



ISO 9001-2000,
ISO 140 01-1996
OHSAS 18001-1999

NORTH EASTERN ELECTRIC POWER CORPORATION LIMITED
(A GOVT. OF INDIA ENTERPRISE)
OFFICE OF THE EXECUTIVE DIRECTOR (CONTRACTS & PROCUREMENT)
BROOKLAND COMPOUND, LOWER NEW COLONY
SHILLONG -793003, MEGHALAYA

Website: www.neepco.gov.in Email:- contract_neepco@yahoo.com
PHONE: 91-364 2224582 / 2222 578, FAX: 91 364 2222928

No.: QP/C&P/F/E/Monarchak/Solar/1185/ 1683

Date:11/12/12

To

1. Anubhavamohanty27@gmail.com,
2. prerit@transcendal.com
3. biswanath.hazra@bajajelec.com
4. kaushal.gaur@empireindia.com
5. ananta@senitih.in
6. shrinibashrao.t@lancogroup.com
7. atharva.shah@tbeaindia.com
8. amitavaroy@bhelindustry.com
9. piyandas@waaree.com
10. bdev@statensolar.com
11. metalmoulders@rediffmail.com
12. mktg_bop@tecprosystems.com
13. tenders@unityinfra.com
14. sales.mumbai@empireindia.com
15. chandrani.dutta@vikramsolar.com
16. upasana@godrej.com
17. amittendernews@gmail.com
18. service@macupsnpc.com
19. ulogdeta1@vsnl.net
20. vikramshenoy@sterlingwilson.com
21. riteshrb@sterlingwilson.com
22. princeagromavhinery5@gmail.com
23. barunkumar@gamesacorp.com
24. mespanol@grenergy.eu
25. animeshk@Intecc.com
26. biswajitt2002@yahoo.com
27. shivjyoti@bhelindustry.com
28. chetan.mohindra@lancogroup.com
29. prerit.damani@prime-energy.in
30. kumarankit@kecrpg.com
31. adnaik.umesh@twincity.co.in
32. ashwin@emgeeindia.com
33. m_c_imcc@yahoo.com
34. csdave101@gmail.com
35. tenders@gkcpl.com
36. guwahatioffice@ivrinfra.com
37. gaurav@gnggroup.com
38. info@assampetroleumltd.com
39. sudershan.gupta@jakson.com
40. s.nisheeth@juwi.in
41. Souheil.Sabbagh@na.canadian-solar.ca
42. ra@kohimaenergy.com



ISO 9001-2000,
ISO 140 01-1996
OHSAS 18001-1999

NORTH EASTERN ELECTRIC POWER CORPORATION LIMITED
(A GOVT. OF INDIA ENTERPRISE)
OFFICE OF THE EXECUTIVE DIRECTOR (CONTRACTS & PROCUREMENT)
BROOKLAND COMPOUND, LOWER NEW COLONY
SHILLONG -793003, MEGHALAYA

Website: www.neepco.gov.in Email:- contract_neepco@yahoo.com
PHONE: 91-364 2224582 / 2222 578, FAX: 91 364 2222928

43. tanmay.sinha@tatapowersolar.com
44. doddaharikrishnareddy@gmail.com
45. solarpower@meilgroup.in
46. akash.vora@indosolar.co.in
47. bs@shansolar.com
48. avijit@xlenergy.com

Sub: **Technical Clarification against NIB-71 dated 02/11/2012, EPC contract for setting up of 5 MW Grid Interactive Solar PV Power Project at Monarchak, Tripura.**

Dear Sir,

With reference to the above, please find attached Annexure-I, i.e. NEEPCO's clarification to the queries raised by a prospective bidder in respect of our NIB No 71 dated 02/11/2012 for the EPC contract of 5 MW Grid Interactive Solar PV Power Project at Monarchak, Tripura.

Thanking You,

Yours faithfully,

Sd/-
(N.Chakraborty)
Executive Director
Contracts & Procurement

ANNEXURE-I

Sl.No.	Clause No.	NEEPCO Tender Says	Bidder's Query	NEEPCO's Reply
1	Vol-2, Part-1, General technical information, salient features, page 16 of 25. Sl.No.3	PV module type : Poly crystalline , Max. power rating: 300Wp	Bidder would like to offer modules made of mono crystalline cells of 240Wp or 290Wp. As the performance of these cells are field proven for more years.	Shall be discussed in the pre bid meeting.
2	Vol-3, Schedule of requirement, Section No.2.01, Sl.No.1	Supply of Solar PV Modules consists of around 9 Nos of 500KWp capacity solar array- 9 Nos.	9 Nos of 500KWp array comprises of 4.5MW instead of 5MW which has to be clarified. In the case of inverters, 500KWp can be operated at 555KWp PV array, in that case, 9 such inverters can be comprised to 5MW. But clarity is needed in the case of 9 Nos of 500KWp Solar PV Array.	500KW inverter can be operated at higher output. But bidder may quote better option. Details shall be discussed during pre bid meeting.
3	Vol-4, Tender drawings, Exhibit 6.1	Plant layout is given in PDF	PDF Drawing is not clear. Corresponding ACAD drawing shall be furnished. Then, the equipment placed in unit control rooms will be clearly visible.	This is a tentative drawing for tender purpose. Bidder is required to visit the project site before submitting the bid.
4	Vol-4 Tender drawings, SLD	9 th 500KW inverter is connected to 1.25 MVA transformer	9 th 500KW inverter is being connected to 1.25 MVA transformer. In that case, transformer will be operating at 50% loading which affects efficiency. Hence, for that 9 th inverter, it is suggested to employ 630KVA transformer. Kindly comment on its acceptability.	Shall be discussed in the pre bid meeting.
5	Vol-2, part-3, section-1, Civil Specs, Sl. No. 12.01.00, page 8 of 13	There will be four unit control rooms and one main control room. The main control room shall	Detailed ACAD details (instead of PDF) for the control room shall be furnished.	The drawing enclosed in the bid documents are for tender purpose only. However, Bidder may

		be adequate enough to accommodate one unit control room, switchyard control room, main control panels etc.		optimize and design accordingly.
6	Vol-2, part-2, Section-4, page 14 of 16, 11KV switch gear cubicle, Sl.No. (f).	Class indoor/outdoor	11KV switch gear cubicle shall be mounted, indoor or outdoor as in Vol-3, Sl.No.2.03, it it was given that indoor switch gear and control panel. Hence it is requested to clarify outdoor or indoor.	11 KV switchgear shall be of indoor type.
7	Vol-3, Schedule of requirement, section No.2.04, Sl.No.2	33 KV, 3-phase Isolator with mounting structure – 5 Nos.	But in Vol-4, tender drawings, SLD final, it was shown that 6 Nos of 33KV isolators are there. Please clarify.	1600 Amps, 33 KV, 3 Phase, Isolator with mounting structure as per Particular Technical Speci9fication-5 Nos. And 1600 Amps, 33KV, 3 Phase, Isolator with earth switch with mounting structure as per Particular Technical Specification-2 Nos. Total 7 Nos of isolator are are shown in the SLD.
8	Vol-2, Part-2, section-2, page 2 of 2, sl. No.4.02	Inverter are connected in parallel to the common utility bus. Depending on the magnitude of the Solar power generated, (whichdepends on	Is this means Inverters have to work in master- slave configuration. If so, maximum 2 inverters can be connected as master slave fashion and those two can be sequentially switched ON based on the solar radiation through out them day. Please confirm	Shall be discussed in Pre-bid meeting.

		solar radiation) sequentially inverters are switched ON automatically.	on this.	
9	Vol-2, Part-2, section-2, page 4 of 14, sl. No.5.05	Voltage range of inverters shall be of - 20% to +15%	Generally, most of the inverter manufacturers will give the voltage tolerance of +10% to -10%. This may please be considered.	Shall be discussed in the pre-bid meeting.
10	Vol-2, Part-2, section-2, page 6 of 14, sl. No.6.05	The PCU shall have provision for galvanic isolation.	Does this mean PCU to have built-in isolation transformer?	As per specification.
11	Vol-2, Part-2, section-3, page 4 of 29, sl. No.1.2 (12)	Neutral earthing LV neutral shall be solidly earthed.	If LV neutral of 11KV transformer should be solidly earthed, then neutral grounding resistors (NGR) which were asked in the same tender document will not have any significance. Hence the same can be clarified.	Shall be discussed in the pre-bid meeting.
12	Vol-2, Part-1, salient features Sl.No.4.	Tilt angle (slope) for PV module: 20 degrees.	SPV plant performance will be maximum when the tilt of the structure is at latitude of the site : i.e 23 degrees instead of 20 degrees. This may please be considered.	NEEPCO is concerned about achieving minimum annual generation of 8.322 MU corresponding to 5 MWp installed capacity. Bidder may choose accordingly which tilt angle to be considered.
13	Vol-2, part-1, general technical information, page 2 of 25, sl.No.1.0	Annual Generation of 8.322 MU	According to energy generation simulations done by us, tearly energy generated by the 5 MW plant 23 deg tilt by considering NASA meteorological, is arriving at 7.0 million units. This may please be considered.	Below minimum annual generation of 8.322 MU corresponding to 5 MWp installed capacity is not acceptable. Bid specification shall prevail.

14	Vol-2, part-1, general technical information, page 14 of 25, sl.No.22	Metronome irradiation data for Monarchak	Given data not tallying with data from NASA as per 3.1B. This may please be clarified.	Metronome data has been considered for this project. NASA data is given as a reference data only.
15	Vol-2, Part-2, msection-4, page 3 of 16, sl.No.102 (9)	HT switchgear shall have at least 2 fully equipped spare feeders (one each for highest size of motor / transformer) for any future requirement.	This point may please be clarified regarding two spare feeders in 11 KV switch gear panel.	Can be discussed in pre bid meeting although same has been explained in the specification.