.~~
~~Copper wiring with PVC conduit.~~

~~Exhaust fan – 2 Nos.~~

~~Ceiling fan – 1 Nos.~~

~~LED tube light – 2 Nos.~~

~~LED flood light (30-40 watt) – 4 no. (for external illumination)~~

~~6/16 Amp. Switch socket – 2 Nos. each~~

~~Shock proof rubber mat~~

~~Fire extinguishers~~

~~l) Contractor shall prepare the drawings for control room get it approved from SSB before execution.~~

~~m) Electrical load wring/cabling for existing building :~~

~~Separate electrical load wiring with PVC conduit shall be in the scope of contractor in all the existing BOPs building at the project site for solar PV plant supply including conduiting, wiring, switch socket, MCB distribution boards, MCBs interconnection cables of existing building with solar PV plant complete in all respect. The wiring should be as per latest CPWD specifications. Contractor shall also repair/replace existing switch sockets, plate etc. as per site requirement. Suitable rating MCBs with distribution boards to be used for electrical protection with proper earthing. The contractor shall make arrangement for by pass system/changeover switch sockets, plate etc. as per site requirement. Suitable rating MCBs with distribution boards to be used for electrical protection with proper earthing. The contractor shall make arrangement for by-pass system/changeover switches (manual/automatic type with interlocking arrangement, MCCBs panels, equipment's, switchgears and all other accessories as per actual requirement of site) so that power supply can be transferred easily without long duration/disruption. No extra cost will be paid to the contractor for the same.~~

Min. Size of wire for lighting circuit. – 1.5 sq mm FRLS copper wire
Min size of wire for power circuit. – 4 sq mm FRLS copper wire

Cable – XLPE armoured/un armoured as per requirement of suitable size.

Switch/socket – Modular/piano type with complete plate, box as per site requirement

Distribution boards with MCBs double door single phase/three phase.

n) Levelling, Internal roads and paths including storm water drains for SOLAR PV plant shall be in the scope of contractor. Work shall be done as per CPWD/MNRE specifications, site condition and directions of engineer-in-charge. No extra cost shall be paid for the same.

o) Any other equipments/activities which are not specifically mentioned in this documents but necessary for safe and efficient operation of the SPV plant shall be executed by the contractor and no extra cost shall be paid for the same. Before start of work contractor shall conduct survey of the site and finalize the plant location, control room location, layout, planning and prepare the detailed design & drawing for the complete solar PV plant. The contractor shall furnish the following drawings after award and obtain approval from SSB.

a) General arrangement drawings and schematic drawings indicating all the specifications of hardware shall be provided to SSB before starting the installation. The installations shall be only as per the approved drawing of SSB.
b) General arrangement and dimensioned layout schematic drawing showing the SPV panel and protection system including battery bank design and any logical control diagram as required.
c) Control room drawings.

d) Array/module mounting structure design calculation and drawing along with stand pro. It must be ensured that the design has been certified by recognized lab/institute in this regard and submit wind loading sheet to SSB.
e) Item wise bill of material for complete SPV plant covering major components and associated accessories
f) Overall layout showing SPV plant.

g) Electrical schematic drawings with details/specification of components of 15 KWP solar power plant with battery bank.
h) manufacture s test certificates/warranty certificates wherever applicable.

i) Format for reports and charts for analysis of various parameters.

j) All safety/fire protection items as per specifications. Danger boards warning boards, route marker etc also to be provided as per statutory regulations. Format for annual maintenance and preventive maintenance and the maintenance activities are required to be submitted.

### 3.4 Test Reports/Certificate

Contractor shall submit the test certificate/reports for items/components from any of the NABL/IEC accredited testing laboratories or MNRE approved test centres. The list of MNRE approved test centres will be reviewed and updated from time to time.
Type test certificates for all the tests specified for the factory built solar PV modules and the component parts shall be submitted by the contractor.
Contractor shall furnish copies of the test reports for approval before dispatch.
Two seats of copies of the complied and approved test certificates shall be submitted to the SSB

**3.5 Maintenance and warranty**

The standard comprehensive onsite maintenance & warranty will be valid for five years including battery bank. Mechanical structures, electrical works, inverters, PV module, charge controllers, maximum power point tracker units, distribution boards, digital meters, switch gear, and overall workmanship of SPV power plant system must be warranted against any manufacturing/design/installation defect.
Warranty period will start from the date of handing over of the site to SSB including testing and successfully commissioning of the work of solar PV plant in all respect.
Warranty will be free of cost and nothing will be paid for repair/replacement of defective parts/preventive maintenance or any other job on account of works required to execute during warranty period.
Contractor shall appoint a maintenance team and attend any defect within 72 hours. Original warranty certificate of equipment's (equipment's having more than 5 year warranty) shall be handed over to SSB after completion of project.

3.6 The scope for supply shall also include comprehensive insurance of the product against theft/damage/defects and human beings involved against accidents up to completion of work and handing over. Storage & transportation is also in the scope of the contractor.

3.7 All the electrical works shall be carried out as per the relevant codes and standards and as per the guidelines of prevailing electrical inspectorate. All liaison work required for electrical inspectorate approval shall be in the scope of the contractor and the rate quoted by the contractor shall be inclusive of the same. The contractor shall not claim any additional fee for liaison work and he shall prepare the all the necessary documents such as drawings as required for the approval & sanction order.

3.8 The civil works, if any, for the supports for SPV/ any chipping works and refinishing by plastering and painting for installation of complete system shall also be in scope of the contractor.

3.9 All the necessary co-ordination with regard to sub-contracted items shall be carried out by the bidder. The purchaser/engineer will communicate only with the bidder for all matter pertaining to this contract.

3.10 The contractor shall be responsible for obtaining necessary statutory approvals/prior approvals, from local bodies, electrical inspectorate, state pollution control board, etc. if any as applicable. All MNRE guidelines for the material and installation should be followed by the bidders. Nothing extra shall be paid to the contractor for the same.

3.11 The total quoted rates for this contract shall be all-inclusive and shall cover all items and service necessary for successful completion of the contract. All the fittings and accessories that might not have been mentioned specifically in the specification but are necessary for equipment's of the system, shall be deemed to be included in the specification and shall be supplied and furnished by the contractor without any extra charge.

3.12 The power from hybrid inverters shall be taken to a distribution panel with multifunction meters at outgoing (ammeter, voltmeter, PF, Energy consumption with a logger that has communication port of RS 232 shall be provided) necessary number of MCCB with suitable overload and short circuit rating shall be provided for incomer and outgoing.

3.13 The outgoing of the main SPV panel shall be taken through DC cable with proper protection (though GI raceways with suitable size) of suitable rating and shall be hooked up over existing panels/DBs. The rate for any modification of existing panel shall be inclusive of the rate quoted.
3.14 The contractor shall also furnish 2 sets of the approved manuals of instructions at the time of inspection and taking over of the equipment. These manuals shall be properly bound in book form and contains all information, description of equipment, diagramme etc. which is necessary to enable the customer to operate and maintain the whole system. In order to maintain the plant, spare parts for keeping minimum stock with measuring instruments are to be provided by the contractor.

## 4.0 CODES AND STANDARDS

All equipment and accessories shall comply to requirement of standards published by latest MNRE specifications/Bureau of Indian standards (BIS) in case no BIS codes exist the equipments shall meet the requirement of international standard including IEC/IEEE for design and installation of PV system. The list of standards adopted shall be indicated in the bid. Latest CPWD specifications to be followed for electrical works. In addition to the above standards the whole system must conform to the relevant national/international electrical safety standards.

## 5.0 TOOLS AND SPARES

After completion of installation & commissioning of the power plant, necessary tools & spares are to be provided free of cost by the contractor for maintenance purpose. A list of requisite spares, fuses, MCCBs etc along with spare set of PV modules to be indicated, shall be supplied along with the equipment.

## 6.0 ACCEPTANCE OF SYSTEMS AND PERFORMANCE EVALUATION

The installer must verify that the systems has been installed according to the manufacture and latest MNRE guidelines. A checkout procedure should be developed to ensure an efficient and complete installation.

## 7.0 SYSTEM DOCUMENTATION :

It is essential that owner have complete documentation on the system. System documentation should include an owner's manual, warranty certificates, test certificates, as build drawings and copies of relevant drawings for whatever system maintenance might be required in the future.

## 8.0 INSTALLATION

Installation shall be done by the qualified engineer who has adequate experience with installation of the PV system.

# LIST OF APPROVED ITEMS

**The contractor shall use any one of the makes for use in work as below after getting the approval from the Engineer-in-Charge.**

All material should be as per MNRE/BIS approved manufacturer list amended up to date

| Sl. No. | Item | Make of Materials/Equipment |
|---|---|---|
| 1 | Inverter/ Power Controller Unit | ENERTECH, LUMINOUS, PPS, SMA, CONSUL, NEOWATT or MNRE/BIS approved vendor |
| 2 | SPV PANEL | CEL, BEL, TATA or MNRE/BIS approved vendor |
| 3 | Distribution board | Legrand, ABB, Schneider, Siemens, |
| 4 | MCB, RCCB, Disconnectors | Legrand, ABB, Schneider, Siemens, |
| 5 | DC string cable- copper | Apar/ Siechemm/Lapp, |
| 6 | DC main cable | KEI/Polycab/Havells cables |
| 7 | DC surge protection device | ABB/CITEL/ISKRA |
| 8 | 660/1100 volt grade stranded PVC unsheathed wire with copper conductor | Finolex/RR Kabel/Polycab/KEI/Havells |
| 9 | Modular type switches, Sockets, bell push, etc | Crabtree, Legrand Mosaic,Anchor, MK Blenze, North west make |
| 10 | 1.1Kv Cu/Al Cable | Havells/ /Polycab/ KEI |
| 11 | Conduits PVC /MS | BEC/AKG/ Balco/Plaza/ Anchor |
| 12 | Battery | EXIDE, NED, HBL/Luminus or other MNRE approved vendor |
| 13 | Fan & Exhaust fan | Usha/ Havells / Orient /CG |
| 14 | LED Light | Philips/CG/Oshram/Wipro |
| 15 | Ordinary Portland Cement Grade 43/53 | BIRLA, JK, ACC, ULTRATECH, JAYPEE, AMBUJA, SHREE |
| 16 | Reinforcement Steel | TATA , SAIL, RINL, JINDAL, JSW STEEL, SRMB |
| 17 | Wall Putty | JK/BIRLA |
| 18 | Paint/Polish/ Primer/ Water Proofing Paint | BERGER, ASIAN, DULUX |
| 19 | Powder Coating | AKZONOBEL, ASIAN |
| 20 | Epoxy Paint | FIBREX/BASF |
| 21 | Floor & Wall Tile(Vitrified & Ceramic) | KAJARIA, ORIENTBELL ,SOMANY |
| 22 | Construction/Waterproofing Chemical, Admixtures | ROFFE, FOSROC, SIKA, ULTRACON |
| 23 | Pre- coated sheet profile sheet | TATA/JSW |

**Note: -** In case make of any equipment or material is not specified in the NIT, the decision of the Engineer-in Charge in this regard will be final.

**Executive Engineer**
**SHQ, SSB, Pilibhit**

## ADDITIONAL TERMS & CONDITIONS

1. The work shall be carried out as per MNRE/CPWD specifications part-I (Internal) 2013 Part-II external 2005, amended up to date & as per additional specification & conditions for this work & as per CPWD sub-station specifications 2013 and electrical work specification internal (Part – I 2007, 2013-14 and external 1994) and sub-station amended up to date

2. The department reserves the right to send such materials to the manufactures authorized test laboratory to verify the genuineness & quality of the product.

3. The contractor is advised to visit the site before quoting for this tender to apprise himself about the site environments & other condition. The contractor should see the site and understand the work requirements, the condition is regard to accessibility of site and nature of ground, working condition including stacking of materials, installations of T & P etc. conditions affecting accommodation and movement of labour etc and in case of doubt, obtain required particulars, which may in any way influence his tender, from the SSB as no claim whatsoever will be entertained for any alleged ignorance thereof before submitting the tender, the contractor should visit the site and satisfy himself as to the conditions prevalent there.
4. Time is the essence of the contract any piece meal work may also require completing in odd hours in order to restore electrical supply as per requirement of department. If such work arises it will be sole responsibility of contractor to get done the work in given time. The rates shall be inclusive of all such eventualities as well as of all taxes, levies, packing, transportation handling etc. nothing extra shall be paid. The contractor shall be responsible for getting all approvals and clearance about labour passes etc as well as all the effort in this connection should be in the preview of contractor. No claim of the contractor shall entertained by the department for the idle labour.

5. The contractor shall be responsible for any damage done to the building of electrical installations during the execution of the work. Damage, if any shall have to be made good by the contractor at his won cost otherwise the same shall be got rectified/made good at the risk & cost the contractor.

6. The work shall be carried out engineering like manner & bad workmanship shall be rejected summarly. For redoing the job, no claim of the contractor shall be entertained on this account.

7. The site shall be cleared of rubbish, debris caused by working at site order book & comply with the remarks entered therein by the representative of the department.
8. The contractor or his authorized representative shall sign the site order book & comply with the remarks entered therein by the representative of the department.

9. The client is not concerned with any rise or fall in the prices of any materials. The rates quoted shall include all costs, allowances, taxes/levies/cess or any other charges including any enhanced labour rates etc. which may be enacted from time to time by the state and/or central.

10. The contractor will ensure that all the skilled persons deployed for executing the electrical work possesses the wireman license issued by approved authorities. Consequences arising due to the default of the contractor to comply with this condition would be contractor's responsibility only.

11. The contractor will make his own arrangement for storage of his material if issued to him departmentally, the material shall be issued to him from JE (E)'s store. The watch & ward of the materials & of the installations would be responsibility of contractor till the work is completed and handed over to the department nothing extra shall be paid to the contractor on this account.

12. The contractor shall make his own arrangement for carriage of materials, fittings cables etc required for execution of work/issued to him departmentally from the site of wok at his own cost. Nothing extra shall be paid on this account.

13. All the DB''S switchgears shall have identification making on them written in white paint nothing extra shall be paid on this account.
14. Earth point with studs are to be provided on each of the switch boards/DB
15. The drawings showing layout of the solar panel array, cable laying earthing put main board allied equipment shall be got approved by the contractor from the engineer-in-charge before fabrication & execution.
16. All hardware, fastening material viz, nuts, bolts, washers & screws etc to be used on work shall be of zinc and cadmium plated iron.

17. The contractor shall have to furnish the insulation test report, earth report along all required details of electrical load on the prescribed performa for the electric connection iron supply company as reqd.

18. The contractor shall submit the completion certificate & completion plan as per clause 2.30 (appendix f) of general specifications for electrical works part I internal 2013.
19. All concealed work & earthing shall have to be done in the presence of engineer-in-charge or his authorized representative.

20. A list of approved make for materials to be used in the work is appended as annexure-I the contractor should use only the approved makes of materials in the work specified in the annexure-I the make of MCB DB should be lame as of MCB.
21. **The quoted rates shall be inclusive of all taxes such as GST, WCT, E-Cess & Cess etc. & nothing extra shall be paid on this account.**

22. Wires and cables shall be got approved from engineer-in-charge before use.

23. Thimbles, lugs are to be provided whenever required by the contractor without any extra cost.

24. Loop earthing wire-in place of bare copper wire green/yellow insulated copper wire to be used as per CPWD specification part-I (internal) 2013.

25. Any balance items, which are not explicitly spelt out here, but are required for the competences of the work, shall also be included in bidder's scope without any extra payment.

26. The SSB shall not be responsible or accountable to the firm/contractor for the employees, agent, technicians and labor employed by the firm/contractor, who shall work on the project site and premises. Firm/contractor shall be exclusively responsible for all such personal engaged, on the work for such matters as payment of salary, wages, bonus, compensation and compensation in the event of death and accident.

27. As soon as the project is finally completed firm/contractor shall in turn inform SSB, who shall nominate a board of officers for checking/verification of completed work as per the scope of the work for final taking over the project.

28. Firm/contractor shall be responsible for the consequence effect arising out of the inspection of the project by the chief technical examiner cell, central vigilance commission during the progress or any timer after the construction of project and shall take appropriate action for rectification of the defective work at own risk and cost. Rectification of defective work/replacement of substandard as pointed out by chief technical cell, central vigilance commission /SSB or his authorized representative shall be carried out by the firm/contractor, at their own cost, SSB shall not pay any extra amount for such type of liabilities.

29. All deputed staff/manpower/engineers at different BOPs of SSB should process valid police verification document, valid IDs/Aadhar card as per requirement of SSB

30. Due to sensitivity of sites and security reasons of BOPs, work shall be executed in day time only (till 5 PM) manpower shall not be allowed to stay at BOPs labour huts/staff residence shall be arranged by contractor at his cost.

31. The contractor shall himself arrange the required water facility, electricity for construction/personal purposes at BOPs at his cost.

32. Suitable rating change over switches shall be provided for grid supply/DG set/Solar power at BOPs.

33. The standard comprehensive onsite maintenance and warranty will be valid for five years including battery bank from the date of taking over of installation or solar plant including repair and replacement of defective part including batteries. Warranty will be free of cost nothing will be paid for repair/maintenance or any other job account of works required to execute during maintenance and warranty period.

34. Contractor shall appoint a maintenance team and attend any defects within 72 hours. Details of the team shall be provided by the contractor.

35. Insurance of all the equipment installed at site shall be in the contractor's scope.

36. **Handing over of the project :** Contractor will hand over the project to SSB after successful completion of each component of the project in all respect and complete satisfaction of engineer-in-charge. The partial handing over of project components shall not be considered. Contractor shall also provide necessary completion certificate. The onsite maintenance and warranty period will be five years after such handing over.

37. The Contractor shall render all help and assistance in documenting the total sequence of this project by way of photography, slides, audio-video recording etc. nothing extra shall be payable to the agency on this account.

38. Contractor shall arrange water electricity food and lodging at his own cost for workers employed at site.

39. The Contractor shall be solely responsible to follow the general clauses of the contract including labour regulations, registration of contractor, obtaining labour license from labour department, safety precautions, etc. and all other statutory provisions related to labour/works as per the prevailing general clauses of contract amended from time to time. The contractor shall stick to the schedule of all activities and carry out it with mutually agreed time frame.

40. Rates and amount quoted by contractor shall be firm and fixed for entire contract period as well as extended period for completion of the works. No escalation shall be applicable on this contract.

41. Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall be all inclusive and shall apply to all heights lifts, lead and depths of the structure and nothing extra shall be payable on this account.

42. Some restrictions may be imposed by the SSB security staff on the working and for movement of labour/materials etc. the contractor shall be bound to follow all such restrictions/ instructions and nothing extra shall be payable on this amount.

43. (a) The project work will be carried out in the manner complying in all respects with the requirements of relevant bye laws of the local body under the jurisdiction of which the work is to be executed or as directed by the engineer in charge and nothing extra will be paid on this account.

    (b) The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rule and regulations and pay all rees and charges which he may be liable.

44. The contractor shall give performance test of the entire installation (s) as per standing specification before the work is finally accepted and nothing extra whatsoever shall be payable to the contactor for the test.

45. The work shall be carried out in accordance with the drawings/layout plan etc as approved, by the engineer-in-charge/SSB senior authorities.

46. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials.

47. The contractor shall have to make approaches to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of works by the engineer in charge nothing extra shall be paid on this account.

48. No payment will be made to the contractor for damage caused by any accidents, rains, or other natural calamities during he execution of the work and no such claim on this account will be entertained.

49. The contractor shall take instruction from the site in charge/SSB authority for staking of materials at any place/BOPs.

50. The material shall confirm to the quality and make as per tender documents. However for the items not appearing in the list preference shall be given to those articles which bear ISI certification marks. In case articles bearing ISI certification marks are not available the quality of sample brought by the contractor shall be judged by the standard laid down in the relevant ISI specification/CPWD/MNRE specification. All materials and articles brought by the contractor to the site for use shall confirm to the samples approved, which shall be preserved till the completion of the work. However, such articles which bear ISI mark but stand banned by CPWD/MNRE will not be used

51. It must be ensure that all materials to be used in work bear BIS certification mark. In cases where BIS certification system is available for a particular material/product but not even a single producer has so far approached BIS for certification the material can be used subject to the condition that it should confirm to CPWD specification/MNRE specifications and relevant BIS codes. In such case written approval of the engineer-in-charge may be obtained before use of such material in the work.

52. In case of non availability of material of brands specified in the list of approved materials an equivalent brand may be used after getting written approval of SSB giving details to indicate that the brand proposed to be used is equivalent to the brands mentioned in the agreement.

53. Removal of rejected/sub-standard materials.

The following procedure shall be followed for the removal of rejected/sub standard materials from the site of work.

(i) Whenever any material brought by the contractor to the site of work is rejected, entry thereof should invariably be made in the site order book under the signature of the engineer-in-charge or his representative/site in charge giving the approximate quantity of such materials.

(ii) As soon s the material is removed, a certificate to that effect shall be recorded by the engineer-in-charge/site in charge against the original entry, giving, the date of removal and mode of removal, i.e., whether by truck, carts, or by manual labour. If the removal is by truck, the registration number of the truck should be recorded.

(iii) When it is not possible for the engineer-in-charge to be present at the site of work at the time of actual removal of the rejected/sub-standard materials from the site, the required certificate should be recorded by the authorized representative of SSB and the engineer-in-charge should countersign the certificate recorded by the authorized representative.

54. The contractor has to take permission from the SSB & local authorities etc. if required for work during night hours. No claim/hindrance on this account shall be considered if work is not allowed during night time.

55. Once the project is completed and the contractor shall be responsible to attend defect pointed out by SSB and then hand over the project to the client.

**56. Any item of work not specifically mentioned in the schedule but required for satisfactory installation/ operation of the plant shall be executed by the contractor without any extra payment.**

**For & on behalf of Tenderer**

## INSTRUCTIONS TO BIDDERS

### 1.0 BIDDING DOCUMENTS

The bidder is expected to examine the bidding documents, including all instructions, Pre- Qualification Criteria, Forms, Annexure, Terms and Conditions of Contract, Specifications, Drawings and other documents and to fully familiarize itself with the requirements of the bidding documents. Failure to furnish all the information required by the Bidding Documents or the submission of a bid not substantially responsive to the Bidding Documents in every respect may result in the rejection of the Bid. In case of any inconsistency, in the interpretation of meaning of any part of this Tender Documents, the BIDDER shall give his best endeavor to resolve the inconsistency by expressing his assumption through his proposal to department.

### 2.0 AMENDMENT OF BIDDING DOCUMENTS

Bidders shall examine the Bidding documents thoroughly and inform the department of any apparent conflict, discrepancy or error. At any time prior to the deadline for submission of bids as well as up to priced bid opening, the department may, for any reason whether at its own initiative or in response to a clarification or modification requested by any prospective Bidder(s), modify the Bidding documents, if required. Notice of issuance of any amendment to the bidding document shall not be advertised in press. The same shall be notified in the websites of SSB (ssb.nic.in). Bidders are therefore advised to visit the website regularly for downloading the details of amendment to bidding document. The Bidders will be required to acknowledge notification of any such amendment to the Bidding documents. Bidders shall confirm the inclusion of Addendum/Corrigendum in their bid and shall follow the instructions issued along with addendum/corrigendum. In order to afford Bidders reasonable time to take the amendment, issued prior to submission of Bids, into account in preparing their Bids, department may, at its discretion, extend the deadline for the submission of Bids.

### 3.0 LANGUAGE OF THE BID

The Bid prepared by the Bidders and all correspondence and documents relating to the
Bid exchanged by the Bidder and the department shall be written either in Hindi or in the English language and all units shall be in Metric system. Any printed literature furnished by the Bidder may be written in another language, provided that such literature is accompanied by an English translation, in which case, for purpose of interpretation of the Bid, the English translation shall govern.

3.1 The basic consideration and essence of the Contract is the strict adherence to the time schedules for performing the specified works as stipulated in the Contract.

### 4.0 SIGNATURE ON BIDS

4.1 The Bid must contain the name, designation and place of business of the person or
persons making the Bid and must be signed and sealed, on each page, by the Bidder with his usual signature. The names of all persons signing should also be typed or Printed below the signature. The Bidder shall submit authority letter / Power of Attorney / Board Resolution in favour of the authorized signatory(s) of the Bid. The Bidder's name stated on the proposal shall be the exact legal name of the Bidder.

4.2 Bids by bodies corporate/ limited Companies must be signed with the legal name of the Corporation/Limited Company by the President, Managing Director or by the Company Secretary or any other person or persons holding Power of Attorney for signing their Bid.

4.3 Power of Attorney issued by the Board of Directors / CEO / MD / Company Secretary of the Bidder/ all partners in case of Partnership Firm / Proprietor in favor of the authorized employee(s) of the Bidder, in respect of the particular tender for signing the Bid and all subsequent communications, agreements, documents etc. pertaining to the tender and to act and take any and all decision on behalf of the Bidder, is to be submitted. The authorized employee(s) of the Bidder shall be signing the Bid and any consequence resulting due to such signing shall be binding on the Bidder.

4.4 Bid shall contain no cuttings, erasures or overwriting except as necessary to correct errors made by the Bidder in which case each such corrections or other changes in the Bid documents shall carry the initials of the person(s) signing the Bid.

4.5 Bids not conforming to the above requirements of signing may be disqualified.

***INTEGRITY PACT***

To,

……..,
……..,
……..

**Reference : NIT No. EE/SHQ/PBT/2025-26/13(2nd Call)**

**Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj**

Dear Sir,

It is here by declared that Sashastra Seema Bal is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the CPWD.

Yours faithfully

Executive Engineer

To,

Executive Engineer,
SHQ, SSB, Pilibhit.

Sub: Submission of Tender for the work of **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57th Bn SSB, Sitarganj**

Dear Sir,

I/We acknowledge that SSB is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by SSB. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, SSB shall have unqualified, absolute and unfettered right to disqualify the tenderer /bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

**To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of SSB.**

## INTEGRITY AGREEMENT

This Integrity Agreement is made at .....
.. on this ..... day of .....20.....

**BETWEEN**

President of India represented through **Executive Engineer, SHQ, SSB, Pilibhit** (Hereinafter referred as the '**Principal/Owner**', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

**AND**

..... (Name and Address of the Individual/firm/Company) through ..... (Hereinafter referred to as the (Details of duly authorized signatory) "**Bidder/Contractor**" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

**Preamble**

WHEREAS the Principal / Owner has floated the Tender (NIT No. ….....)
(hereinafter referred to as "**Tender/Bid**") and intends to award, under laid down organizational procedure, contract for **Repairing & Up-gradation of 06 Nos Off-grid 10 KVA Solar Power Plant at BOPs Banbasa, Dhanushpul, Narayan Nagar, Melaghat , Bangali basti and Boom under 57$^{th}$ Bn SSB, Sitarganj**
(Name of work) hereinafter referred to as the "**Contract**".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "**Integrity Pact**" or "**Pact**"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

**Article 1: Commitment of the Principal/Owner**

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

a. No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

b. The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.

(c) The Principal/Owner shall Endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

**Article 2: Commitment of the Bidder(s)/Contractor(s)**

1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.

2) The Bidder(s)/Contractor(s) commits 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:

a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.

b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.

c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

a) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both.

Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

e) The Bidder(s)/Contractor(s) 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.

3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice **means a will full misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.**

5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

**Article 3: Consequences of Breach**

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/ determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. **Such exclusion may be forever or for a limited period as decided by the Principal/Owner.**

2) **Forfeiture of EMD/Performance Guarantee/Security Deposit**: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.

3) **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal / Owner will inform the same to law enforcing agencies for further investigation.

**Article 4: Previous Transgression**

1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.

2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.

3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

**Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors**

1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement / Pact by any of its Subcontractors/sub-vendors.

2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.

3) **In case of e-tendering, integrity Pact shall be treated in the same manner as other components of the bid document. In e-tendering, the intending bidder is not required to sign any document physically and entire bid document is submitted through digital signature. Since IP is a part of bid document no separate physical submission is required with other documents to be submitted in the office of tender opening authority. In addition to other component of bid document, the integrity pact along shall also be signed between Executive Engineer and successful bidder after acceptance of bid.**

**Article 6- Duration of the Pact**

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, CPWD.

**Article 7- Other Provisions**

1) This Pact is subject to Indian Law, place of performance and jurisdiction is the **Head quarters of the Division** of the Principal/Owner, who has floated the Tender.

2) Changes and supplements need to be made in writing. Side agreements have not been made.

3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.

4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.

5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this **Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.**

**Article 8- LEGAL AND PRIOR RIGHTS**

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....

(For and on behalf of Principal/Owner)

.....

(For and on behalf of Bidder/Contractor)
WITNESSES:
1. .....
(signature, name and address)
2. .....
(signature, name and address)
Place :
Dated :

## 9.0 TIME SCHEDULE

| S.No. | Deliverables | Timelines |
|---|---|---|
| 1. | Final design report, draft final detailed project report (DPR) includes detailed drawing for constructions as per NIT (soft and 2 hard copies) | 30 days from the date of signing of agreement |
| 2. | Final detailed project report (DPR) (DPR) includes detailed drawing for constructions as per NIT (soft and 3 hard copies) | 15 days from the date of comments on draft DPR |
| 3. | Supply of material at site | 90 days from the date of signing of agreement |
| 4. | Installation, testing and commissioning and handing over of the project | 365 days from the date of signing of agreement |
| 5. | Onsite comprehensive maintenance and warranty | 5 years after handing over of the project to SSB |