

To

M/S Jyoti Structures Ltd,
Valecha Chambers, 5th/6th Floor,
New Link Road, Oshiwara, Andheri (West),
Mumbai-400053
Fax: 022-56915014-15, 0175-2203621

Sub: Detailed award of contract for optimisation, design, engineering, manufacture, supply, transportation, storage, handling of all the material, for the construction of 220 KV, double circuit transmission line from Kashang to Bhaba on turnkey basis against tender specification No. DDT-251/2004. – Supply of material (First contract)

This has reference to the following:

- i) Bid document No.DDT-251/2004 for the subject cited package followed by corrigendum slip No. 1,2,3 & 4 issued vide this office letter No. HPSEB/DDT-251(Gen)/ 2004-1634-38 dated 31.5.04, 1822-27 dated 11.6.04, 1975-80 dated 21.6.04 & even No. 2049-54 dated 24.6.2004.
- ii) Your offer No. JS9/T950/151 dated 8.7.2004.
- iii) Our fax messages/letter Nos. for post bid clarifications:-
 - a) HPSEB/DDT-251(Gen)/ 2004-2669-70 dated 7.8.2004
 - b) HPSEB/DDT-251(Gen)/ 2004-2720-21 dated 13.8.2004
 - c) HPSEB/DDT-251(Gen)/ 2004-3392 dated 28.9.2004
 - d) HPSEB/DDT-251(Jyoti)/ 2005-1786 dated 17.4.2005
- iv) Clarification/confirmation furnished by you vide your letter Nos:-
 - a) No. JS9/T950/231 dated 14-08-2004
 - b) No. JS9/T950/264 dated 21-08-2004
 - c) No. JS9/T950/343 dated 29-09-2004
 - d) No. JS9/T950/359 dated 9-10-2004
 - e) No. JS9/T950/camp Shimla-1 dated 10.01.2005
 - f) No. JS9/T950/698 dated 2-03-2005
 - g) No. JS9/T950/854 dated 18-05-2005

Dear Sirs,

In continuation to this office notification of award of contract vide No. HPSEB/DDT-251(Jyoti)/2005-1184-89 dated 21.3.2005 and your acceptance vide your letter Nos. JS9/T950/784 dated 6.4.05. I have been authorized to intimate you that your above referred offer against this office Tender Specification No. DDT-251/2004 for the construction of 220 KV, double circuit transmission line from Kashang to Bhaba on turnkey basis has been accepted. The scope of this contract includes optimisation, design, engineering, manufacture, supply, transportation, storage, handling of all the material required for the construction of said line at the prices as per detailed abstract of cost (Annexure-I). We have also awarded the work for check survey, optimisation, engineering, transportation, storage, handling of all the material, foundation casting, revetments, tower erection, stringing, sagging, testing and commissioning of said line vide award No HPSEB/DDT-251(Jyoti)/2005-2451-08... dated 06-06- 2005 (hereinafter referred to as the second contract). The contractor shall also be fully responsible for the works to

executed under the 'second contract' and it is expressly understood and agreed that any breach under the second contract shall automatically be deemed as a breach of this (first contract) and vice-versa. The main abstract of cost is as under:

S.No	Description	Amount(Rs.)	Remarks
1	Tower & tower accessories	130708629.00	As per item Nos. A (1 to 8) of Anx.-I
2	Conductor & Groundwire	78654640.00	As per item Nos.B (i to iii) of Anx.-I
3	Disc Insulators	24634544.00	As per item Nos.C (i to iii) of Anx.-I
4	Hardware fittings	10073627.00	As per item No. D (i to x) of Anx.-I
	Total (Rs.)	24,40,71,440.00	
	Less discount (Rs.)	35,00,000.00	
	G. Total (Rs.)	24,05,71,440.00	

The detailed price schedule is given at Annexure-'I'

The total amount of Rs. 24,05,71,440/- is inclusive of excise duty, central sales tax, freight & transit insurance charges (detail as per Annexure-I) and taking into account the effect of discount amounting to Rs 35,00,000/- given by the firm during negotiation of rates. The amount of discount, Rs 35, 00,000/- shall be deducted from the supply bills of the firm @ Rs 5,00,000/- progressively. The above amount excludes any statutory variation in excise duty, sales tax and other taxes ,duties, levies and also any additional taxes and duties due to the introduction of VAT by the central/local government, the same shall be paid as per actual on the production of documentary evidence.

The bifurcation of taxes and duties for bought out items in pursuant to clause No. 3.58 of general conditions of contract and as agreed by the firm has not been furnished by the firm, hence the same could not be mentioned in the detailed price schedule. However the payment of taxes & duties in respect of bought out items will be deducted and shall be released only on the production of documentary proof.

NOTE:

The firm has requested to waive off the condition of production of documentary evidence for taxes and duties in respect of bought out items which will be taken up separately with the Board if it is supported with authenticated documents by the firm and the amendment in the award shall be issued separately, if agreed by the SPC/WTM of the Board.

The other terms and conditions are detailed below.

TERMS AND CONDITIONS:

1. CENTRAL SALES TAX (C.S.T.)

Central Sales tax shall be paid wherever applicable as per actual on production of documentary evidence at the time of supply of material. The present rate of Central sales Tax is 4%.

The HPSEB, hereinafter called the Board is registered as dealer under the central Sales Tax Act. Form "C" will be issued by the consignee on receipt of the material in full and good condition. The following certificates shall be included with the every invoice claiming C.S.T.

- a) Certified that the transaction on which tax has been claimed has been /will be included in the return submitted/to be submitted to the Sales tax authorities for the assessment of the sales tax and amount claimed from the Board has been/shall be paid to the sales tax authorities.
- b) Certified that the goods on which Sales tax has been charged have not been exempted under central Sales Tax act or the Rules made here under and the charges on account of Sales Tax on these goods are correct under the provisions of the relevant Act or Rules made hereunder.
- c) Certified that we shall indemnify the Board in case it is found at a later stage that wrong or incorrect payments have been received on account of the Sales tax paid by us.
- d) Certified that we are registered as dealer under the Central Sales Tax and our registration No. is

2. **FREIGHT AND INSURANCE**

The material under supply shall be dispatched on freight paid basis duly insured. The Freight and Insurance charges to be paid by the Board have been indicated in the Annexure-I (detailed abstract of cost). The insurance of material at site and other services shall be governed by the relevant clauses of the specification.

3. **EXCISE DUTY**

The excise duty will be paid on Ex-works as per actual wherever applicable at the time of supply on the production of documentary evidence as per clause 3.58 of general conditions of contract and detail as per Annexure-1 (detailed abstract of cost). At present the Excise Duty @ 16.0 % is applicable

4. **PRICES:**

The prices shall be applicable as per unit rates for the various items. The prices for complete material are firm and no price variation is permissible.

5. **MODVAT BENEFIT**

Since the firm has passed on the 'MODVAT BENEFITS' to Board in interpretation of clause No.3.58.3 Section-III, volume-I of the tender documents for the material, wherever excise duty is applicable, the Ex-works prices have been reduced to the extent of benefits passed on and no claim on account of revision of Modvat structure shall be payable/deductible....

CERTIFICATE

"It is certified that we have examined the records/books of accounts of M/..... with reference to the tender documents submitted by them against purchase order HPSEB.No./DDT-251 (Jyoti)/2005-----dated ----- and confirm that the firm has already taken into account the element of 'MODVAT' benefit.

6.

COMPLETION TIME/DELIVERY PERIOD

Subject to any requirement in the contract as to completion of any section of the works before completion of the whole, the whole of the work shall be completed in accordance with schedule -E-5 of part-V, volume-II as amended proportionately/accordingly as detailed below within the time stated in the contract calculated from the last day of the period specified in above schedule as that within which the works are to be completed or such extended time as may be allowed under sub-clause 3.29.2 hereof.

S.No	Description of work	Time in months from the detailed award of work.	
		Start	Completion
A	Supply of Material:		
1	Stub, stub setting template and earthing material for all type of tower i/c nuts and bolts:	2	7
2	Super structures including extensions, tower accessories and nuts & bolts :	6	10
3.	Disc insulators and Hardware fittings :	7	11
4.	Conductor and Earthwire and its accessories:	7	12
B.	Construction Activity		
1.	Check Survey	0.5	3
2.	Stub setting and foundation work.	3	10
3.	Tower erection.	7	12
4.	Stringing and sagging	9	14
5.	Revetments.	4	15
6.	Earthing of towers	5	12
7.	Testing and Commissioning.	14	15

* *The supply of material shall be so arranged that there is no mismatch between procurement of material and erection and in a manner approved by the purchaser.*

The firm would strictly adhere to the schedules E-1, E-3, and E-4 of Technical Specifications, volume-II under the heading Schedule for submission /approval of Drawings.

The firm would complete its supply as per above schedule from the date of detailed award of order. In case the firm submit drawings and designs earlier, the same would be accepted if the firm wishes to supply these designs/drawings in anticipation of the dates prescribed in the specifications.

The requirement of material has been worked out on the basis of detailed survey carried out by the HPSEB which is tentative. The firm shall supply the sag tension charts and sag template alongwith tower spotting data as per clause No. 1.9.7.3 of Technical specification, Part-I, Volume-II immediately after the placement of order. The exact requirement of towers shall be worked out by the firm after the check survey and shall submit final tower schedule for the approval of the purchaser in pursuant to clause 2.3 of Part-V, Volume-II of Technical specification.

The firm shall carry out the weight span calculations and tower location schedules of the line for working out the design/requirement of special structures/gantries/full body extensions/hill side extensions etc.

7. LIQUIDATED DAMAGES

- a) The time and dates stipulated in the tender for the delivery of the equipment/material and completion of the work entrusted to the contractor shall be deemed to be the essence of contract. Timely submission of drawings and data as well as timely delivery of embedded parts of equipment/material/Erection work required for maintaining scheduled progress of the works at site is also of equal importance. Should the contractor fail or neglect to complete the separate portion of work identified below within the periods and dates specified under the contract, the contractor shall pay to the purchaser as fixed and agreed liquidated damages and not as penalty, the sums calculated as shown below for every week (or part thereof) @ $\frac{1}{2}$ % per week in Indian Rupees on the amount payable to the contractor under the contract subject to a maximum of :

- i) 5% of the each item of work in case of delay in that individual item of work.
- ii) 5% of the total contract value in case whole of the work is delayed.

S.No	Description of work	Time of completion* in months from the detailed award of work	Applicable amount of L.D. after completion time
A	Supply of Material:		
1	Stub, stub setting template for all type of tower i/c nuts and bolts:	7	$\frac{1}{2}$ % Per week
2	Super structures including extensions, tower accessories and nuts & bolts :	10	$\frac{1}{2}$ % Per week
3.	Disc insulators and Hardware fittings :	11	$\frac{1}{2}$ % Per week
4.	Conductor and Earthwire and its accessories:	12	$\frac{1}{2}$ % Per week

In case of non-completion of supply as per delivery period stipulated as per clause 6 above, the contract shall be governed in terms of clause No. 4.13 of special conditions of Contract. Volume-I of the specifications.

CERTIFICATES AND PAYMENTS

Ninety percent(90%) of the Ex-works price and 100% freight, insurance charges & taxes shall be paid within 30 days on receipt of material in the contractor's store in full and good condition duly verified by the Engineer or his authorized representative and upon submission of the documents specified below and shall be released by the Engineer or by central payment cell of the purchaser:

- (a) Original and 4 copies of the invoices showing P.O. number, goods description, quantity, unit price and total amount.
 - (b) Packing list (4 copies).
 - (c) Railway receipt/receipted L.R.
 - (d) Manufacturers/ contractors guarantee certificate of quality.
 - (e) Material inspection clearance certificate for dispatch issued by the purchaser's representative and the contractor's factory inspection report, transit insurance certificate and a Indemnity bond as per form-VII for full value of material valid till the taking over of said transmission line by the purchaser.
 - (f) 100 % Taxes & duties shall be paid against documentary evidence.
 - (g) The type test charges shall be paid on successful completion of the type test/ proto type test specified and on approval of the test results by the purchaser.
- (ii) The balance 10% of the Ex-works price of each item as per price schedule shall be made within 30 days of the certificate by the purchaser's Engineers that the item(s) have been received and provided and on submission of Bank Guarantee for 10% of full amount valid till completion of testing and issuance of taking over certificate.
- (iii) However, in case payment is delayed beyond 30 days due to one or the other reason no interest for the delayed period shall be admissible.

The other terms and conditions for payments shall be governed as per clause 4.15 of special conditions of Contract, Volume-I and for the purpose of payment in respect of fabricated tower material and bolts & nuts shall be made in accordance with clause No. 1.16 of Part-I, Volume-II of the specifications.

Payment shall be made after deducting discount of Rs. 35.0 Lac given by the firm @ Rs. 5.0 Lac from supply bills progressively.

GUARANTEED WEIGHT

The guaranteed weights and ceiling volumes of excavation/concrete for all types of towers, extensions, leg extensions, stub and stub setting templates, nuts & bolts shall be considered on composite basis for all types of towers/structures taken together for payment purpose. In case of any increase or decrease in overall weights of fabricated members and Bolts & Nuts for all type of towers, extensions, leg extensions, stubs and stubs setting templates and their foundation volumes, the contract shall be governed in terms of clause no. 1.16 of the Technical conditions of Contract Part I, volume -II of the specifications. The payment for special towers/structures shall be made as per actual weight and as per actual volume of excavation and concrete.

10. DESIGN AND PROTOTYPE TESTING OF TOWERS

As per offer, the firm has offered fresh design & testing of towers instead of pre designed and tested towers, hence before proceeding with mass fabrication of towers, proto of each type of tower shall be inspected as per clause 1.33 and tested in accordance with clause No. 1.37 of technical specifications, Part-I, volume-II. The proto testing of each type of un-galvanised tower shall be carried out with 6.0 Mtrs. full body extension up to destruction test. No tower testing charges shall be paid as the same are included in the quoted prices of material.

11. SPECIAL STRUCTURES.

Special towers/structures shall be used, for long spans/river crossing/power line crossings and where level difference is high and normal towers are not suitable. The scope of supply of these towers includes design of foundations, towers, template and supply of towers and their accessories etc. The Bidder shall submit the most economical design for these towers.

The unit rate per tonne for design, fabrication, supply of special towers and sets of stub, (including stub setting templates) shall be same as quoted for Normal tower in appropriate schedules. The payment for special towers/structures shall be based on actual weight of towers as per most economical design. The special structures shall be designed in accordance with section-II volume-II of technical specifications.

12. FOUNDATIONS

The firms is required to furnish designs, layout specifications and construction drawings for various types of foundations likely to be involved during the erection as per Cl. No. 1.29 of the technical specifications (Volume-II) No: extra payment shall be made to the firm for these designs.

13. SPECIFICATIONS

The towers, tower accessories, conductor, GSS wire, disc insulators, hardware fittings and other material required to be supplied shall comply and confirm to technical specifications volume-II.

14. TESTS

All type of tests i.e. type tests, routine tests and acceptance tests etc for complete material shall be governed as per relevant clauses of Volume-II of the specifications. The test charges shall be paid as per Annexure - B of this P.O. in case the tests are conducted as per requirement of the purchaser, however no charges shall be paid for already type tested material. The material should be type tested as per relevant clauses of the tender specifications.

15. INSPECTION AND DESPATCH OF MATERIAL:

The contractor shall afford all facilities to the purchaser to inspect and satisfy himself that the work in hand is in all respect according to the specifications. The Bidder shall make all necessary arrangements so that material may be inspected and tested as desired by the authorised inspecting officer. No material is to be dispatched till it has been inspected and approved by the Purchaser's authorised Inspecting Officer. The inspection and despatch of material shall be governed as per relevant clauses of Volume-II of the specifications.

16.

EXECUTION OF CONTRACT:

The successful bidders shall have to execute a Contract Agreement on the terms and conditions envisaged in these specifications and the detailed purchase order or as has been mutually agreed to after negotiations, within 30 calendar days from the detailed award of work. It is a legitimate obligation of the successful bidder to execute and to stamp the contract, in accordance with the Indian stamp Act and to supply six copies of contract drawings, technical particulars as finally approved by the purchaser and other literature and instruction books regarding handling, use and maintenance of equipments/material. The cost of all these and such other items will be deemed to have been included in the tendered prices and the bidder will not be entitled to any extra payment on these accounts. However, non-execution of the contract agreement by the successful bidder shall not absolve him of the responsibility of the faithful execution of the contract.

17.

WARRANTY/GUARANTEE:

Against any defect in material/services or faulty workmanship, the Contractor shall guarantee the satisfactory performance of the Transmission line(s) for a period of eighteen months from the date of actual taking over or twelve months after its commissioning whichever ever expires earlier. The other terms of warranty/guarantee shall be governed as per clause No. 3.56 of commercial conditions, Volume-I.

18.

PERFORMANCE SECURITY:

- a) Within 30 days after the contractor's receipt of notification of detailed award of the contract, the contractor shall furnish contract performance security to the purchaser. The performance security shall be in the amount of 10% of the contract price considering both the contracts together (i.e. supply contract and erection contract) and should be valid up to end of warranty period as per contract.
- b) The proceeds of the contract performance security shall be payable to the purchaser as compensation for any loss resulting from the contractor's failure to complete its obligations under the contract.
- c) The performance security shall be denominated in the currency of the contract and shall be in the form of a bank guarantee issued by a Nationalised bank located in India and in the form provided in the Bidding Documents or another form acceptable to the purchaser.
- d) The contract performance security will be discharged by the purchaser and returned to the contractor promptly following the completion of the contractor's performance obligations, including any warranty obligations under the Contract. No interest will be paid on the performance security.

19.

SETTLEMENT OF DISPUTES BY ARBITRATION:

Except where otherwise provided in the contract, all questions & disputes arising out of or relating to the contract shall be referred to the Sole Arbitrator i.e. Chief Engineer(Arbitration), HPSEB. The settlement of disputes shall be governed as per clause No. 3.44 of commercial conditions, Volume-I.

20.

FORCE MAJEURE:

The Contractor shall not be liable for any loss or damage due to delay in manufacture or delivery resulting from any causes beyond the Contractor's reasonable control, including but not limited to compliance with regulations, orders or instructions of any federal State

by Municipal Govt. or agency thereof, acts of God, acts of civil and military authorities, fires, strikes, factory shut downs or altercations, embargoes, wars and riots. The force Majeure conditions will be subject to production of satisfactory documentary proof. Delay in transportation or inability to obtain materials due to import or non-availability of raw material and power cuts shall not be considered as force majeure.

21. VARIATIONS/OMISSIONS

The purchaser shall make any variation in quantity of works or any part thereof that may in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion be desirable in pursuant to clause No 3.35 of commercial conditions of contract.

22. TERMINATION FOR CONVENIENCE

- i) The purchaser shall be entitled to terminate this contract, in whole or in part, at any time for the Purchaser's convenience after giving thirty days prior notice to the contractor, with a copy to the Engineer.
- ii) In the event of such termination the contractor shall:
 - a) Proceed as provided in sub-clause 3.42.7 of commercial conditions, Volume-I, and
 - b) Be paid by the purchaser as provided in sub-clause 3.42.8 of commercial conditions, Volume-I.

23. INDEMNITY BOND

For releasing the payments against the supply of material, the contractor is required to furnish a Indemnity bond as per form-VII for full value of material valid till the taking over of said transmission line by the purchaser in pursuant to clause No. 415.1(A)(i)(e) of special conditions of the contract.

24. OTHER TERMS AND CONDITIONS:

The contract/purchase order shall be further subject to other terms and conditions as stipulated in commercial conditions of the contract (Vol.-I) and technical specification (Vol.-II) of the tender document bearing No. DDT-251/2004(Copy enclosed).

Please acknowledge the receipt

- Encl
1. Annexure-I
 2. Annexure-A
 3. Annexure-B
 4. Copies of pre-bid/post-bid correspondence
 5. Tender specification

Yours faithfully,

Director (A) / Planning
10/5/11

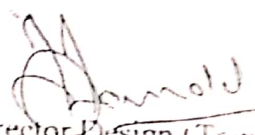
(Anu. J. - contd.)

Forwarded to the following alongwith enclosures for information and necessary action:

The Chief Engineer (MM), HPSEB, Shimla -4 with reference to his letter No. HPSEB:CE(MM): DDT-251/04/254-30247-48 dated 10.03.2005

2. The Chief Engineer (Trans.) HPSEB, Anu, Hamirpur (HP) with reference to his endorsement No. HPSEB:CE(T)/SP-22(a)/2005-16256 dated 11.3.2005.
3. The Managing Director H.P. Jal Vidyut Vikas Nigam, Vidyut Bhawan, Shimla-4 for information and necessary action.
4. The Chief Accounts Officer HPSEB, Vidyut Bhawan, Shimla-171004 alongwith three copies for Finance /Banking /CPC sections.
5. The Superintending Engineer, Trans. Const. & Mtc. Circle, HPSEB, Totu, Shimla-171011. It is requested that suitable directions be imparted to the concerned field officers to ensure that the material supplied and used by the contractor for construction of line is the same which is duly inspected, tested and approved by this office.
6. The Sr. Executive Engineer, Trans. Division, HPSEB, Bhabanagar, Distt. Shimla (HP). He is requested to ensure that the material inspected, tested and approved by this office should only be used.
7. The Asstt. Executive Engineer, Transmission Sub-Division., HPSEB, Bhabanagar Distt. Shimla (HP).

Encl: As above


Director-Design (Trans.),
HPSEB, Anu, Hamirpur (HP).

DETAILED ABSTRACT OF COST. (SUPPLY OF MATERIAL)

ANNEXURE-I

Description	Provisional Quantity (No.)	Total Weight (tonne)	Unit Price Ex Works excluding taxes and duties (Rs) per tonne	Unit Excise Duty (Rs) per tonne	Unit LST/CST (Rs) per tonne	Any other taxes/levies (Rs) per tonne	Unit Freight i/c Insurance, packing, forwarding, loading & unloading (Rs) per tonne	Unit cost of inland delivery to final destination store (Rs) per tonne	Total cost at destination store (Rs)	Remarks
2	3	4	5	6	7	8	9	10	11	12
1 Tower and lower accessories										
1 Total Guaranteed weight of super structures including extensions	104 Nos.	1400.069	57875	9260	2685		3600	73420	102793066	As per Annex-A
2 Total Guaranteed weight of Nuts bolts & washers for above.	104 Nos.	71.838	65770	Incl.	Incl.	Incl.	3600	69370	4983402	As per Annex-A
3 Tower testing charges	4 Nos	-	-	-	-	-	-	-	0	
4 Sub setting trip/plates for above	7 Nos	12.162	57875	9260	2685		3600	73420	892934	As per Annex-A
5 Total Guaranteed weight of Nuts bolts & washers for above.	7 Nos	0.182	65770	Incl.	Incl.	Incl.	3600	69370	12625	As per Annex-A
6 Tentative wt. of special towers, girders i/c extensions	14 Nos.	252.00	57875	9260	2685		3600	73420	18501840	As per Annex-A
7 Bolts, nuts & washers for 6' above.	14 Nos.	12.00	65770	Incl.	Incl.	Incl.	3600	69370	832440	As per Annex-A
8 Tower accessories										
i) Nut/er plates with bolts, nuts and washers (Nos.)	114		266				10	276	31464	
ii) Danger plates with bolts nuts and washers (Nos.)	114		266				10	276	31464	
iii) Phase plates with bolts, nuts and washers (Set of 3 plates)	228		800				30	830	189240	
iv) Circuit plates (Set of 2 plates)	114		532				20	552	62928	
v) Anti-climbing devices for 220 KV, D/C Towers i/c bolts nuts & washers										
a) Tower type A	0									
b) Tower type B	28		10962				1000	11962	334936	
c) Tower type C	31		11745				1000	12745	395095	
d) Tower type D	42		12527				1000	13527	568134	
e) Special type Tower i/c girders(SPL)	13		12527				1000	13527	175851	

S.No.	Description	Provisional Quantity (No.)	Total Weight (tonne)	Unit Price Ex Works excluding taxes and duties (Rs) per tonne	Unit Excise Duty (Rs) per tonne	Unit LST/CST (Rs) per tonne	Any other taxes/levies (Rs) per tonne	Unit Freight i/c Insurance, packing, forwarding, loading & unloading (Rs) per tonne	Unit cost of inland delivery to final destination store (Rs) per tonne	Total cost at destination store (Rs)	Remarks.
vi)	Bird guards	0		3132				1500	4632	0	
vi)	Earthing material for towers										
a)	Pipe type earthing material (Set) complete with necessary bolts, nuts and washers	118		3915				1500	5415	638970	
b)	15 Metres long Counterpoise (Set) earthing material complete with necessary bolts, nuts and wasgers	10		6264				1500	7764	77640	
c)	30 Meters long Counterpoise (Set) earthing material complete with necessary bolts, nuts and wasgers	20		7830				1500	9330	186600	
	Total tower accessories (B)									2692322	
	Total 'A'									130708629	
B.	Conductor & Groundwire			Per km				Per km	Per km		
i)	ACSR 'ZEBRA' Conductor 54/7/3.18 mm (km)	239		319011	Incl.	Incl.	Incl.	1862	320873	76688647	
ii)	GSS Ground wire, 7/3.15mm (km)	40		41561	Incl.	Incl.	Incl.	2235	43796	1751840	
iii)	Type test charges for a) conductor			-	-	-	-	-	-	148976	As per Anx-B
	b) Groundwire			-	-	-	-	-	-	65177	As per Anx-B
	Total 'B'									78654640	
C.	Disc Insulators			Rs each				Rs each	Rs each		
i)	90 kN Porcelain Disc Insulators	3550	-	518	Incl.	Incl.	Incl.	32	550	1952500	
ii)	160 kN Porcelain Disc Insulators	26400	-	786	Incl.	Incl.	Incl.	34	820	21648000	
iii)	Type test charges for disc insulators & strings with & without hardware fittings.			-	-	-	-	-	-	1034044	As per Anx-B
	Total 'C'									24634544	

	Description	Provisional Quantity (No.)	Total Weight (tonne)	Unit Price Ex Works excluding taxes and duties (Rs) per tonne	Unit Excise Duty (Rs) per tonne	Unit LST/CST (Rs) per tonne	Any other taxes/levies (Rs) per tonne	Unit Freight i/c Insurance, packing, forwarding, loading & unloading (Rs) per tonne	Unit cost of inland delivery to final destination store (Rs) per tonne	Total cost at destination store (Rs)	Remarks
D.	Hardware Fittings	Sets									
i)	Single suspension H/W fitting for ACSR 'ZEBRA'	0		4741	Incl.	Incl.	Incl.	177	4918	0	
ii)	Double suspension H/W fitting for ACSR 'ZEBRA'	0		7549	Incl.	Incl.	Incl.	289	7838	0	
iii)	Suspension H/W fitting for pilot string	234		2404	Incl.	Incl.	Incl.	93	2497	584298	
iv)	Single Tension H/W fitting for ACSR 'ZEBRA'										
	With FAH (Fixed Arcing Horn)	1067		3371	Incl.	Incl.	Incl.	130	3501	3735567	
	With AAH (Adjustable Arcing Horn)	73		3572	Incl.	Incl.	Incl.	140	3712	270976	
v)	Double Tension H/W fitting for ACSR 'ZEBRA'										
	With FAH	244		7166	Incl.	Incl.	Incl.	279	7445	1816580	
	With AAH	0		7302	Incl.	Incl.	Incl.	279	7581	0	
vi)	Suspension H/W fitting for ground wire i/c flexible copper bond	0		1415	Incl.	Incl.	Incl.	52	1467	0	
vii)	Tension H/W fitting for ground wire i/c flexible copper bond	255		1479	Incl.	Incl.	Incl.	54	1533	390915	
viii)	Accessories for ZEBRA conductor										
a)	Mid spar compression joint	250		1065	Incl.	Incl.	Incl.	39	1104	276000	
b)	Repair sleeve	250		337	Incl.	Incl.	Incl.	13	350	87500	
c)	Vibration dampers	2060		931	Incl.	Incl.	Incl.	35	966	1989960	
ix)	Accessories for Groundwire										
a)	Mid span compression joint	42		263	Incl.	Incl.	Incl.	11	274	11508	
b)	Vibration dampers	340		495	Incl.	Incl.	Incl.	19	514	174760	
x)	Type test charges for above									735563	As per Anx-B
	Total 'D'									10073627	
	Total (A+B+C+D)									244071440	
	Less discount given by the firm (to be deducted @ Rs.5.00 Lac. from supply bills progressively)									3500000	
	G.Total									240571440	

HIMACHAL PRADESH STATE ELECTRICITY BOARD

PSEE.No./DDT-251 (Jyoti)/2005- 2401-08

Dated:- 6/6/05

M/S Jyoti Structures Ltd,
Valecha Chambers, 5th/6th Floor,
New Link Road, Oshiwara, Andheri (West),
Mumbai-400053
Fax: 022-56915014-15, 0175-2203621

ub: Detailed award of contract for check survey, optimisation, design, engineering, transportation, storage, handling of all the material, foundation casting, revetments, tower erection, stringing, sagging, testing and commissioning of 220 KV, double circuit transmission line from Kashang to Bhaba on turnkey basis against tender specification No. DDT-251/2004 – Erection including civil works (Second contract).

This has reference to the following:

- i) Bid document No.DDT-251/2004 for the subject cited package followed by corrigendum slip No. 1,2,3 & 4 issued vide this office letter No. HPSEB/DDT-251(Gen)/ 2004-1634-38 dated 31.5.04, 1822-27 dated 11.6.04, 1975-80 dated 21.6.04 & even No. 2049-54 dated 24.6.2004.
- ii) Your offer No. JS9/T950/151 dated 8.7.2004.
- iii) Our fax messages/letter Nos. for post bid clarifications:-
 - e) HPSEB/DDT-251(Gen)/ 2004-2669-70 dated 7.8.2004
 - f) HPSEB/DDT-251(Gen)/ 2004-2720-21 dated 13.8.2004
 - g) HPSEB/DDT-251(Gen)/ 2004-3392 dated 28.9.2004
- iv) Clarification/confirmation furnished by you vide your letter Nos:-
 - a) No. JS9/T950/231 dated 14-08-2004
 - b) No. JS9/T950/264 dated 21-08-2004
 - c) No. JS9/T950/343 dated 29-09-2004
 - d) No. JS9/T950/359 dated 9-10-2004
 - e) No. JS9/T950/camp Shimla-1 dated 10.01.2005
 - f) No. JS9/T950/698 dated 2-03-2005
 - g) No. JS9/T950/854 dated 18-05-2005

Dear Sirs,

In continuation to this office notification of award of contract vide No. HPSEB/DDT-251(Jyoti)/2005-1184-89 dated 21.3.2005 and your acceptance vide your letter Nos. JS9/T950/784 dated 6.4.05. I have been authorized to intimate you that your above referred offer against this office Tender Specification No. DDT-251/2004 for the construction of 220 KV, double circuit transmission line from Kashang to Bhaba on turnkey basis has been accepted. The scope of this contract includes check survey, optimisation, engineering, transportation, storage, handling of all the material, foundation casting, revetments, tower erection, stringing, sagging, testing and commissioning of said line at the prices as per detailed abstract of cost (Annexure-II). We have also awarded the work for optimisation, design, engineering, manufacture, supply, transportation, storage, handling of all the material required for the construction of said line vide award No HPSEB/DDT-251(Jyoti)/2005- 2393-2400 dated 06-06-2005 (hereinafter

referred to as the first contract). The contractor shall also be fully responsible for the supply of complete material under the 'first contract' and it is expressly understood and agreed that any breach under the first contract shall automatically be deemed as a breach of this (second contract) and vice-versa. The main abstract of cost is as under:

S.No	Description	Amount(Rs.)	Remarks
1	Survey	264145.00	As per item No. 1 of Anx.-II
2	Foundation work/stub setting	87389825.00	As per item Nos. 2 to 8 of Anx.-II
3	Erection i/c fixing of accessories	15328270.00	As per item No. 9 & 10 of Anx.-II
4	Stringing & sagging of ACSR Zebra conductor & GSS wire	11910873.00	As per item Nos. 11 & 12 of Anx.-II
5	Earthing of towers	416354.00	As per item No. 13 of Anx.-II
6	Benching & revetment work	8110000.00	As per item Nos. 14 & 15 of Anx.-II
Total (Rs.)		12,34,19,467.00	

The detailed price schedule is given at Annexure-'II'

✓ The total amount of Rs. 123419467/- is inclusive of sales tax on contract, @ 2% and shall not be paid extra. All other taxes, duties, levies like service tax, entry tax, octroi, VAT etc. if applicable shall be paid extra as per actual on the production of documentary evidence. The main terms and conditions are detailed below:

TERMS AND CONDITIONS:

1. PRICES:

The prices shall be applicable as per unit rates for the various items. The prices are firm and no price variation is admissible.

2. COMPLETION TIME/DELIVERY PERIOD

Subject to any requirement in the contract as to completion of any section of the works before completion of the whole, the whole of the work shall be completed in accordance with schedule -E-5 of part-V, volume-II as amended proportionately/accordingly as detailed below within the time stated in the contract calculated from the last day of the period specified in above schedule as that within which the works are to be completed or such extended time as may be allowed under sub-clause 3.29.2 hereof.

S.No	Description of work	Time in months from the detailed award of work.	
		Start	Completion
A	Supply of Material: (As per supply contract)		
1	Stub, stub setting template and earthing material for all type of tower i/c nuts and bolts:	2	7

2	Super structures including extensions, tower accessories and nuts & bolts	6	10
3.	Disc insulators and Hardware fittings :	7	11
4.	Conductor and Earthwire and its accessories:	7	12

B. Construction Activity (As per erection contract)

1.	Check Survey	0.5	3
2.	Stub setting and foundation work.	3	10
3.	Tower erection.	7	12
4.	Stringing and sagging	9	14
5.	Revetments.	4	15
6.	Earthing of towers	5	12
7.	Testing and Commissioning.	14	15

* *The supply of material shall be so arranged that there is no mismatch between procurement of material and erection and in a manner approved by the purchaser.*

The firm would strictly adhere to the schedules E-1, E-3, and E-4 of Technical Specifications, volume-II under the heading Schedule for submission /approval of Drawings.

The firm shall supply the sag tension charts and sag template alongwith tower spotting data as per clause No. 1.9.7.3 of Technical specification, Part-I, Volume-II immediately after the placement of order. The exact requirement of towers shall be worked out by the firm after the check survey and shall submit final tower schedule for the approval of the purchaser in pursuant to clause 2.3 of Part-V, Volume-II of Technical specification.

The firm shall carry out the weight span calculations and tower location schedules of the lines for working out the design/requirement of special structures/gantries/full body extensions/hill side extensions etc.

LIQUIDATED DAMAGES

The time and dates stipulated in the tender for the delivery of the equipment/material and completion of the work entrusted to the contractor shall be deemed to be the essence of contract. Timely submission of drawings and data as well as timely delivery of embedded parts of equipment/material/Erection work required for maintaining scheduled progress of the works at site is also of equal importance. Should the contractor fail or neglect to complete the separate portion of work identified below within the periods and dates specified under the contract, the contractor shall pay to the purchaser as fixed and agreed liquidated damages and not as penalty, the sums calculated as shown below for every week (or part thereof) @ ½ % per week in Indian Rupees on the amount payable to the contractor under the contract subject to a maximum of:

- i) 5% of the each item of work in case of delay in that individual item of work.
- ii) 5% of the total contract value in case whole of the work is delayed.

S.No	Description of work	Time of completion* in months from the detailed award of work	Applicable amount of L.D. after completion time
Construction Activity			
1.	Detailed Survey/Check Survey	3	½ % Per week
2.	Stub setting and foundation work.	10	½ % Per week
3.	Tower erection.	12	½ % Per week
4.	Stringing and sagging	14	½ % Per week
5.	Revetments.	15	½ % Per week
6.	Earthing of towers	12	½ % Per week
7.	Testing and Commissioning.	15	½ % Per week

In case of non-completion of construction activity within stipulated period as per clause 2 above, the contract shall be governed in terms of clause No. 4.13 of special conditions of Contract, Volume-I of the specifications.

4. CERTIFICATES AND PAYMENTS

- (i) The contractor shall submit an application for interim payment in quadruplicate to the Engineer at the end of each month in a form approved by the Engineer. The application shall include the following items, as applicable, which shall be taken in to account in the sequence listed.
- The estimated contract value in Indian Rupees of the permanent works executed up to the end of the month in question, obtained by applying the base unit rates and prices in the schedule-C-5 of part-V, volume-II to the quantities measured by the Engineer pursuant to clause 3.38 of section-III, Volume-I.
 - The estimated contract value of the permanent works obtained as above, executed up to the end of the previous month.
 - The estimated contract value at base unit rates and prices, expressed in Indian Rupees of the permanent works for the month in question obtained by deducting (b) from (a).
 - Any amount reflecting any changes in cost and legislation pursuant to clause 3.46 of section-III to this volume.
 - Any amount to be deducted on account of the Advance Loan Repayment under the provisions set forth in Sub-clause 4.15.4 and
 - Any other sum to which the contractor may be entitled under the contract.

The other terms and conditions for payments shall be governed as per clause 4.15 of special conditions of Contract, Volume-I and clause 1.12 of part -V, Volume -II.

5. SUB-LETTING:

The contractor shall not sub-let the whole of the works. Except where otherwise provided by the contract, the contractor shall not sub-let any part of the works without the prior written consent of the Engineer, which shall not be unreasonably withheld, and such consent, if given, shall not relieve the contractor from any liability or obligation under the

15. **OTHER TERMS AND CONDITIONS:**

The contract/purchase order shall be further subject to other terms and conditions as stipulated in commercial conditions of the contract (Vol.-I) and technical specification Vol.-II of the tender document bearing No. DDT-251/2004(Copy enclosed).

Please acknowledge the receipt.

- Encl: 1. Annexure-II
2. Tender specification (Part-V, Vol-II)

Yours faithfully,

Director Design (Trans.),
HPSEB, Anu, Hamirpur (HP).

Copy forwarded to the following alongwith enclosures for information and necessary action:

1. The Chief Engineer (MM), HPSEB, Shimla -4 with reference to his letter No. HPSEB:CE(MM): DDT-251/04/254-30247-48 dated 10.03.2005.
2. The Chief Engineer (Trans.) HPSEB, Anu, Hamirpur (HP) with reference to his endorsement No. HPSEB:CE(T)/SP-22(a)/2005-16256 dated 11.3.2005. It is requested that the concerned field officers may be instructed to get the work execute strictly as per terms and conditions of contract.
3. The Managing Director H.P. Jal Vidyut Vikas Nigam, Vidyut Bhawan, Shimla-4 for information and necessary action.
4. The Chief Accounts Officer HPSEB, Vidyut Bhawan, Shimla-171004 alongwith three copies of award of work for Finance /Banking /CPC sections.
5. The Superintending Engineer, Trans. Const. & Mtc. Circle, HPSEB, Totu, Shimla-171011. As mentioned at clause No. 13 above, the SPC/WTM has authorised Chief Engineer (Trans.) to include/exclude any quantity of civil work from the scope of contract as per site requirement, if it is found economical. As such, permission of Chief Engineer (Trans.) be obtained for all civil protection works.
6. The Sr. Executive Engineer, Trans. Division, HPSEB, Bhabanagar, Distt. Shimla (HP). The work be executed strictly as per terms and conditions of contract and as per directions of higher authorities.
7. The Asstt. Executive Engineer, Transmission Sub-Division, HPSEB, Bhabanagar Distt. Shimla (HP).


Director Design (Trans.),
HPSEB, Anu, Hamirpur (HP)

contract and he shall be responsible for the acts, defaults and neglects of any Sub-contractor, his agents, servants or workmen as fully as if they were the acts, defaults & neglects of the contractor, his agents, servants or workmen. Provided always that the provision of labour on a piece work basis shall not be deemed to be a sub-letting under this clause.

6. **FOUNDATIONS/REKETMENT**

The foundation work of tower footing i.e. excavation, stub setting, concreting, quality of material, curing, protection of tower footing and earthing of towers shall be carried out in accordance with Section-III, Part-V, Volume-II of the specifications.

7. **INSURANCE**

The insurance of material at site and other services shall be governed as per clause No. 3.54 of commercial conditions and other relevant clauses of the specifications.

8. **EXECUTION OF CONTRACT:**

The bidders shall have to execute a Contract Agreement on the terms and conditions envisaged in these specifications and the detailed purchase order or as has been mutually agreed to after negotiations, within 30 calendar days from the detailed award of work. It is a legitimate obligation of the bidder to execute and to stamp the contract, in accordance with the Indian stamp Act and to supply six copies of contract drawings, technical particulars as finally approved by the purchaser and other literature and instruction books regarding handling, use and maintenance of equipments/material. The cost of all these and such other items will be deemed to have been included in the tendered prices and the bidder will not be entitled to any extra payment on these accounts. However, non-execution of the contract agreement by the successful bidder shall not absolve him of the responsibility of the faithful execution of the contract.

9. **WARRANTY/GUARANTEE:**

Against any defect in material/services or faulty workmanship, the Contractor shall guarantee the satisfactory performance of the Transmission line(s) for a period of eighteen months from the date of actual taking over or twelve months after its commissioning whichever ever expires earlier. The other terms of warranty/guarantee shall be governed as per clause No. 3.56 of commercial conditions, Volume-I.

10. **PERFORMANCE SECURITY:**

- a) Within 30 days after the contractor's receipt of notification of detailed award of the contract, the contractor shall furnish contract performance security to the purchaser. The performance security shall be in the amount of 10% of the contract price considering both the contracts together (i.e. supply contract and erection contract) and should be valid up to end of warranty period as per contract.
- b) The proceeds of the contract performance security shall be payable to the purchaser as compensation for any loss resulting from the contractor's failure to complete its obligations under the contract.
- c) The performance security shall be denominated in the currency of the contract and shall be in the form of a bank guarantee issued by a Nationalised bank located in India and in the form provided in the Bidding Documents or another form acceptable to the purchaser.

- d) The contract performance security will be discharged by the purchaser and returned to the contractor promptly following the completion of the contractor's performance obligations, including any warranty obligations under the Contract. No interest will be paid on the performance security.

11 SETTLEMENT OF DISPUTES BY ARBITRATION:

Except where otherwise provided in the contract, all questions & disputes arising out of or relating to the contract shall be referred to the Sole Arbitrator i.e. Chief Engineer (Arbitration), HPSEB. The settlement of disputes shall be governed as per clause No. 3.44 of commercial conditions, Volume-I.

12 FORCE MAJEURE:

The Contractor shall not be liable for any loss or damage due to delay in manufacture or delivery resulting from any causes beyond the Contractor's reasonable control, including but not limited to compliance with regulations, orders or instructions of any federal State or Municipal Govt. or agency thereof, acts of God, acts of civil and military authorities, fires, strikes, factory shut downs or altercations, embargoes, wars and riots. The force Majeure conditions will be subject to production of satisfactory documentary proof.

Delay in transportation or inability to obtain materials due to import or non-availability of raw material and power cuts shall not be considered as force majeure.

13. VARIATIONS/OMISSIONS

The purchaser shall make any variation in quantity of works or any part thereof that may in his opinion, is necessary, in pursuant to clause No 3.35 of commercial conditions of contract, if required due to any change in route alignment at the time of actual execution of work and to increase/decrease the quantity of civil works as per actual measurement at site during the execution of contract. The SPC/WTM authorised Chief Engineer (Trans.) to include/exclude any quantity of civil works from the scope of contract as per site requirement, if found economical and in the interest of the Board.

14. TERMINATION FOR CONVENIENCE

- i) The purchaser shall be entitled to terminate this contract, in whole or in part, at any time for the Purchaser's convenience after giving thirty days prior notice to the contractor, with a copy to the Engineer.
- ii) In the event of such termination the contractor shall:
 - a) Proceed as provided in sub-clause 3.42.7 of commercial conditions, Volume-I; and
 - b) Be paid by the purchaser as provided in sub-clause 3.42.8 of commercial conditions, Volume-I.
- iii) The termination for default shall be governed as per clause 3.41 of commercial conditions, Vol-I

DETAILED ABSTRACT OF QUANTITIES & COST **(ERECTION INCLUDING CIVIL WORKS)**

ANNEXURE-II

No.	Description	Unit	Quantity	Unit Rates (Rs.)	Unit	Provisional Quantity	Unit Price (Rs.)	Total Amount (Rs.)
1	Survey Work Detailed survey including pegging of tower centres, route marking, profile plotting, tower spotting etc.	km			Km.	5	52829	264145
	Foundation work							
2	Stub setting							
	Tower type A	No.			No.	0	6628	0
	Tower type B	No.			No.	28	6702	187856
	Tower type C	No.			No.	31	8027	248837
	Tower type D	No.			No.	42	10826	454692
	Special towers l/c gables					13	16239	211107
								0
3	Tower type A+3+6							0
	Normal dry							0
	Excavation	cum		286	No.	0		0
	Concreting M 10	cum		19431	No.	0		0
	Concreting M 15	cum		20019	No.	0		0
	Concreting M 20	cum		20431	No.	0		0
	Reinforcement	MT		43829	No.	0		0
	Wet							0
	Excavation	cum		343	No.	0		0
	Concreting M 10	cum		19431	No.	0		0
	Concreting M 15	cum		20019	No.	0		0
	Concreting M 20	cum		20431	No.	0		0
	Reinforcement	MT		43829	No.	0		0
								0
	Soft Rock/Fissured Rock							0
	Excavation	cum		800	No.	0		0
	Concreting M 10	cum		19431	No.	0		0
	Concreting M 15	cum		20019	No.	0		0
	Concreting M 20	cum		20431	No.	0		0
	Reinforcement	MT		43829	No.	0		0
								0
	Hard Rock							0
	Excavation	cum		1714	No.	0		0
	Concreting M 10	cum		19431	No.	0		0
	Concreting M 15	cum		20019	No.	0		0
	Concreting M 20	cum		20431	No.	0		0
	Reinforcement	MT		43829	No.	0		0
								0
	Non cohesive							0
	Excavation	cum		343	No.	0		0
	Concreting M 10	cum		19431	No.	0		0
	Concreting M 15	cum		20019	No.	0		0
	Concreting M 20	cum		20431	No.	0		0
	Reinforcement	MT		43829	No.	0		0
								0
4	Tower type B+3+6							
	Normal dry							
	Excavation	cum	2358	286	No.	18	37466	674388
	Concreting M 10	cum	76.14	19431	No.	18	82193	1479474
	Concreting M 15	cum	0	20019	No.	18	0	0
	Concreting M 20	cum	224.64	20431	No.	18	254979	4589622
	Reinforcement	MT	27.9	43829	No.	18	67935	1222830

Note - The provision of 10% contingency is as per CECI No. HPSEB/CECI/W-24/05-3753-36 dt 11-07-2005.

S.No.	Description	Unit	Quantity	Unit Rates (Rs.)	Unit	Provisional Quantity	Unit Price (Rs.)	Total Amount (Rs.)
b)	Wet							
i)	Excavation	cum	208	343	No.	1	71344	71344
ii)	Concreting M 10	cum	8.72	19431	No.	1	130578	130578
iii)	Concreting M 15	cum	0	20019	No.	1	0	0
iv)	Concreting M 20	cum	23.38	20431	No.	1	477288	477288
v)	Reinforcement	MT	1.9	43829	No.	1	83275	83275
c)	Soft Rock/Fissured Rock							
i)	Excavation	cum	645	800	No.	5	103200	518000
ii)	Concreting M 10	cum	24.5	19431	No.	5	95212	476060
iii)	Concreting M 15	cum	0	20019	No.	5	0	0
iv)	Concreting M 20	cum	76.3	20431	No.	5	311777	1558885
v)	Reinforcement	MT	9.75	43829	No.	5	85467	427335
d)	Hard Rock							
i)	Excavation	cum	18	1714	No.	2	15426	30852
ii)	Concreting M 10	cum	0	19431	No.	2	0	0
iii)	Concreting M 15	cum	0	20019	No.	2	0	0
iv)	Concreting M 20	cum	10.5	20431	No.	2	107263	214526
v)	Reinforcement	MT	0.8	43829	No.	2	17532	35064
e)	Non cohesive							
i)	Excavation	cum	584	343	No.	2	100158	200312
ii)	Concreting M 10	cum	17	19431	No.	2	165184	330328
iii)	Concreting M 15	cum	0	20019	No.	2	0	0
iv)	Concreting M 20	cum	58.24	20431	No.	2	594951	1189902
v)	Reinforcement	MT	5	43829	No.	2	109573	219148
5	Tower type C+3+6							
a)	Normal dry							
i)	Excavation	cum	3400	286	No.	20	48620	972400
ii)	Concreting M 10	cum	109.6	19431	No.	20	106482	2129640
iii)	Concreting M-15	cum	0	20019	No.	20	0	0
iv)	Concreting M 20	cum	365.8	20431	No.	20	373683	7473660
v)	Reinforcement	MT	38	43829	No.	20	83275	1665500
b)	Wet							
i)	Excavation	cum	262	343	No.	1	89866	89866
ii)	Concreting M 10	cum	8.46	19431	No.	1	164386	164386
iii)	Concreting M 15	cum	0	20019	No.	1	0	0
iv)	Concreting M 20	cum	29.23	20431	No.	1	597198	597198
v)	Reinforcement	MT	2.8	43829	No.	1	122721	122721
c)	Soft Rock/Fissured Rock							
i)	Excavation	cum	620	800	No.	4	124000	496000
ii)	Concreting M 10	cum	26.88	19431	No.	4	130576	522304
iii)	Concreting M 15	cum	0	20019	No.	4	0	0
iv)	Concreting M 20	cum	84.6	20431	No.	4	432116	1728464
v)	Reinforcement	MT	9.2	43829	No.	4	100807	403228
d)	Hard Rock							
i)	Excavation	cum	10	1714	No.	1	17140	17140
ii)	Concreting M 10	cum	0	19431	No.	1	0	0
iii)	Concreting M 15	cum	0	20019	No.	1	0	0
iv)	Concreting M 20	cum	6.66	20431	No.	1	136070	136070
v)	Reinforcement	MT	0.5	43829	No.	1	21915	21915

S.No.	Description	Unit	Quantity	Unit Rates (Rs.)	Unit	Provisional Quantity	Unit Price (Rs.)	Total Amount (Rs.)
a)	Non cohesive							
i)	Excavation	cum	1815	343	No.	5	110789	553945
ii)	Concreting M 10	cum	52	19431	No.	5	202082	1010410
iii)	Concreting M 15	cum	0	20019	No.	5	0	0
iv)	Concreting M 20	cum	177.4	20431	No.	5	724892	3624480
v)	Reinforcement	MT	10.25	43829	No.	5	142444	712220
6	Tower type D+3+6							
a)	Normal dry							
i)	Excavation	cum	5200	286	No.	25	59488	1487200
ii)	Concreting M 10	cum	168	19431	No.	25	130576	3264400
iii)	Concreting M 15	cum	0	20019	No.	25	0	0
iv)	Concreting M 20	cum	559	20431	No.	25	458837	11420925
v)	Reinforcement	MT	62.5	43829	No.	25	109573	2739325
b)	Wet							
i)	Excavation	cum	646	343	No.	2	110789	221578
ii)	Concreting M 10	cum	20.8	19431	No.	2	202082	404164
iii)	Concreting M 15	cum	0	20019	No.	2	0	0
iv)	Concreting M 20	cum	70.96	20431	No.	2	724892	1449784
v)	Reinforcement	MT	6.5	43829	No.	2	142444	284888
c)	Soft Rock/Fissured Rock							
i)	Excavation	cum	965	800	No.	5	154400	772000
ii)	Concreting M 10	cum	40.5	19431	No.	5	157391	786955
iii)	Concreting M 15	cum	0	20019	No.	5	0	0
iv)	Concreting M 20	cum	129.25	20431	No.	5	528141	2640705
v)	Reinforcement	MT	15	43829	No.	5	131487	657435
d)	Hard Rock							
i)	Excavation	cum	33	1714	No.	3	18854	56562
ii)	Concreting M 10	cum	0	19431	No.	3	0	0
iii)	Concreting M 15	cum	0	20019	No.	3	0	0
iv)	Concreting M 20	cum	23.4	20431	No.	3	159362	478086
v)	Reinforcement	MT	1.65	43829	No.	3	24106	72318
e)	Non cohesive							
i)	Excavation	cum	2723	343	No.	7	133427	933989
ii)	Concreting M 10	cum	87.78	19431	No.	7	243665	1705655
iii)	Concreting M 15	cum	0	20019	No.	7	0	0
iv)	Concreting M 20	cum	299.53	20431	No.	7	874242	6119694
v)	Reinforcement	MT	30.8	43829	No.	7	192848	1349936
7	Tower type Special +3+6							
a)	Normal dry							
i)	Excavation	cum	1913.6	286	No.	8	68411	547288
ii)	Concreting M 10	cum	61.824	19431	No.	8	150163	1201304
iii)	Concreting M 15	cum	0	20019	No.	8	0	0
iv)	Concreting M 20	cum	205.712	20431	No.	8	525363	4202904
v)	Reinforcement	MT	23	43829	No.	8	126008	1008064
b)	Wet							
i)	Excavation	cum	371.45	343	No.	1	127407	127407
ii)	Concreting M 10	cum	11.96	19431	No.	1	232395	232395
iii)	Concreting M 15	cum	0	20019	No.	1	0	0
iv)	Concreting M 20	cum	40.802	20431	No.	1	833626	833626
v)	Reinforcement	MT	3.7375	43829	No.	1	163811	163811

S.No.	Description	Unit	Quantity	Unit Rates (Rs.)	Unit	Provisional Quantity	Unit Price (Rs.)	Total Amount (Rs.)
c)	Soft Rock/Fissured Rock							
i)	Excavation	cum	221.95	800	No.	1	177560	177560
ii)	Concreting M 10	cum	9.315	19431	No.	1	181000	181000
iii)	Concreting M 15	cum	0	20019	No.	1	0	0
iv)	Concreting M 20	cum	29.7275	20431	No.	1	607363	607363
v)	Reinforcement	MT	3.45	43829	No.	1	151210	151210
d)	Hard Rock							
i)	Excavation	cum	12.65	1714	No.	1	21682	21682
ii)	Concreting M 10	cum	0	19431	No.	1	0	0
iii)	Concreting M 15	cum	0	20019	No.	1	0	0
iv)	Concreting M 20	cum	8.97	20431	No.	1	183266	183266
v)	Reinforcement	MT	0.6325	43829	No.	1	27722	27722
e)	Non cohesive							
i)	Excavation	cum	894.7	343	No.	2	153441	306882
ii)	Concreting M 10	cum	28.642	19431	No.	2	280214	560428
iii)	Concreting M 15	cum	0	20019	No.	2	0	0
iv)	Concreting M 20	cum	98.417	20431	No.	2	1005379	2010758
v)	Reinforcement	MT	10.12	43829	No.	2	221775	443550
8	Dewatering of pits during concreting							
i)	Manual				Manhour	100	150	15000
ii)	Mechanical pump				Manhour	100	300	30000
iii)	Power driven pump				Manhour	100	400	40000
	Total 2 to 8							87369825
9	Erection of super structure, body extension, leg extension of tower including fixing of danger plate, number plate, circuit plate, phase plate, bird guard, anti-climbing devices etc.							
a)	Tower type A							
i)	Normal tower	MT			No.	0	76811	0
ii)	Body Extension, 3 Mtrs.	MT			No.	0	16009	0
iii)	Body Extension, 6 Mtrs.	MT			No.	0	29043	0
iv)	2 Leg. Extension, 1.5 Mtr.	MT			No.	0	3847	0
v)	2 Leg. Extension, 3.0 Mtr.	MT			No.	0	5852	0
vi)	2 Leg. Extension, 6.0 Mtr.	MT			No.	0	8504	0
b)	Tower type B							
i)	Normal tower	MT			No.	28	93504	2618112
ii)	Body Extension, 3 Mtrs.	MT			No.	0	19641	0
iii)	Body Extension, 6 Mtrs.	MT			No.	0	32873	0
iv)	2 Leg. Extension, 1.5 Mtr.	MT			No.	0	4270	0
v)	2 Leg. Extension, 3.0 Mtr.	MT			No.	11	6409	70499
vi)	2 Leg. Extension, 6.0 Mtr.	MT			No.	5	10212	51060
c)	Tower type C							
i)	Normal tower	MT			No.	31	108021	3348651
ii)	Body Extension, 3 Mtrs.	MT			No.	0	21565	0
iii)	Body Extension, 6 Mtrs.	MT			No.	0	35399	0
iv)	2 Leg. Extension, 1.5 Mtr.	MT			No.	0	4611	0
v)	2 Leg. Extension, 3.0 Mtr.	MT			No.	11	6625	72875
vi)	2 Leg. Extension, 6.0 Mtr.	MT			No.	10	11065	110650

S.No.	Description	Unit	Quantity	Unit Rates (Rs.)	Unit	Provisional Quantity	Unit Price (Rs.)	Total Amount (Rs.)
d)	Tower type D							
i)	Normal tower	MT			No.	42	131932	5541144
ii)	Body Extension, 3 Mtrs.	MT			No.	4	25583	102332
iii)	Body Extension, 6 Mtrs.	MT			No.	3	40945	122835
iv)	2 Leg. Extension, 1.5 Mtr.	MT			No.	0	5555	0
v)	2 Leg. Extension, 3.0 Mtr.	MT			No.	16	8027	128432
vi)	2 Leg. Extension, 6.0 Mtr.	MT				15	13241	198615
	10 Special Tower & gantries							
a)	Special Tower i/c Extns.				No.	9	259315	2333835
b)	Gantries (Assumed weight)	MT	70.00	8989.00	No.	4		629230
	Total 9 & 10							15328270
11	Mounting of Insulator string for six nos. ACSR "ZEBRA" conductor including laying, jointing, tensioning stringing, sagging and clamping, fixing of vibration dampers, arching horns etc.				Km	39	213785	8337615
12	Stringing of one no. 7/3 15mm GSS groundwire including laying, jointing tensioning, sagging and clamping, fixing of vibration dampers, earth bonds etc.				Km	39	91622	3573258
	Total 11 & 12							11910873
13	Earthing of towers							
a)	Pipe type earthing complete including excavation and backfilling work				No.	118	2068	244024
b)	15 Mtr. counterpoise earthing complete with excavation and back filling work				No.	10	3447	34470
c)	30 Mtr. counterpoise earthing complete with excavation and back filling work				No.	20	6893	137860
	Total 13							416354
14	Benching							
a)	Normal Dry soil	cum	40	315	No.			12600
b)	Wet soil	cum	1	455	No.			455
c)	Soft rock/ Fissured rock	cum	5	1050	No.			5250
d)	Hard Rock	cum	2	2000	No.			4000
e)	Non Cohesive soil	cum	10	455	No.			4550
	15 Rivetments							
A)	Breast wall							
i)	Excavation for foundation							
a)	Normal Dry soil	cum	100	286	No.			28600
b)	Wet soil	cum	5	343	No.			1715
c)	Soft rock/ Fissured rock	cum	10	800	No.			8000
d)	Hard Rock	cum	4	1714	No.			6856
e)	Non Cohesive soil	cum	20	343	No.			6860
ii)	Coping with M 15 concrete	cum	3	24028	No.			72084
iii)	Rubble Masonary work including cement mortar (1:5) work complete	cum	150	5561	No.			834150
iv)	Excavation & transportation of soil from suitable place and backfilling, levelling of the volume enclosed by revetment walls	cum	10	618	No.			6180

S.No.	Description	Unit	Quantity	Unit Rates (Rs.)	Unit	Provisional Quantity	Unit Price (Rs.)	Total Amount (Rs.)
B)	Retaining wall							
i)	Excavation for foundation							
a)	Normal Dry soil	cum						
b)	Wet soil	cum	460	286	No.			
c)	Soft vrock/ Fissured rock	cum	30	343	No.			131560
d)	Hard Rock	cum	100	800	No.			10290
e)	Non Cohesive soil	cum	70	1714	No.			80000
ii)	Coping with M 15 concrete	cum	180	343	No.			119980
iii)	Rubble Masonary work Including cement mortar (1:5) work complete	cum	20	24028	No.			61740
			1035	5561	No.			480560
iv)	Excavation & transportation of soil from suitable place and backfilling, levelling of the volume enclosed by revetment walls	cum	700	618	No.			5755635
v)	Providing of stone packings at weep holes	cum	15	3089	No.			432600
	Total 14 & 15							46335
								8110000
								123419467

NOTE:

- Payment shall be released to the firm as per clause 1.16 of Part-I, Vol -II, clause 1.12 of Part-V, Vol-II and other relevent clauses.
- The quantities mentioned at Sr. No. 2 to 6 above for excavation,concreting, reinforcement are guaranteed quantities, however the quantities mentioned at sr. No.7, to 15 are tentative quantities and shall be paid as per actual measurement at site during the execution of contract at the rates mentioned against each item.
- The unit rates applicable for erection/foundation work for normal towers shall also be applicable for special structures.
- Any item not covered above but essentially required for successful completion, testing and commissioning of the transmission line on turnkey basis shall have to be provided by the bidder without any extra cost or any other liability whatsoever to HPSEB/Purchaser.
- The detailed survey has already been carried out by HPSEB and payment of detailed survey shall be made to the contractor as per rates mentioned at Sr. No. 1. above, in case detailed survey is required to be done due to any change in route alignment at site during execution of the work.

H.P.S.E.B.

Name of Work: Estimate for Construction of 220 kV Trans.
Line from Kashang to Nathpa under Trans.
Division, HPSEB, Bhabanagar.

Account Head : 14: 51 : 6.

Name of Scheme: Project Report for the Constr. of 220 kV D/C
Transmission line from Nathpa to Kashang/
Bokhito (By LHO of Bhalea Kumbhar Line) and
installation of 220/22 kV, 20 MVA Sub-station at
Bokhito along with construction of 22 kV S/C Trans.
line on 66 kV towers from Bokhito to Abba.

This estimate has been framed by E.P.C. Negi,
Addl. Superintending Engineer Trans. Division, HPSEB, Bhabanagar
for the probable cost of Rs. ~~42,69,58,500/-~~ only.
REPORT 42,23,93,100/-

HISTORY:- This estimate amounting to Rs. ~~42,69,58,500/-~~ ^{42,23,93,100/-} only
has been framed to cover the ~~cost~~ cost of above cited work
charged to the account codes and scheme mentioned against
it. The aforesaid line meant for providing better power
supply in Upper Kinner area is being constructed by the
Bored on turnkey basis. The M/A & E/S for the scheme has
and already approved by the Board vide letter No. HPSEB/
Sectt/1102-49 (Abba)/02-611066 dt 27.8.2002 ~~with the~~
to the tune of Rs. 3474.13 lakh wherein the provision for aforesaid
220 kV line exists amounting to Rs. 2394.416 lakh. The constn.
of aforesaid line already assigned to M/s Jyoti Structures
Ltd., Vilek Chambers, Oshiwara, Andheri (West), Mumbai-400053
on contract basis vide D.D. Trans, HPSEB, Amr, Hampapur letter of
award No. HPSEB/DDT-251 (Jyoti)/2005-2393-21100 dt. 06-06-2005
and even file No. 2401-08 dated 06-06-2005. Since the constn.
activities has already taken up by aforesaid firm/contractor
at site, therefore, the ~~est~~ estimate in question has been
framed to regularise the expenditure/buying of material
to be made against these of.

Keeping in view the above facts this estimate
has been framed for according the technical sanction.

Contd B/P

Contd from B.F.

from competent authority.

DESIGN & SCOPE:- The estimate covers the provision for purchase of material and constn. of the line as per letter of awards issued by the D.D.(Trans), HPSEB, Anil, ~~HPSEB~~, Haridwar vide letter No. HPSEB/DDT-251(Jyoti)/2005-2393 dated 06-06-2005 and even No. 21101-08 dated 06-06-2005 respectively. Other charges such as Entry/State/Central VAT@5% contingencies @ 3%, Depn. charges @ 13.25% and ~~for rate there~~ ~~@ 2000~~ have also been levied.

TIME - During 2005-06-07

METHOD:- Through Depn./Contract.

Amount:- Rs. 47,76,29,300/- only

Rs. 60/-
12/-
500/-
00/-

Add. Superintending Engineer
Transmission Division
HPSEB Bhaba Nagar - 172015

NAME OF WORK:- Est. for C/O 220KV D/C T/L from Kashang to Natipa under Trans. Divn. It Sec, Bhabnagar.

PART MEMORANDUM OF COST - Original estimate.

Sl. No.	Description	Unit	Sq. Yds.	Rate	Amount
1	C/O 220KV D/C Trans. Line from Kashang to Natipa.	Job one		24,05,72,440.00	24,05,72,440.00
a)	Supply of material (As per Bill of Materials)	Job one		12,34,19,467.00	12,34,19,467.00
b)	Erecting of line 1/c civil works	Job one		36,39,190,507.00	36,39,190,507.00
15% for meeting the losses and delay on the production of approved design.					
Add 5% extra for entry tax, shelter, test and for introduction of 44V/CFL V&A but to be paid as per actual as levied on bill (N&B) above.					

Add 3% contingencies charges.

Add 1% deprec. charges.

G. & B. total :-

See Rs. 42,23,93,100/- Only.

RECOMMENDATION FOR CANCELLATION

Add Superintendent ng. Engineer, Trans. Divn. Bhabnagar.

Superintending Engineer, Trans. Const. & M&E Circle, HPSEB, Tolu, Shimla-41

Recommended for A/S

Technical Section No. 38
amounting to Rs. 42,23,93,100/-
Copy 12 only. For 12 only. (See Memorandum & Bill)
hundred only)

Chief Engineer (Trans)
O/o Chief Engineer (Trans)
H.P. S.E.B. Bhabnagar (H.P.)

Assistant Engineer (E)
O/o Chief Engineer (T)
HPSEB, Bhabnagar

Superintending Engineer (E)
O/o Chief Engineer (T)
H.P.S.E.B. Bhabnagar (H.P.)

Chief Engineer (Trans)
H.P.S.E.B. Bhabnagar (H.P.)

The Superintending Engineer,
Trans. Const. & Mtc, Circle,
HPSEB, Totu, Shimla-11

Subj:- Sanctioned estimate.

Ref:- Your office letter No. HPSEB/TCS/DB-25/2005-4962-83 dated 12.09.2005.

The below mentioned estimate is returned herewith duly technically sanctioned under Gr.No.2(i) capital of delegation of financial power of HPSEB, 1997 for the amount and head of account mentioned against it

Sr. No.	T.S.No.	Name of work	Estimated cost.	Head of A/C
1.	CE(T)-38 2005-06	Estimate for C/O 220kV Trans. line from Bhaba to Kashang under Trans. Division, HPSEB, Bhabanagar.	Rs.42,23,93,100/- (Rupees Forty Two Crore Twenty Three Lacs Ninety Three Thousand One Hundred) only	14.516

Name of scheme:- Project report for the C/O 220kV D/C Trans. Line from Nathpa to Kashang/Bokhtoo (By LILO of Bhaba-Kunihar line) and installation of 220/22kV, 20 MVA G/Sn. at Bokhtoo alongwith construction of 22kV S/C Trans. Line on 66kV towers from Bokhtoo to Akpa.

The expenditure on the above work as well as on the other works may be restricted to the budget grant placed at your disposal during the current financial.

DA:- Estimate.

Chief Engineer (Trans.),
HPSEB, Hamirpur (H.P.)

Copy to the Resident Audit Officer, HPSEB, Vidyut Bhawar Shimla-4 for information please.

Chief Engineer (Trans.),
HPSEB, Hamirpur (H.P.)

No. TCS/DB-124/05 7/86
Copy of above alongwith copy of sanction estimate is forwarded to Adlt. SE Trans. Dwn. HPSEB Bhabanagar for information & necessary action.

DA:- As above

P.T.O

Superintending Engineer,
Trans. Const. & Mtc
HPSEB, Totu, Shimla-11