



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN - 01

Ref: PSER:SCT:VIZ-E1121:TCN-01

Date: 30/08/2010

Sub	Tender change notice (TCN) 01.	
Job	Design , Engineering, Procurement, Supply, erection, testing, commissioning and Operation & Maintenance of construction power system & Temporary illumination system package for 2x520 MW HNPCL Thermal Power Project VIZAG, Andhra Pradesh	
Ref	1.0	Tender no PSER:SCT:VIZ-E1121:10.
	2.0	BHEL's NIT, vide reference no Ref: PSER:SCT:VIZ-E1121:10 Dated 21/08/10
	3.0	Other references (if any).

With reference to above , following points , relevant to tender, may please be noted and complied with while submitting offer.

- 1.0 Technical & Commercial modification is attached vide annexure-I to TCN-01.
- 2.0 Price schedule format VOL-III, PRICE SCHEDULE, REV-0 has been revised as VOL-III, PRICE SCHEDULE, REV-01 . Bidders are requested to submit their price in revised format (VOL-III, PRICE SCHEDULE, REV-01) only. Offer from bidders in superseded price schedules shall not be considered. Bidders are requested to furnish a declaration in techno-commercial offer that they have submitted their price bid in sealed envelope as per revised price schedule format (VOL-III, PRICE SCHEDULE, REV-01).
- 3.0 Clarification to bidders query as per Annexure-II to TCN-01
- 4.0 Revised 'No deviation certificate' is attached. Bidder to submit 'No deviation certificate' as per attached format only.
- 5.0 All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD

ENGR (SCT)

Encl

- 1.0 Technical & Commercial modification (annexure-I to TCN-01)
- 2.0 Revised price format as (VOL-III, PRICE SCHEDULE, REV-01)
- 3.0 Clarification to bidders query (Annexure-II to TCN-01)
- 4.0 Revised 'No deviation certificate' format.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960 फोन/Phone : बोर्ड/EPABX : 23211798/ 1691

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
Power Sector - Eastern Region,
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Design , Engineering, Procurement, Supply, erection, testing, commissioning and Operation & Maintenance of construction power system & Temporary illumination system package for 2x520 MW HNPCL Thermal Power Project VIZAG, Andhra Pradesh	
Ref	1.0	Tender no PSER:SCT:VIZ-E1121:10.
	2.0	BHEL's NIT, vide reference no Ref: PSER:SCT:VIZ-E1121:10 Dated 21/08/10
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:VIZ-E1121:TCN-01, dated 30/08/10.
	4.0	Other references (if any).

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized
representative of the bidder)

ANNEXURE-I TO TCN-01

TENDER NO. PSER:SCT:VIZ-E1121:10

(SCHEDULE OF TECHNICAL & COMMERCIAL MODIFICATION)

JOB: Design , Engineering, Procurement, Supply, erection, testing, commissioning and Operation & Maintenance of construction power system & Temporary illumination system package for 2x520 MW HNPCL Thermal Power Project VIZAG, Andhra Pradesh.

1.0 Clause No. 2.2 (SCOPE) of VOLUME-IC&ID of Page 02 of 19 shall be read as follows .

Scope of work and technical specification shall be as per Volume-II (Section-D) of tender for development of Construction Power Network including 33 KV substation as well as operation & maintenance of the said system till completion of the project execution. Rates/ prices are to be quoted as per description of work in Price schedule. The successful bidder shall develop necessary drawing for execution of work at site and obtain / arrange all necessary statutory approvals. The scope covers broadly the following.

The bidder's scope shall include

1) design, engineering, development of all necessary drawings / schemes, obtaining all necessary statutory approvals, procurement and supply of all necessary equipment / items for the system on FOR/Site delivery basis including Erection & Commissioning spares , Maintenance Tools & Tackles , Mandatory Spares (Detailed below at Sl. No. 9) in complete (except 2 nos. 33/11kV transformers and 10 nos. 30 m high Lighting Mast which shall be provided by BHEL as free issue item), all civil foundation for equipments/items as required for transformers, panels, protecting equipments, Tower, Pole etc and 33/11 kV substation building, 11/415V sub-station covered under the scope of work and including supply of all civil materials etc. Preparation of necessary Civil drawings is also in the scope of the bidder as applicable, installation including, testing & commissioning and putting into service, the total construction power network consisting of 33/11 KV transformers, 33 kV substation, 11 kV ring-main system, 11KV/415V step down transformers, LT distribution boards (440 V), with all necessary rail poles, wires, insulators, hardware, isolators, circuit breakers, protection panels, metering equipment, HT/LT cables, conductors etc. general illumination system during construction , tower lighting (approximately 10 nos. lighting mast), temporary pole lighting, temporary lights at different floors/ areas till the permanent illumination system is established (IS or any other standard to be referred to),at the Lumpsum Price quoted by the bidder and accepted by BHEL under SCH 2 (Sl. No. 1.1) & SCH 3 (Sl.No - '1.2.1)

2) Providing approximately 6 portable lighting towers with DG back-up on hiring basis for initial period till the construction power network is established/ permanent illumination system is established at the rate quoted & accepted under SCH-3 (Sl.No-- '1.2.2.1 & Sl.No-- '1.2.2.2)

3) Providing 1 (one) no. of portable DG set having capacity 60-65 KVA as per BOQ (VOL-III , PRICE SCHEDULE) under schedule SCH-3 (Sl.No-- '1.2.3 & 1.2.4)

4) Subsequently Operation and maintenance of total construction power network consisting of 33/11 KV transformers, 33 kV substation, 11 kV ring-main system, 11KV/415V step down transformers, LT distribution boards (440 V), with all necessary rail poles, wires, insulators,

ANNEXURE-I TO TCN-01

TENDER NO. PSER:SCT:VIZ-E1121:10

(SCHEDULE OF TECHNICAL & COMMERCIAL MODIFICATION)

hardwares, isolators, circuit breakers, protection panels, metering equipment, HT/LT cables, conductors etc. general illumination system during construction , tower lighting (approximately 10 nos. lighting mast), temporary pole lighting, temporary lights at different floors/ areas till the permanent illumination system is established (IS or any other standard to be referred to).For regular day to day as well as breakdown maintenance of the entire system for initial period of 30 months from the date of completion of construction power system as described above on round the clock basis, necessary provision for experienced supervisor, licensed electrician, helper, T&Ps etc.,replacement /rectification of item & components to restore the system for making the system operational (except the items as specified under SCH-4 against Sl.No. 1.3.2.1 to Sl.No. 1.3.2.3) is to be made by the contractor within the lumpsum Price quoted by the bidder and accepted by BHEL under SCH 4 (Sl. No. 1.3.1)(The date of completion of Power system shall be as certified by BHEL site engineer)

5) The bidder scope also includes obtaining necessary approvals from statutory authorities before

6) During extension, if any, as required for the project and granted by BHEL, separate rate for Operation and maintenance is to be quoted as per the Vol-III, Rate schedule.(SCH-5)

7) During the maintenance period, the contractor shall also provide all necessary spares including transformer oil etc for the system, as required, on actual reimbursement basis/BHEL supplied items as free issue.

8) The scope mentioned above is a brief guidance and not exhaustive. For detail scope SCC of tender document shall be referred.

9) MANDATORY SPARES (To be supplied by bidder within the lumpsum quoted price at sl. 1.0 of MAIN PRICE SCHEDULE. No separate payment shall be admissible):

Description of item	Quantity
Pin type Insulator	50 NOS
Disc Type Insulator	50 NOS
AB Switch	1 LOT
Lighting Arrestor	3 NOS
Fuses (For each type/rating /size ; 10% of the total Quantity supplied)	1 LOT
HT cable joining Kit (For each type/rating /size ; 10% of the total Quantity supplied)	1 LOT
Cable lug(For each type/rating /size ; 10% of the total Quantity supplied)	1 LOT

ANNEXURE-I TO TCN-01
TENDER NO. PSER:SCT:VIZ-E1121:10
(SCHEDULE OF TECHNICAL & COMMERCIAL MODIFICATION)

D2 .

- d.1) For further extension, if any, as required for the project and granted by BHEL, BHEL reserves the right to exercise monthly charges as per Optional item rate of Vol-III . These services shall be available on round the clock basis. Necessary provision for experienced supervisor, licensed electrician, helper, T&Ps etc. to be made.
- d.2) During the maintenance period, the contractor shall provide all necessary spares, fuses, cable gland / lugs, lamps, cables including transformer oil etc for the system, as required. Payment for the same shall be made on actual basis/OR same shall be supplied by BHEL as free issue item.

However, if requirement of such spares is necessitated due to the fault of the contractor, the same shall have to be supplied by the contractor on their own cost within the quoted rate.

All other terms under scope (2.2.1 to 2.3) shall remain unchanged.

2.0 Clause No. 2 (BRIEF SCOPE OF SUPPLY & SERVICES) of VOL-II (TECHNICAL SPECIFICATION) of Page 02 of 08 shall be read as follows .

Scope of work and technical specification shall be as per Volume-II (Section-D) of tender for development of Construction Power Network including 33 KV substation as well as operation & maintenance of the said system till completion of the project execution. Rates/ prices are to be quoted as per description of work in Price schedule. The successful bidder shall develop necessary drawing for execution of work at site and obtain / arrange all necessary statutory approvals. The scope covers broadly the following.

The bidder's scope shall include

- 1) design, engineering, development of all necessary drawings / schemes, obtaining all necessary statutory approvals, procurement and supply of all necessary equipment / items for the system on FOR/Site delivery basis including Erection & Commissioning spares , Maintenance Tools & Tackles , Mandatory Spares (Detailed below at Sl. No. 9) in complete (except 2 nos. 33/11kV transformers and 10 nos. 30 m high Lighting Mast which shall be provided by BHEL as free issue item), all civil foundation for equipments/items as required for transformers, panels, protecting equipments, Tower, Pole etc and 33/11 kV substation building, 11/415V sub-station covered under the scope of work and including supply of all civil materials etc. Preparation of necessary Civil drawings is also in the scope of the bidder as applicable, installation including, testing & commissioning and putting into service, the total construction power network consisting of 33/11 KV transformers, 33 kV substation, 11 kV ring-main system, 11KV/415V step down transformers, LT distribution boards (440 V), with all necessary rail poles, wires, insulators, hardware, isolators, circuit breakers,

ANNEXURE-I TO TCN-01

TENDER NO. PSER:SCT:VIZ-E1121:10

(SCHEDULE OF TECHNICAL & COMMERCIAL MODIFICATION)

protection panels, metering equipment, HT/LT cables, conductors etc. general illumination system during construction , tower lighting (approximately 10 nos. lighting mast), temporary pole lighting, temporary lights at different floors/ areas till the permanent illumination system is established (IS or any other standard to be referred to),at the Lumpsum Price quoted by the bidder and accepted by BHEL under SCH 2 (Sl. No. 1.1) & SCH 3 (Sl.No - '1.2.1)

2) Providing approximately 6 portable lighting towers with DG back-up on hiring basis for initial period till the construction power network is established/ permanent illumination system is established at the rate quoted & accepted under SCH-3 (Sl.No-- '1.2.2.1 & Sl.No-- '1.2.2.2)

3) Providing 1 (one) no. of portable DG set having capacity 60-65 KVA as per BOQ (VOL-III , PRICE SCHEDULE) under schedule SCH-3 (Sl.No-- '1.2.3 & 1.2.4)

4) Subsequently Operation and maintenance of total construction power network consisting of 33/11 KV transformers, 33 kV substation, 11 kV ring-main system, 11KV/415V step down transformers, LT distribution boards (440 V), with all necessary rail poles, wires, insulators, hardwares, isolators, circuit breakers, protection panels, metering equipment, HT/LT cables, conductors etc. general illumination system during construction , tower lighting (approximately 10 nos. lighting mast), temporary pole lighting, temporary lights at different floors/ areas till the permanent illumination system is established (IS or any other standard to be referred to).For regular day to day as well as breakdown maintenance of the entire system for initial period of 30 months from the date of completion of construction power system as described above on round the clock basis, necessary provision for experienced supervisor, licensed electrician, helper, T&Ps etc.,replacement /rectification of item & components to restore the system for making the system operational (except the items as specified under SCH-4 against Sl.No. 1.3.2.1 to Sl.No. 1.3.2.3) is to be made by the contractor within the lumpsum Price quoted by the bidder and accepted by BHEL under SCH 4 (Sl. No. 1.3.1)(The date of completion of Power system shall be as certified by BHEL site engineer)

5) The bidder scope also includes obtaining necessary approvals from statutory authorities before

6) During extension, if any, as required for the project and granted by BHEL, separate rate for Operation and maintenance is to be quoted as per the Vol-III, Rate schedule.(SCH-5)

7) During the maintenance period, the contractor shall also provide all necessary spares including transformer oil etc for the system, as required, on actual reimbursement basis/BHEL supplied items as free issue.

8) The scope mentioned above is a brief guidance and not exhaustive. For detail scope SCC of tender document shall be referred.

9) MANDATORY SPARES (To be supplied by bidder within the lumpsum quoted price at sl. 1.0 of MAIN PRICE SCHEDULE. No separate payment shall be admissible):

Description of item	Quantity
Pin type Insulator	50 NOS

ANNEXURE-I TO TCN-01
TENDER NO. PSER:SCT:VIZ-E1121:10
(SCHEDULE OF TECHNICAL & COMMERCIAL MODIFICATION)

Disc Type Insulator	50 NOS
AB Switch	1 LOT
Lighting Arrestor	3 NOS
Fuses (For each type/rating /size ; 10% of the total Quantity supplied)	1 LOT
HT cable joining Kit (For each type/rating /size ; 10% of the total Quantity supplied)	1 LOT
Cable lug(For each type/rating /size ; 10% of the total Quantity supplied)	1 LOT

D2 .

- d.1) For further extension, if any, as required for the project and granted by BHEL, BHEL reserves the right to exercise monthly charges as per Optional item rate of Vol-III . These services shall be available on round the clock basis. Necessary provision for experienced supervisor, licensed electrician, helper, T&Ps etc. to be made.
- d.2) During the maintenance period, the contractor shall provide all necessary spares, fuses, cable gland / lugs, lamps, cables including transformer oil etc for the system, as required. Payment for the same shall be made on actual basis/OR same shall be supplied by BHEL as free issue item.

However, if requirement of such spares is necessitated due to the fault of the contractor, the same shall have to be supplied by the contractor on their own cost within the quoted rate.

3.0 All other terms shall remain unchanged.

ANNEXURE-II TO TCN-01
TENDER NO. PSER:SCT:VIZ-E1121:10
(CLARIFICATION TO BIDDER'S QUERY)

JOB: Design , Engineering, Procurement, Supply, erection, testing, commissioning and Operation & Maintenance of construction power system & Temporary illumination system package for 2x520 MW HNPCL Thermal Power Project VIZAG, Andhra Pradesh .

SL. NO.	BIDDER'S QUERY	BHEL CLARIFICATION
01	Equipments / items supplied other than our scope of supply, we shall not be responsible due to which site work will be delayed (Such as readiness of sites, delayed / defective / during testing / supply of 2Nos. 33/11KV, Power Transformer, 10Nos. of Lighting Mast or any other equipments which will be supplied by BHEL).	Delay in site work due to delay in supply of equipments/items other than those supplied by bidder shall not be attributable to the bidder
02	Delay due to getting clearance / approvals from the concerned agencies (Such as Forest Dept., Pollution Board, State Electricity Boards etc.) related to project requirement, we shall not be responsible, for that.	BHEL/HNPCL to provide clear land for installation of construction power . Approval from all statutory agencies is in bidder's scope
03	During work at site, if we have to clear / excavation of land / roads and again reinstall that job in proper working condition (such as passing underground cable / water pipes, telephone wire etc), hence delay due to these reasons, we can not be made responsible for that.	Since it is a greenfield project ,no such problem of delay due excavation etc is envisaged
04	In tender you have mentioned tentatively 17 Nos. of 11/0.440KV, 500KVA Distribution transformer, but there are 16 Locations for these substation Transformers, Kindly clarify it.	There shall be 16 Nos ,11/0.433 KV ,500KVA ,transformers in all .
05	In tender there are two option for selection of Circuit Breaker (SF6 & VCB) for 33KV side of Transformer. Kindly let us know which Breaker has to be installed at site.	Circuit breaker shall be Vacuum Circuit Breaker for 33KV side of transformer
06	You have mentioned that suitable rating Circuit Breakers have to be installed at each working site (11/0.440 Substation) towards protection of our manpower working at site.	AB switch ,DO fuse assembly to be installed near each 11/0.433KV transformer points
07	Kindly specify the total length of Ring Main System	Description of ring main is tentative .There is no seperate BOQ for the same .Bidder to ascertain the same with Plot Plan drawing .
08	Material should not be asked to be replaced F.O.C in an event of damage due to construction activity.	Responsibility vis a vis damage of various items/equipments of Construction Power lies with the bidder until commissioning of the system .

**VOLUME-III
PRICE SCHEDULE, REV-1**

**DESIGN, ENGINEERING, PROCUREMENT, SUPPLY, ERECTION, COMMISSIONING ETC , OPERATION
AND MAINTENANCE OF CONSTRUCTION POWER SYSTEM AND TEMPORARY ILLUMINATION
SYSTEM FOR 2x520 MW TPP HNPCL VIZAG PROJECT**

TENDER DOCUMENT NO - PSER:SCT:VIZ-E1121:10

PREAMBLE

01	This preamble forms part of tender document and schedule of items. The tenderer should read this preamble carefully in rates for various items. Clauses under this preamble shall be read in conjunction with Volume-IA, Volume-IB, Volume-IC, Volume-ID, Volume-II together with subsequent changes/modifications etc thereto as applicable as on date of submission of price offer.
02	The work shall be carried out strictly as per specifications, description of the items in these schedule and / or engineer's instructions.
03	Items of work provided in this schedule but not covered in this specification shall be executed strictly as per instruction of the engineer.
04	Unless specifically mentioned otherwise in the tender document, the tenderer shall quote for the finished items and shall provide for the complete cost towards power, fuel, tools, tackles, equipment, constructional plants, temporary works, labour, dismantling of all temporary piping, structures, valves, pumps, tanks & other misc equipment, strengthening of roads/culverts/bridges etc including arranging all clearances etc required for carrying out different activities & tests, materials, levies, taxes, transport, layout, repairs, rectification, maintenance till handing over, supervisions, colonies, shops, establishments, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to the tender document and this schedule.
05	The rates quoted shall be inclusive of cleaning of site of any vegetation, dressing and leveling etc including fixing of grid pillars, benchmarks etc required for commencement of site activities. No separate payment will be made towards the same.
06	Rates shall be quoted in figures and in words in clear legible writing. No overwriting is allowed. All scoring and cancellations should be countersigned and in case of illegibility the interpretation of engineer shall be final. All entries shall be in English.
07	The tender shall be deemed to have visited site and made himself aware of all the site conditions, studied the specifications and details of work to be done within the time schedule attached and to have acquainted himself of the conditions prevailing at site.
08	Engineer's decision shall be final and binding on the contractor regarding clarification of items in the schedule with respect to the other sections/volumes of the contract.

**VOLUME-III
PRICE SCHEDULE, REV-1**

DESIGN, ENGINEERING, PROCUREMENT, SUPPLY, ERECTION, COMMISSIONING ETC , OPERATION AND MAINTENANCE OF CONSTRUCTION POWER SYSTEM AND TEMPORARY ILLUMINATION SYSTEM FOR 2x520 MW TPP HNPCL VIZAG PROJECT

TENDER DOCUMENT NO - PSER:SCT:VIZ-E1121:10

SCH-1 : MAIN PRICE

SL NO	DESCRIPTION	TOTAL PRICE
1.0	Total prices for supply part & service part together as Specified, Comprising design, engineering, procurement, inspection & Testing at manufacturers works, duly packed for transportation, supply , delivery to site, including freight, , receipt at site , unloading, storage & handling at site, erection & commissioning, Operation and maintenance including Supply of Mandatory spares , Erection & Commissioning spares , Maintenance tool & tackles of complete 'Construction Power system and temporary illumination system' as detailed in the SCC and Technical Specification including all taxes, duties etc. for 2x520 MW TPP HNPCL Vizag project. (Above Price shall exclude supplies required for Operation & Maintenance)	
Note		
1	Bidder to note that total price indicated above at 1.0 shall be considered for evaluation as such, shall be complete in all respect for the full scope defined and considering all terms & conditions.	
2	Bidder shall furnish further break-up of above total price(SCH 1) into supply part, service part and O&M part in SCH-2.Bidder shall furnish further break-up of service part in SCH-3 .Bidder shall shall further break up of operational & maintenance part in SCH 4.	
3	Bidder shall furnish ED (Excise Duty), ST, VAT components in various schedules of Price Schedule as per tender provision only.	
4	Any item as per scope of work if not included in price quoted above & shown separately will not be taken cognizance of and offer shall be liable for rejection.	
5	The bidder shall furnish quote/rates for Optional items separately under SCH 5.Bidder's quoted rates/ prices under SCH 5 for optional items shall not be considered for evaluation of bid and the same shall be valid till contract completion. In case the contract gets extended beyond the contractual completion period, BHEL reserves the right to exercise these optional items .	
6	The quantity of variable items is likely to vary during execution mainly due to actual requirement etc necessitating change in quantities of variable items as above. The unit rates quoted & accepted by BHEL shall be considered and no separate unit rates shall be quoted. Unit rates shall be valid throughout the contract. Bidder to note that BHEL reserve the right to rationalize the rates quoted by L-1 bidder against variable items and optional item with respect to item-wise lowest rates (amongst the participating bidders), before placement of order.	

**VOLUME-III
PRICE SCHEDULE, REV-1**

DESIGN, ENGINEERING, PROCUREMENT, SUPPLY, ERECTION, COMMISSIONING ETC , OPERATION AND MAINTENANCE OF CONSTRUCTION POWER SYSTEM AND TEMPORARY ILLUMINATION SYSTEM FOR 2x520 MW TPP HNPCL VIZAG PROJECT

TENDER DOCUMENT NO - PSER:SCT:VIZ-E1121:10

SCH-2: MAIN PRICE BREAK UP

SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	QUOTED PRICE (Rs)					TOTAL PRICE
		BASIC PRICE	ED (If any, as per tender provision)	ST (If any, as per tender provision)	VAT (If any, as per tender provision)	FREIGHT	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(3+4+5+6+7)
1.1	Lumpsum price for design, engineering, procurement, inspection & Testing, supply , transportation to site , including freight, delivery to site includig supply of Mandatory spare , Erection & Commissioning spare , Maintenance tools & tackles for complete construction power system and temporary Illumination system as detailed in the SCC and technical specification . <i>(Above price excludes supplies required for operation and maintenance)</i>						
1.2	Total price for receipt at site , unloading, erection (Including associated civil works), commissioning etc. of entire construction power system and temporary illumination system as detailed in SCC and Technical specification.The break up specified under SCH-3.		NA	NA	NA	NA	
1.3	Total Price for operation and maintenance of entire construction power system and temporary illumination system as detailed in SCC and Technical specification. and erection & commissioning of miscellaneous items as specified under SCH-4		NA	NA	NA	NA	
1.4	TOTAL						
NOTE	Total at sl. no. 1.4 should match with sl. no. sl. no. 1.0 of Main Price Schedule.						

VOLUME-III					
PRICE SCHEDULE, REV-1					
DESIGN, ENGINEERING, PROCUREMENT, SUPPLY, ERECTION, COMMISSIONING ETC , OPERATION AND MAINTENANCE OF CONSTRUCTION POWER SYSTEM AND TEMPORARY ILLUMINATION SYSTEM FOR 2x520 MW TPP HNPCL VIZAG PROJECT					
TENDER DOCUMENT NO - PSER:SCT:VIZ-E1121:10					
SCH-3: SERVICE PRICE BREAK UP					
SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	QUANTITY		RATE (Rs)	AMOUNT (Rs)
(1)	(2)	(3)		(4)	(5)=(3)x(4)
1.2	PRICE BREAK UP OF SL. NO. 1.2 OF SCH-2				
1.2.1	Lumpsum price for receipt, unloading, erection (Including associated civil works), commissioning of entire construction power system and temporary illumination system as detailed in SCC and Technical specification.(except Hiring of Portable Lighting Tower with in-built DG set power back up).	1	Lot		
1.2.2	Hiring charges of portable Lighting Tower with in-built DG set power back up . (These towers shall be of 30 ft. height, noiseless, have 4x1000W metal halide lights, with Fuel tank capacity of 8 hrs. duty cycle, complete with panels, self starter for DG set, manual winch etc.)				
1.2.2.1	Monthly Hiring charges for each Lighting Tower with DG set. (Total approx. Tower months has been calculated considering 6 nos. towers for 3 months.	18	TOWER - MONTHS		
1.2.2.2	Fuel, lubricant etc.CHARGES per tower per hour. (Total approx. running Hr. has been calculated considering 6 nos. towers, 6 hrs. per working day of 30 days in a month for 3 Months. Payment shall be made as per actual total running hours of all the towers deployed on monthly basis. For example, say, during first month, Tower1 run for 6 hrs., Tower2 run for 4 hrs., Tower3 run for 8 hrs, Tower4 run for 0 hrs., Tower5 run for 2 hrs., and Tower6 run for 0 hrs., then the total running hour shall be calculated as 6+4+8+0+2+0 = 20 running hours.)	3240	RUNNING HRS.		
1.2.3	Hiring of portable DG set having capacity 60-65 KVA complete with all electrics/output terminal , operator/manpower for running of DG expected 10 HR/Day for office illumination , AC and other works. After completion of job constructor will take away DG Set alongwith installation and clean site.(excluding supply of fuel & lubricants)	5	Month		
1.2.4	Running of aboveDG set under sl no. 7(a) by Supply of fuel ,lubricants ,spare parts,consumables required for running the above hired DG set (expected 10 HR/Day for illumination ,for AC and other works).	1500	Running Hour of DG set		
1.2.5	TOTAL (in Rs.)				
NOTE	Total at sl. no. 1.2.5 should match with total at sl. no. 1.2 of Main Price Break Up Schedule.				

VOLUME-III					
PRICE SCHEDULE. REV-1					
DESIGN, ENGINEERING, PROCUREMENT, SUPPLY, ERECTION, COMMISSIONING ETC , OPERATION AND MAINTENANCE OF CONSTRUCTION POWER SYSTEM AND TEMPORARY ILLUMINATION SYSTEM FOR					
2x520 MW TPP HNPCL VIZAG PROJECT					
TENDER DOCUMENT NO - PSER:SCT:VIZ-E1121:10					
SCH-4: OPERATION & MAINTENANCE BREAK UP					
SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	UNIT	QUANTITY	RATE (Rs)	TOTAL PRICE (Rs)
(1)	(2)	(3)	(4)	(5)	(5)=(3)x(4)
1.3	PRICE BREAK UP OF SL. NO. 1.3 OF SCH-2				
1.3.1	Lumpsum price for operation & maintenance of entire construction power system and temporary illumination as detailed in the SCC and technical specification	Lumpsum	1		
1.3.2	Erection commissioning of following items				
1.3.2.1	Laying, Dressing, Termination & commissioning of any HT cable (cable & accessories to be supplied by BHEL)	Meter	1000		
1.3.2.2	Laying, Dressing, Termination & commissioning of any LT cable (cable & accessories to be supplied by BHEL)	Meter	3000		
1.3.2.3	Uprooting , shifting & fixing of installed rail / concrete pole	Each	20		
1.3.3	TOTAL (in Rs.)				
NOTE					
1.0	Total price at 1.3.3 should match with total at sl. no. 1.3 of Main Price Break Up Schedule.				
2.0	The amount quoted and accepted under sl. no. 1.4.1 shall be payable in 30 equal installment after start of operation and maintenance period as O & M charges , upon satisfactory performance and tender terms.				
3.0	The quantity under sl no. 1.4.2.1 , 1.4.2.2, 1.4.2.3 may vary to any extent as per condition of SCC , Technical specification and tender terms				

VOLUME-III PRICE SCHEDULE, REV-1			
DESIGN, ENGINEERING, PROCUREMENT, SUPPLY, ERECTION, COMMISSIONING ETC , OPERATION AND MAINTENANCE OF CONSTRUCTION POWER SYSTEM AND TEMPORARY ILLUMINATION SYSTEM FOR 2x520 MW TPP HNPCL VIZAG PROJECT			
TENDER DOCUMENT NO - PSER:SCT:VIZ-E1121:10			
SCH5: OPTIONAL PRICE			
SL NO	DESCRIPTION	UNIT	ALL INCLUSIVE RATE/ PRICE (Rs)
	OPTIONAL ITEM (NOT TO BE CONSIDERED FOR EVALUATION)		
2.0	O&M of Construction Power & temporary Illumination system in extended period beyond contractual completion period		
2.1	Supervisor experienced in 33/ 11KV substation & overhead line maintenance (on lumpsum monthly pay basis, with paid weekly off & 10 + 2 (optional) holidays in a calender year.	MAN-MONTH	
2.2	Skilled electrician having experience in 33/ 11KV substation & overhead lines (minimum 5 years experience or ITI with one year experience) alongwith necessary tools, insulation tapes as required for the work [8 hrs shift per day, with paid weekly off & 10 + 2 (optional) holidays in a calender year].	MAN-MONTH	
2.3	Semiskilled electrician/ helper (minimum 3 years experience) alongwith necessary hand tools & miscellaneous consumables like insulation tape/ emery papers/ drill bits etc as required for the work [8 hrs shift per day, with paid weekly off & 10 + 2 (optional) holidays in a calender year].	MAN-MONTH	
2.4	Unskilled helper alongwith hand tools as required for the work [one shift of 8 hrs per day, with paid weekly off & 10 + 2 (optional) holidays].	MAN-MONTH	
NOTE	1) Bidder's quoted rates/ prices for above optional items shall not be considered for evaluation of bid and the same shall be valid till contract completion. In case the contract gets extended beyond the contractual completion period, BHEL reserves the right to excercise these optional items .		
	2) BHEL reserve the right to rationalize the rates quoted by L-1 bidder against optional item with respect to item-wise lowest rates (amongst the participating bidders), before placement of order.		