
	<b>SOLAR BUSINESS DIVISION (SBD)</b>	<b>SPECIAL CONDITIONS OF CONTRACT (SCC)</b>	<b>ITEM: DESIGN, MANUFACTURING, SUPPLY, INSTALLATION AND COMMISSIONING OF TRACKER SYSTEM</b>  <b>Ref No: MANPVT0003</b>
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33	Conflict of Interest among Bidders/ Agents	<p>"A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:</p> <ul style="list-style-type: none"> <li>a) they have controlling partner (s) in common; or</li> <li>b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or c) they have the same legal representative/agent for purposes of this bid; or</li> <li>d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder, or</li> <li>e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from. one bidding manufacturer in more than one bid; or</li> <li>f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following: <ul style="list-style-type: none"> <li>1. The principal manufacturer directly or through one Indian agent on his behalf; and</li> <li>2. Indian/foreign agent on behalf of only one principal, or</li> </ul> </li> <li>g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid, or</li> <li>h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business. "</li> </ul>
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34	NOTE	<p>Delivery Challans &amp; Invoices /Service Entry Sheet in the format as specified under GST laws mentioning your GSTIN No, item HSN/SAC No should accompany supply.</p> <ol style="list-style-type: none"> <li>1. GST portion of invoice shall be released only upon vendor declaring such invoice in his GSTR-1 return and receipt of goods/services and tax and confirmation of payment of GST thereon by vendor on GSTN Portal.</li> <li>2. Bank Guarantee of appropriate value may be obtained from vendor which shall be valid at least one month after the confirmation of payment date by vendor on GST portal and receipt of Tax invoice and receipt of goods, whichever is later. [if (a) above could not be complied].</li> <li>3. In case GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount shall be recoverable from vendor along with interest levied/BG of appropriate value may be obtained from vendor alternatively payment covering GST portion including interest thereon shall be release to vendor only upon completion of these requirements.</li> </ol> <p>In case vendor delays declaring such invoice in his return &amp; GST credit by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST Law shall be recoverable from vendor/contractor along with interest levied/leviable.be obtained from vendor alternatively payment covering GST portion including interest thereon shall be released to vendor only upon completion of these requirements.</p>
35	Arbitration & Conciliation Clause	<p>The Conciliation Scheme 2018 attached as <u>Annexure-A</u> shall be applicable. The Signed &amp; Stamped copy of the same to be attached along with the offer as a mark of acceptance.</p> <p>Arbitration &amp; Conciliation Clause:</p> <p>a) In case of contractors/vendors /consultants other than Public Sector Enterprise (PSE) or a Government Department: The parties shall attempt to settle any disputes or difference arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract, or in connection with this contract through friendly discussions. In case no amicable settlement can be reached between the parties through such discussions, in respect of any dispute; then, either Party may, by a notice in writing to the other Party refer such dispute or difference to the sole arbitration of an arbitrator appointed by Head of the BHEL –EDN/SBD. Such Sole Arbitrator appointed, shall conduct the arbitration in English language.</p> <p>The Arbitrator shall pass a reasoned award and the award of the Arbitration shall be final and binding upon the Parties.</p> <p>Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be Bangalore.</p>



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		<p>The cost of arbitration shall be borne as decided by the Arbitrator upon him entering the reference. Subject to the Arbitration Clause as above, the Courts at Bangalore alone shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract. Notwithstanding the existence or any dispute or differences and/or reference for the arbitration, the parties shall proceed with and continue without hindrance the performance of its obligations under this Contract with due diligence and efficiency in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.</p> <p>b) in case of Contract with contractors/vendors /consultants when they are a Public Sector Enterprise (PSE) or a Government Department: In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either party for Arbitration to the Sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any Party aggrieved by such Award may make further reference for setting aside or revision of the Award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the Parties hereto finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.”</p>
36	Provisions vendors for MSE	<p><b>PROVISIONS APPLICABLE FOR MSE VENDORS (MICRO AND SMALL ENTERPRISES)</b></p> <p>Benefits/facilities as applicable for Micro and Small Enterprises (MSEs) shall be available to MSE vendors registered with Government Designated Authorities as per the Purchase &amp; Price Preference Policy of the Government subject to them becoming eligible otherwise. Vendors who qualify as MSE vendors are requested to submit applicable certificates (as specified by the Ministry of Micro, Small and Medium Enterprises) at the time of vendor registration.</p> <p>Vendors have to submit the Udyog Aadhaar Memorandum (UAM)/UDYAM Registration Certificate along with attested copy of a CA certificate [Annexure-2(A) / Annexure-2(B)] applicable for the relevant financial year (latest audited) along with the tender documents in the Part-I Bid to avail the applicable benefits.</p> <p>Date to be reckoned for determining the deemed validity will be the date of bid opening (Part I in case of two-part bid and three-part bid).</p>



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Documents have to be notarized/attested by a Gazetted officer and must be valid as on the date of Part-I Bid opening for the vendors to be eligible for the benefits applicable for MSE vendors. Please note that no benefit shall be applicable if any deficiency in the above required documents are not submitted before the Price Bid Opening / Reverse Auction.

If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Bidders to however note the documents that shall be furnished in order to establish credentials as MSE vendor should be as per the extant statutory requirements specified by the Ministry of Micro, Small and Medium Enterprises (MSME).

**PURCHASE PREFERENCE FOR MSE VENDORS:**

**(For Items which are divisible in nature)**

MSE vendors quoting within a price band of L1 + 15% shall be allowed to supply up to 25% of the requirement against this tender provided:

1. The MSE vendor matches the L1 price.
2. L1 price is from a non MSE vendor.
3. L1 price will be offered to the vendor nearest to L1 in terms of price ranking (L2 – nearest to L1). In case of non-acceptance by the MSE vendor (L2), next ranking MSE vendor will be offered who is within the L1 + 15% band (if L3 is also within 15% band).
4. 3% of the 25% will be earmarked for women owned MSE's.
5. 25% of the 25% (i.e., 6.25% of the total enquired quantity) will be earmarked for SC/ST owned MSE firms provided conditions as mentioned in (1) & (2) are fulfilled.
6. In case where no SC/ST category firms are meeting the conditions mentioned in (1) and (2) or have not participated in the tender, the 6.25% of earmarked quantity for SC/ST owned MSE firms will be distributed among the other eligible MSE vendors who have participated in the tender.

**(For Items which are not divisible in nature)**

MSE vendors quoting within a price band of L1 + 15% shall be allowed to supply up to 100% of the requirement against this tender provided:

1. The MSE vendor matches the L1 price.
2. L1 price is from a non MSE vendor.
3. L1 price will be offered to the vendor nearest to L1 in terms of price ranking (L2 – nearest to L1). In case of non-acceptance by the MSE vendor (L2), next ranking MSE vendor will be offered who is within the L1 + 15% band (if L3 is also within 15% band).
4. No distribution shall be done specifically to women owned MSEs or SC/ST owned MSEs in such cases.

**Documents to be submitted for claiming MSE status and intended benefits:**



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		<b>Submission of updated Udyam Registration Certificate along-with Techno-commercial bid is required mandatorily.</b> MSE suppliers can also receive payment through TReDS platform operated.
37	Breach of contract, Remedies and Termination	In case of breach of contract, wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is at least 10% of the contract value, the same will be encashed. In case the value of the security instruments available is less than 10% of the contract value, the balance amount shall be recovered from other financial remedies (i.e. available bills of the contractor, retention amount, any other amount payable to vendor from any units of BHEL, etc. with BHEL) or legal remedies shall be pursued. The balance scope shall be got done independently without Risk & Cost of the failed supplier/ contractor. Further, levy of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract. In any case of Breach of contract amount equivalent to 10% of the contract value in shall be recovered from the contractor.
38	Compliance to order No. 25-111612018-PG, Dated 02.07.2020 of Ministry of Power, GOI	Compliance to order No. 25-111612018-PG, Dated 02.07.2020 of Ministry of Power, GOI to be submitted in the bidder's letter head as per attached Annexure-4 Note: Non-compliance of MoP Order and its subsequent amendment(s), (if any), by vendor shall lead to rejection of their offer or cancellation of contract, which is awarded by BHEL.
39	e-Invoicing under GST	E-Invoicing under GST to be done in line with the latest guidelines of GOI. It is the responsibility of the bidders to keep updated themselves of the guidelines. In case the vendor delays or fails to provide all the documents as per the Purchase Order at the time of submitting Tax Invoice to BHEL, any subsequent financial loss to BHEL on account of vendor shall be to vendor's account. BHEL has further right to take necessary steps to protect its interest at the time of release of payment.



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40	Declaration by bidder regarding protection of commercial interests of BHEL	The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). 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 introduce cartelization in the bidding process. In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/ guidelines.
41	Note	<ol style="list-style-type: none"><li>1. In place of EPD, Bangalore, it may be read as SBD Bangalore.</li><li>2. Any vendor who has been banned by BHEL or against whom action due to non-performance has been initiated by BHEL are not eligible for participation. Such offers will not be considered for evaluation and will be rejected.</li><li>3. Bidders shall confirm acceptance of technical specification which is part of the tender document (If Applicable). Any deviation from technical specification can be rejected at BHEL's discretion.</li><li>4. Amendments/addendums/circulars/Revisions thereto if any from Government or Statutory bodies or agencies shall be applicable if not explicitly stated above from time to time. It is the responsibility of the bidders to keep updated themselves of the same. The bidders shall submit their offers in compliance.</li></ol>
42	Pre-Qualification Requirement (PQR)	Applicable. Technical Pre-Qualification Requirement (PQR) - As per Tender document Financial Pre-Qualification Requirement (PQR) – <b>Shall be specified later during floating the NIT (Purchase Inquiry)</b>
43	MOU FORMAT	The MOU Format attached with the NIT is tentative. The same will be finalized with the qualified bidders on mutually agreed contract and legal terms and conditions.
44	Tax Deducted at Source (TDS)	This has reference to the newly inserted Section 194Q under Income Tax Act 1961 (applicable w.e.f. 01.07.2021) for deduction of tax at source by a buyer of goods at the time of amount paid or credited for purchase of goods exceeding Rs. 50 lacs.  The gist of the provisions of Section 194Q are as follows: Tax is required to be deducted at source by a purchaser of goods whose turnover for previous FY has exceeded Rs. 10 Crs. The seller should be a resident of India. TDS @ 0.1% shall be applicable on the amount paid /credited in case purchases from a seller exceeds Rs. 50 Lacs during a financial year. In case PAN of seller is not available or seller is a Specified person (Non-filer), TDS shall be deducted @ 5%. This provision shall not be applicable where tax is deductible under any other provision of I.T Act, 1961. Also, in case a particular transaction qualifies for deduction of TDS u/s 194-Q and the purchaser has deducted the TDS then the same transaction shall not attract TCS u/s 206C(1H).



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		<p>W.e.f. 01.07.2021, as per the above-stated provisions of I. Tax Act, 1961, BHEL HAVING PAN : AAACB4146P IS LIABLE TO DEDUCT TAX AT SOURCE UNDER SECTION 194Q OF THE INCOME TAX ACT AND ACCORDINGLY TDS AT APPLICABLE RATE ON THE PRESCRIBED VALUE UNDER SECTION 194Q WOULD BE DEDUCTED UNDER TAN : BLRB04342C BEFORE MAKING PAYMENT FOR PURCHASE OF GOODS.</p> <p>Thus, all the BHEL Partners are requested not to levy TCS w.e.f. 01.07.2021</p>
45	Quote with multiple options	Vendor's can quote for multiple options having different type as per Technical specifications.
46	Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017	<ol style="list-style-type: none"><li>I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.</li><li>II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not failing in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.</li><li>III. "Bidder from a country which shares a land border with India" for the purpose of this Order means:<ol style="list-style-type: none"><li>1. An entity Incorporated, established or registered in such a country; or</li><li>2. A subsidiary of an entity Incorporated, established or registered in such a country; or</li><li>3. An entity substantially controlled through entitles incorporated, established or registered in such a country; or</li><li>4. An entity whose beneficial owner is situated in such a country, or</li><li>5. An Indian (or other) agent of such an entity; or</li><li>6. A natural person who is a citizen of such a country; or</li><li>7. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above</li></ol></li><li>IV. The beneficial <i>owner</i> for the purpose of (iii) above will be as under:<ol style="list-style-type: none"><li>1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.</li></ol></li></ol>



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Explanation-

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

\* The above clause is not applicable to the bidders from those countries (even if sharing a land border with India) to which the Gol has extended lines of credit or in which the Gol is engaged in development projects.

\* List of countries to which lines of credit have been extended or in which development projects are undertaken are available on the Ministry of External affairs website (<https://www.mea.gov.in/>)

Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017 to be submitted on the bidder's letterhead as per Annexure-D(i) or Annexure-D(ii) – as applicable.





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47	Compliance to order No. 25-111612018-PG, Dated 02.07.2020 of Ministry of Power, GOI	Not Applicable
48	Evaluation in case of more than one L-1 bidder	In the course of evaluation, if more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from the respective L-1 bidders. In case more than one bidder happens to occupy the L-1 status even after soliciting discounts, the L-1 bidder shall be decided by a toss / draw of lots, in the presence of the respective L-1 bidder(s) or their representative(s). Ranking will be done accordingly. BHEL's decision in such situations shall be final and binding.
49	Submission of Supplier registration Form	Qualified Bidders shall be required to register with BHEL as per BHEL SEARP guidelines available on <a href="http://www.bhel.com">www.bhel.com</a> and <a href="https://supplier.bhel.in/index.jsp">https://supplier.bhel.in/index.jsp</a> . BHEL shall be entering into TC-MOU with registered suppliers.
50	Quantity Variation	BHEL Reserves the right to plus or minus 30% within contract period. The Purchaser shall have the right to increase or decrease quantities and scope upto the above extent of value and Seller/Contractor shall be bound to accept the same at the contracted prices without any escalation.
51	No Relaxation for MSEs/Start-Ups for PQR criteria provided technical specifications are met:	The Tracker system will serve as the foundation for mounting crucial components within the Solar Power Plant, including Solar PV Modules, dry module cleaning system etc. It is essential to recognize that the quality and longevity of this system directly impact the safety of the other Equipment/workforce operating within the plant premises due to presence of moving parts in the system itself.  Considering the paramount importance of safety measures, it is imperative that the design & Supply of the tracker system be entrusted only to experts with significant experience in the field. Hence in line with the clarification issued by the Department of Expenditure, Ministry of Finance (vide No. F.20-2/2014-PPD(Pt.) dated 27.07.2017), no relaxation regarding prior experience shall be granted to any bidder for this Techno-Commercial MOU and Pre-bid tie up.



TECHNICAL SPECIFICATION FOR DESIGN,  
MANUFACTURING, SUPPLY, INSTALLATION  
AND COMMISSIONING OF TRACKER SYSTEM  
FOR VARIOUS SOLAR PV PROJECTS ACROSS  
INDIA

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**TECHNICAL SPECIFICATION  
FOR  
DESIGN, MANUFACTURING,  
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OF  
TRACKER SYSTEM  
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Revision details: 01	Prepared by: VKC	Checked & Approved by: PM	Date: 04.09.2024
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## **1.0 INTRODUCTION**

The PV modules shall be mounted on metallic structures called Module Mounting Structures (MMS) having adequate strength and appropriate design, which can withstand the load of the modules and design wind pressure. Modules shall be mounted on non-corrosive support structures with Automatic motor powered Realtime East-West tracking. This document describes the technical specification for design, manufacturing, supply, installation and commissioning of Tracker system.

## **2.0 BRIEF SCOPE OF DESIGN, SUPPLY AND WORKS**

### **2.1. DESIGN**

- I. Design, Engineering and approval from End customer of complete Tracker system along with all accessories.
- II. Design of MMS material for Tracker system including foundation design. Foundation design validation by trial pile test at site shall also be conducted by Vendor at site.

### **2.2. SUPPLY OF TRACKER SYSTEM**

- I. Tracker System along with all accessories, tools & Consumables and mandatory spares specified.
- II. Module mounting arrangement and all associated accessories, as applicable.
- III. Any auxiliary requirement of trackers system for regular functioning or maintenance to be supplied.

### **2.3. WORKS & SERVICES:**

- I. Demonstration of erection methodology and supervision of erection during complete erection of Tracking system. Erection works shall be done by BHEL Sub-contractor.
- II. Commissioning, trial run and acceptance test of Tracking system.
- III. Comprehensive AMC of complete Tracker system including all accessories on yearly basis for specified period.

Based on above scope of design, supply and works, a BOM will be prepared for providing quotations during project specific tendering. Detailed specification and scope elaborated in relevant section of the specification and its enclosures which are the integral part of the specification.



**2.4. BHEL SCOPE OF WORK (NOT INCLUDED IN SCOPE OF TRACKER VENDOR):**

- I. Foundation works & Mechanical Installation of Trackers shall be done by BHEL's Subcontractor under supervision of tracker supplier.
- II. Dry Robotic Cleaning system shall be installed by BHEL's another Subcontractor. Tracker system should be compliant with dry robotic cleaning system.
- III. Supply of PV Module by BHEL.

**3.0 PROJECT INFORMATION:**

Will be intimated at the time of inviting project specific tender.

**4.0 SITE SPECIFIC DATA:**

Will be intimated at the time of inviting project specific tender.

**5.0 MANDATORY TECHNICAL REQUIREMENTS/DOCUMENTS TO BE SUBMITTED BY THE BIDDER ALONG WITH TECHNICAL BID:**

- I. Bidder should be a Manufacturer of Tracker System. A self-declaration along with details of manufacturing facilities to be submitted.
- II. Details and drawings of the Trackers being offered to BHEL.
- III. Indicative MQP and FQP of the Tracker System.

**6.0 TECHNICAL SPECIFICATIONS FOR TRACKER SYSTEM**

**6.1. GENERAL**

The Tracker System shall be of proven design capable of tracking Sun's path actively, intended to maximize the energy output from PV Module. Design shall be based in accordance with the site climatic conditions and seismic loads, soil characteristics, thermal loads caused by expected fluctuations of materials and ambient temperatures and the minimum required design wind speed.

**6.2. CODES AND STANDARDS**

The Tracker system must conform to the latest edition of any of the following IEC/ equivalent standards for Tracker system design qualification and type approval.