



# भारत हेवी इलेक्ट्रिकल्स लिमिटेड

( भारत सरकार का उपक्रम )

## BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

**TCN - 02**

Ref: PSER:SCT:PSC-M1443:TCN-02

Date: 20/02/2013

Sub	Tender change notice (TCN) 02	
Job	Transportation of Consignments from Various Manufacturing Units of BHEL to Punatsangchhu HEP with intermediate storage facility in Bhutan for 6 X 200 MW Punatsangchhu-I Hydroelectric Project, Punatsangchhu, Bhutan .	
Ref	1.0	Tender no PSER:SCT:PSC-M1443:13
	2.0	BHEL's NIT, vide ref no PSER:SCT:PSC-M1443:13 Dated 08/02/2013
	3.0	BHEL's TCN-01, vide ref no PSER:SCT:PSC-M1443:TCN-01 Dated 13/02/2013
	4.0	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 Due date of submission of tender extended from 22/01/2013 upto 27/02/2013 (1500 Hrs ) . Bidders are requested to submit their offer by extended due date positively.
- 2.0 BHEL clarification to Bidders query as per ANNEXURE-A to TCN-02 .
- 3.0 Addition/Modification as per ANNEXURE-B to TCN-02.
- 4.0 Please find attached Revised Annexure-I (Rev-01) , Annexure IIA (Rev-01) & Annexure IIB (Rev-01)
- 5.0 Revised Volume-III , Price Schedule , Rev-2 superseding earlier version Revised Price schedule format VOL-III- Price Schedule , Rev-01 .  
**Bidders are requested to submit their offer as per revised Price Schedule ( Rev-02 ) only . Offer from bidders in superseded price schedule (Vol-III , REV-01) shall not be considered. Bidders are also requested to submit 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-02).**
- 6.0 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. Revised `No deviation certificate' format.
2. ANNEXURE-A to TCN-02
3. ANNEXURE-B to TCN-02.
4. Annexure-I (Rev-01) , Annexure IIA (Rev-01) & Annexure IIB (Rev-01)
5. Vol-III Rev-02 .

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

## ANNEXURE-A to TCN-2

*Tender No. PSER:SCT:PSC-M1443:13*

**Transportation of Consignments from various BHEL –MUs to Punatsangchhu HEP with intermediate storage facility in Bhutan for 6 x 200 MW Punatsangchhu-I Hydroelectric Project, Punatsangchhu, Bhutan**

### Reply to queries raised by the Bidders

Sl. No.	Reference clause of tender document	Existing provision	Bidder's query	BHEL's clarification
01.	Clause No. 2.1.3 (b) of TS and SC of contract (Page 9 of 43)	Route from MU, Bhopal to site with emphasis from Phuentsholing to Punatsangchhu site identifying hurdles requiring removal for the transportation of the listed consignments. Any remedial action for overcoming of difficulties/obstacles en-route from Phuentsholing to Punatsangchhu site during transportation is to be carried out by bidder within the quoted price.	Pls. clarify whether all required civil works to overcome the enroute obstacles and / or removal of hill projection cutting etc. are to be carried out by the bidder or not.	<b>No civil works on the route inside Bhutan i.e. between Phuentsholing to site, is envisaged. Very minor work if encountered during actual transportation may have to be carried out by the bidder. The bidder shall take care of any work in the route inside India.</b>
02.	Clause No. 2.1.5.2 (p) of TS and SC of contract (Page 12 of 43)	The storage facility will be maintained up to Dec.'2015 or till exit of last stored item from store.	Please let us know when the last item envisaged to be stored to enable us to access the exact storage period.	<b>As per tender.</b>
03.	Clause No. 2.1.6 of TS and SC of contract (Page 12 of 43)	Ensure appropriate storage & preservation including maintenance, packing/repacking etc of consignments, as required, during storage, transit etc., or for all consignments including ODCs mentioned above, as per BHEL guidelines till receipt of those items at site.	Please clarify the type / guidelines of preservation including maintenance required for all consignments which are to be stored by us. for unloading.	<b>Will be intimated during the course of execution. Bidder shall follow all instructions of BHEL's Site Engineers in this regard.</b>

Sl. No.	Reference clause of tender document	Existing provision	Bidder's query	BHEL's clarification
04.	Clause No. 2.1.11 of TS and SC of contract (Page 14 of 43)	Obtain all required clearances / permit from all governmental / non-governmental authorities e.g. NHAI, PWD/CPWD, State Electricity Board, Railways, Communication Department, P&T, Traffic, Police Department or any other authority, including private parties / persons/ organisations for transportation of all the consignments including ODC through identified inland road transport route at appropriate time and submit to BHEL for clearance for transportation of equipment. No transportation of equipment shall be undertaken by contractor without clearance from BHEL.	Please note that all required clearances from NHAI, Rail, State authority etc. for movement of ODC in India can only be obtained after loading on trailer and during movement. Hence, all clearances cannot be submitted to BHEL prior to dispatch. Therefore, please clarify whether BHEL would allow to start movement prior to obtain of such all permissions / clearance.	Please refer modified clause no. 2.1.11 under sl. no. (ii) of Annexure-B to TCN-2
05.	Clause No. 2.1.19 of TS and SC of contract (Page 16 of 43)	The approximate weight and dimension is enclosed as Annexure - I, Annexure - II A & Annexure - II B. Please note that the weights and sizes given in Annexures are indicative and for guidance to the bidder. The actual Dispatch particulars may vary and shall be known at an appropriate stage from BHEL. Bidder shall not claim any compensation from BHEL towards such variation in actual Dispatch particulars of Consignments including ODCs with ref to tender information.	Please confirm the maximum percentage of increase / decrease in weight & dimensions of your consignments.	Weight and dimension of individual consignment given in Annexures are tentative and may vary up to $\pm 5\%$ . However in case of variation in dimension beyond $\pm 5\%$ , transporter shall be liable to transport the consignment.

<b>Sl. No.</b>	<b>Reference clause of tender document</b>	<b>Existing provision</b>	<b>Bidder's query</b>	<b>BHEL's clarification</b>
06.	Clause No. 2.1.26 of TS and SC of contract (Page 17 of 43)	Bidder shall arrange and complete the cargo's examination whenever required. It shall be the endeavor of bidder to minimize the opening of the packed consignment. Opening and repacking (wherever required) shall be carried out as per the supplier's manual, under the supervision of BHEL or their authorized representative, and the same shall be in bidder's scope of work.	Please clarify under what circumstances the bidder is expected to arrange and complete the cargo examination.	Opening & repacking may be required during inspection by Statutory / Govt. bodies or in case of damage of packing during transit/storage or for assessment of damage occurred, if any.
07.	Clause No. 4.11.18.1 (b) of TS and SC of contract (Page 43 of 43)	Detention : Beyond Seven days: Rs 500/- per day for truck, Rs.1000/- per day for mechanical trailer, Rs 2500/- per day for hydraulic trailer including prime mover (For each additional day).	Please clarify the rate of detention for per day per hydraulic trailer or per hydraulic axle. In case of any delay in loading of vehicle placed as per your dispatch schedule, whether any detention charges will be paid to us or not. In case of delay in handling over the required documents for customs clearance in Bhutan, whether detention charges will be paid to us or not.	Please refer modified clause no. 4.11.18.1 under sl. no. (viii) of Annexure-B to TCN-2.  No detention charges will be paid for delay in custom & other clearances.
08.	Clause No. 4.12.1 of TS and SC of contract (Page 43 of 43)	Price Variation Clause (PVC) / Over Run Compensation (ORC)/ Rate Revision are not applicable for this package.	Please let us know the validity of contract against the subject NIT and also in case of hike in diesel price whether any PVC clause shall be applicable.	Please refer modified clause no. 3.15 under sl. no. (vi) of Annexure-B to TCN-2.
09.	Clause No. 11.2.2 of GCC of contract (Page 4 of 52)	To split up the work amongst two or more tenderers	Please confirm.	No splitting of work is envisaged.
10.	Clause No. 11.2.3 of GCC of contract (Page 4 of 52)	To award the work in part.	Please confirm.	As per terms of the tender.

Sl. No.	Reference clause of tender document	Existing provision	Bidder's query	BHEL's clarification
11.	<p><u>PART - II</u></p> <p>Clause No. 7.4 of GCC of contract (Page 18 of 52)</p>	PERFORMANCE BOND	Please confirm it is applicable for this tender or not.	Not Applicable.
12.	<p><u>PART - II</u></p> <p>Clause No. 5.1 / 5.2 of GCC of contract (Page 12 of 52)</p>	<p>The quantities set out in the tender are the estimated quantities of the work but they are not to be taken as the actual and correct quantities of the works to be executed by the contractor in fulfillment of his obligations under the contract .....</p>	<p>Please clarify to what extent the quantity may vary and its impact on the lumpsum price quoted in MAIN PRICE (SCH-1).</p> <p>Also, please clarify whether all the GCC conditions are applicable in addition to SCC.</p>	Please refer Note (ii) of Vol. III Price Schedule Rev 02.
13.	<p>Note (ii)</p> <p>PRICE FOR TRANSPORTATION (SCH-2)</p>	<p>Total considered weight of all consignments in Annexure- I, IIA &amp; II B may individually vary upto any extent on arrival of new items/deletion of existing items.</p> <p>However, the total variation in quantity (weight) of consignments in Annexure- I, IIA &amp; II B taken together will be limited to +/-30% of total weight of tendered quantity.</p>	<p>Please clarify to what extent the weight of individual consignment may vary.</p> <p>We suggest to limit the variation in total weight of consignments up to 10%. Also, whether we shall be paid for actual total quantity transported at the rate given in the break up as per</p> <p>PRICE FOR TRANSPORTATION (SCH-2) on per MT basis.</p>	<p>As mentioned under BHEL's clarification in Sl. No. 5 above.</p> <p>Transportation charges will be paid on actual weight as per Packing List.</p>

Sl. No.	Reference clause of tender document	Existing provision	Bidder's query	BHEL's clarification
14.	Volume 1F Technical Specification and Special Condition of Contract Clause No. 2.1.5.2	As per clause (a to j)	Please clarify the time limit for arrangement of required storage facility	<p>The Bidder has to complete the following activities as per schedule mentioned below:</p> <p>Hiring of Land inside Bhutan - within 15 days of receipt of LOI.</p> <p>Completion of construction of semi-covered stores and completion of all other development Activities required on the total land (open &amp; semi-covered) - to be completed by 15/05/2013.</p>
15.	Volume 1F Technical Specification and Special Condition of Contract Clause No. 2.1.5.2	As per clause K (ii)	Please provide probable time in which 70 MT crane require for the purpose of bid cost.	Please refer modified clause no. 2.1.5.2 (k) under sl. no. (i) of Annexure-B to TCN-2.

## **ANNEXURE-B to TCN-2**

### **Please incorporate following changes on tender document:-**

- (i) Clause No. 2.1.5.2 (k) is modified as:-

Arrangement of necessary Material Handling Equipment / facility with manpower , T & P along with

(i) One no of Hydra of 12T/14T capacity on continuous basis.

(ii) The contractor shall mobilize crane/s of suitable capacity in the store for unloading, reloading & preservation of equipments/ materials as and when required.

(iii) Any other material handling equipment, T & P required for handling listed items as per tender.

- (ii) Clause No. 2.1.11 is modified as:

It is the responsibility of the transporter to obtain all required clearances / permit from all governmental / non-governmental authorities e.g. NHAI, PWD/CPWD, State Electricity Board, Railways, Communication Department, P&T, Traffic, Police Department or any other authority, including private parties / persons/ organisations for transportation of all the consignments including ODC through identified inland road transport en- route at appropriate time and carry out the transportation under intimation to BHEL. No transportation of equipment shall be undertaken by contractor without getting proper clearance. No delay in transportation in connection with obtaining above clearances shall be entertained by BHEL

- (iii) Clause No. 2.1.19 is modified as:

The approximate weight and dimension is enclosed as Annexure – I, Annexure – II A, Annexure – II B, Annexure – III & Annexure – IV. Please note that the weights and sizes given in Annexures are indicative and for guidance to the bidder. The actual Dispatch particulars may vary and shall be known at an appropriate stage from BHEL. Transportation charge of individual consignment will be paid on actual weight as mentioned in packing list.

- (iv) Clause No. 2.1.22 is modified as :

Priority of dispatch from BHEL-MUs shall be decided by concerned Manufacturing Units unless instructed otherwise by BHEL:PSER. Priority of dispatch from intermediate storage shall be based on requirement of Punatsangchhu site, which will be informed to transporter on due time by BHEL-PSER.

- (v) Clause No. 3.3.4 (C) of Payment term is modified as:-

#### **Storage with material handling/ lighting & Security arrangement:**

- (i) Construction/development of Open Storage Area (7250 sq.-m) at Phuentsholling or nearby area in Bhutan and necessary earth works like excavation, filling, compaction, levelling, grading, hard surfacing etc. including fencing of total storage area (8000 sq.-m), construction of internal roads, gate, security post ,office and other such things as per the specifications/details provided in the tender.– 100% of the price as per Sl. No. 1 (a) of SCH-3 of VOLUME – III .
- (ii) Construction/ development of semi-covered Storage Area (750 sq.-m) at Phuentsholling or nearby area in Bhutan and necessary earth works like excavation, filling, compaction, levelling, grading, hard surfacing, PCC flooring, CGI sheet covering and other such things as per specifications/details provided in the tender.– 100% of the price as per Sl. No. 1 (b) of SCH-3 of VOLUME – III .
- (iii) Hiring, operating and maintenance charges of total Storage Area (8000 sq.-m) at Phuentsholling or nearby area in Bhutan with facilities like unloading & loading of consignments, store-keeping, security, lighting, necessary material handling equipments, sleepers, T&P, manpower & preservation of equipments etc. as detailed in the tender.–

100% of the price as per SI. No. 2 of SCH-3 of VOLUME – III progressively on monthly basis & final after exit of last stored item from store.

Note: Payment of monthly rental as per sl. No. (iii) above will be paid from the date of readiness of storage to receive consignments. The readiness of store will be certified by BHEL Engineer.

(vi) Clause No. 3.15 is modified as :

The term of the tender stands amended to the following extent only.

The transportation portion [ SCH-2 of Vol III ( latest revision)] of the contract price shall be subject to PVC as follows:

The transportation portion of the Contract Price shall be increased or decreased on account of diesel and labour rates as per following formula:

$$P_1 = P_0 \left[ 0.5 + 0.3 \left( 1 + \frac{D_1 - D_0}{D_0} \right) + 0.2 \left( 1 + \frac{L_1 - L_0}{L_0} \right) \right]$$

Where:

$P_0$  = Actual Price of Invoice as per rates of the Contract.

$P_1$  = Price on the day of the Invoice after taking into account the indices.

$D_0$  = Price as per the 'MONTHLY WHOLESALE PRICE INDEX' for the high speed diesel oil published by Office of Economic Advisor, Ministry of Commerce & Industry, Govt. of India (Website: [www.eaindustry.nic.in](http://www.eaindustry.nic.in)) on scheduled due date of submission of offer.

$D_1$  = Price as per the 'MONTHLY WHOLESALE PRICE INDEX' for the high speed diesel oil published by Office of Economic Advisor, Ministry of Commerce & Industry, Govt. of India (Website: [www.eaindustry.nic.in](http://www.eaindustry.nic.in)) on the date of Invoice.

$L_0$  = 'Monthly All-India average consumer price index numbers for industrial workers' published by Labour Bureau , Ministry of Labour & Employment, Govt. of India (Website: [www.labourbureau.nic.in](http://www.labourbureau.nic.in)) on scheduled due date of submission of offer.

$L_1$  = 'Monthly All-India average consumer price index numbers for industrial workers' published by Labour Bureau , Ministry of Labour & Employment, Govt. of India (Website: [www.labourbureau.nic.in](http://www.labourbureau.nic.in)) on the date of invoice.

Note: For the consideration of escalation, indices shall be taken on the date of invoice or date of receipt of consignment at site/intermediate store whichever is earlier.

(vii) Clause No. 4.11.7.6 is modified as:

If the vehicle is not placed within the two days beyond the indicated placement date of vehicle as per clause 4.11.7.1, BHEL is at liberty to recover Rs 1000/- per day for truck/mechanical trailer and Rs 5000/- per day for hydraulic trailer from transporter's bills.

(viii) Clause No. 4.11.18.1 is modified as:

Detention charges for vehicles detained at Site shall be as follows –

a) For first Seven days from the date of reporting at site : NIL

b) Beyond Seven days: Rs 500/- per day for truck, Rs.1000/- per day for mechanical trailer, Rs 1500/- per axle per day for hydraulic trailer including prime mover (For each additional day).

c) The detention charges shall be limited to 10% of the Freight amount.

d) The period of detention shall be certified by the Consignee/Customer/BHEL Site-Incharge.

## ANNEXURE-I(REV-01)

### CONSIGNMENTS MORE THAN 35 MT(ODC)

**Consignments to be transported by Hydraulic trailers from BHEL Bhopal to storage area at Phuentsholing in Bhutan including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border & further transportation from storage area to Punatsangchhu Project Site on site requirement.**

#### PUNATSHANGCHHU PHASE-I HYDROELECTRIC PROJECT (6X200MW)

##### SHIPPING DETAILS OF SUPPLIES (UPTO MAR'2013)

S. No.	Item Description	No. of Units	No. of Boxes / Unit		Box Sizes in mm			Gr. weight kg	Qty	Total Wt. kg
					L	B	H			
<b>A. Turbine items</b>										
1	Runner	1	1	i	5500	5500	1500	35000	1	35000
2	Turbine Shaft	2	1	i	5000	2500	2500	40000	2	80000
<b>B. Generator items</b>										
3	Generator Bottom Shaft	3	1	i	5000	3200	3200	40000	3	120000
4	Generator Top Shaft	6	1	i	2500	1900	1900	40000	6	240000
<b>C. Turbine &amp; Generator items</b>										
5	Guide Apparatus	3	2	i	6600	3300	3500	46783	3	140349
				ii	6600	3300	3500	46783	3	140349

##### SHIPPING DETAILS OF SUPPLIES (FROM APR'2013 TO MAR'2014)

6	Guide Apparatus	3	1	i	6600	3300	3500	46783	3	140349
			1	ii	6600	3300	3500	46783	3	140349
7	Runner	5	1	i	5500	5500	1500	35000	5	175000
8	Turbine Shaft	4	1	i	5000	2500	2500	40000	4	160000
9	Arrgt of Penstock butterfly valve									
	Door (Half)	2	1	i	6100	4000	2200	38000	2	76000
	Door (Half)	2	1	ii	6100	4000	2200	38000	2	76000
	Body (Half)	2	1	iii	7200	3800	2300	39000	2	78000
10	Main Inlet Valve									
	D/S Body	6	1	i	5000	2270	4800	35000	6	210000
	Door	6	1	ii	3420	3000	2800	50000	6	300000
	Runner (Spare)	1	1	iii	5500	5500	1500	35000	1	35000
11	Bottom Shaft	3	1	i	5000	3200	3200	40000	3	120000

Total Wt. 2379396

## ANNEXURE- II A(REV-01)

## PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)

## List of Non-OD Consignments for direct transportation from BHEL Bhopal to Punatsangchhu Site in Bhutan

S. NO.	Item Description	No. of Units	No. of Boxes / Unit	Box Sizes in mm			Gr. weight kg	Qty	Total Wt. kg
				L	B	H			

## SHIPPING DETAILS OF SUPPLIES (UPTO MAR'2013)

## A. TURBINE ITEMS

1	Installation of D T Cone with securing items	4	3	i	1220	660	420	50	4	200
				ii	460	310	260	215	4	860
				iii	460	310	260	12	4	48
2	Tubes & Embedments for field Efficiency	6	1	iv	1500	1500	800	80	6	480
3	Runner	1	1	v	1500	1500	1000	800	1	800
4	Turbine Shaft	2	1	vi	1500	1500	1000	800	2	1600

## B. GENERATOR ITEMS

5	Stator Bars	6	25	i	1400	700	800	620	6	3720
				ii	2350	1800	1000	950	6	5700
				iii	3700	1000	900	1350	6	8100
				iv	3700	1000	900	1350	6	8100
				v	3700	1000	900	1350	6	8100
				vi	3700	1000	900	1350	6	8100
				vii	3700	1000	900	1350	6	8100
				viii	3700	1000	900	1350	6	8100
				ix	3700	1000	900	1350	6	8100
				x	3700	1000	900	1320	6	7920
				xi	3700	1000	900	1320	6	7920
				xii	4400	1000	900	1350	6	8100
				xiii	4400	1000	900	1350	6	8100
				xiv	4400	1000	900	1350	6	8100
				xv	4400	1000	900	1350	6	8100
				xvi	4400	1000	900	1350	6	8100
				xvii	4400	1000	900	1350	6	8100
				xviii	4400	1000	900	1350	6	8100
				xix	3700	1000	900	1320	6	7920
				xx	3700	1000	900	1320	6	7920
				xxi	3700	1000	900	1450	6	8700
				xxii	3700	1000	900	980	6	5880
				xxiii	4400	1000	900	1350	6	8100
				xxiv	3700	1000	900	920	6	5520
				xxv	3700	1000	900	980	6	5880
6	Bus Ring Connectors.	2	6	i	8700	800	700	900	2	1800
				ii	7600	800	700	900	2	1800
				iii	6600	800	700	600	2	1200
				iv	5900	800	1000	650	2	1300
				v	4300	800	1050	500	2	1000
				vi	3800	800	1050	450	2	900
				i	1300	1000	800	2800	3	8400
				ii	1300	1000	800	2800	3	8400
				iii	1300	1000	800	2800	3	8400
				iv	1300	1000	800	2800	3	8400
				v	1300	1000	800	2800	3	8400
				vi	1300	1000	800	2800	3	8400
				vii	1300	1000	800	2800	3	8400
				viii	1300	1000	800	2800	3	8400
				ix	1300	1000	800	2800	3	8400
				x	1300	1000	800	2800	3	8400
				xi	1300	1000	800	2800	3	8400
				xii	1300	1000	800	2800	3	8400
				xiii	1300	1000	800	2800	3	8400

**ANNEXURE- II A(REV-01)**

**PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)**

**List of Non-OD Consignments for direct transportation from BHEL Bhopal to Punatsangchhu Site in Bhutan**

S. NO.	Item Description	No. of Units	No. of Boxes / Unit	Box Sizes in mm			Gr. weight kg	Qty	Total Wt. kg	
				L	B	H				
7	Stator Punchings	3	61	xiv	1300	1000	800	2800	3	8400
				xv	1300	1000	800	2800	3	8400
				xvi	1300	1000	800	2800	3	8400
				xvii	1300	1000	800	2800	3	8400
				xviii	1300	1000	800	2800	3	8400
				xix	1300	1000	800	2800	3	8400
				xx	1300	1000	800	2800	3	8400
				xxi	1300	1000	800	2800	3	8400
				xxii	1300	1000	800	2800	3	8400
				xxiii	1300	1000	800	2800	3	8400
				xxiv	1300	1000	800	2800	3	8400
				xxv	1300	1000	800	2800	3	8400
				xxvi	1300	1000	800	2800	3	8400
				xxvii	1300	1000	800	2800	3	8400
				xxviii	1300	1000	800	2800	3	8400
				xxix	1300	1000	800	2800	3	8400
				xxx	1300	1000	800	2800	3	8400
				xxxi	1300	1000	800	2800	3	8400
				xxxii	1300	1000	800	2800	3	8400
				xxxiii	1300	1000	800	2800	3	8400
				xxxiv	1300	1000	800	2800	3	8400
				xxxv	1300	1000	800	2800	3	8400
				xxxvi	1300	1000	800	2800	3	8400
				xxxvii	1300	1000	800	2800	3	8400
				xxxviii	1300	1000	800	2800	3	8400
				xxxix	1300	1000	800	2800	3	8400
				xl	1300	1000	800	2800	3	8400
				xli	1300	1000	800	2800	3	8400
				xlii	1300	1000	800	2800	3	8400
				xliii	1300	1000	800	2800	3	8400
				xliv	1300	1000	800	2800	3	8400
				xlv	1300	1000	800	2800	3	8400
				xlvi	1300	1000	800	2800	3	8400
				xlvii	1300	1000	800	2800	3	8400
				xlviii	1300	1000	800	2800	3	8400
				xliv	1300	1000	800	2800	3	8400
				l	1300	1000	800	2800	3	8400
				li	1300	1000	800	2800	3	8400
				lii	1300	1000	800	2800	3	8400
				liii	1300	980	800	2300	3	6900
				liv	1300	980	800	2300	3	6900
lv	1300	980	800	2300	3	6900				
lvi	1300	980	800	2300	3	6900				
lvii	1800	1350	1200	2500	3	7500				
lviii	1800	1350	1200	2500	3	7500				
lix	1800	1350	1200	2500	3	7500				
lx	1800	1350	1200	2500	3	7500				
lxi	1800	1350	1200	500	3	1500				
i	1900	750	850	2750	5	13750				
ii	1900	750	850	2750	5	13750				
iii	1900	750	850	2750	5	13750				
iv	1900	750	850	2750	5	13750				
v	1900	750	850	2750	5	13750				
vi	1900	750	850	2750	5	13750				
vii	1900	750	850	2750	5	13750				



## ANNEXURE- II A(REV-01)

## PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)

## List of Non-OD Consignments for direct transportation from BHEL Bhopal to Punatsangchhu Site in Bhutan

S. NO.	Item Description	No. of Units	No. of Boxes / Unit	Box Sizes in mm			Gr. weight kg	Qty	Total Wt. kg	
				L	B	H				
				xv	2250	1050	800	4700	6	28200
				xvi	2250	1050	800	4700	6	28200
				xvii	2250	1050	800	4700	6	28200
				xviii	2250	1050	800	4700	6	28200
				xix	2250	1050	800	4700	6	28200
				xx	2250	1050	800	4700	6	28200
				xxi	2250	1050	800	4700	6	28200
				xxii	2250	1050	800	4700	6	28200
				xxiii	2250	1050	800	4700	6	28200
				xxiv	2250	1050	800	4700	6	28200
10	Generator Bottom Shaft	3	1	i	800	700	800	1000	3	3000
11	Generator Top Shaft	6	1	i	800	700	1000	1000	6	6000
<b>C. TURBINE &amp; GENERATOR ITEMS</b>										
12	Installation of Stay Ring with securing items	5	1	i	800	500	420	25	5	125
13	Installation of Spiral Casing with securing items	6	5	i	1440	1120	800	2500	6	15000
				ii	500	500	200	30	6	180
				iii	2500	1000	1000	810	6	4860
				iv	460	310	260	5	6	30
				v	2250	750	600	2300	6	13800
14	Guide Apparatus	3	4	i	2000	1500	1000	370	3	1110
				ii	2000	1500	1000	602	3	1806
				iii	1500	1500	1000	12	3	36
				iv	1500	1500	1000	70	3	210
15	Upper Bracket Assembly	6	2	i	800	500	410	220	6	1320
				ii	500	500	500	870	6	5220
16	Lower Bracket Assembly	6	2	i	2200	650	600	2908	6	17448
				ii	500	500	500	870	6	5220
17	Rotor Spider	6	3	i	1200	800	800	500	6	3000
				ii	1200	800	800	500	6	3000
				iii	1500	1500	1000	1500	6	9000
<b>D. SHIPPING DETAILS OF SUPPLIES (FROM APR'2013 TO MAR'2014)</b>										
1	Guide Apparatus	3	1	i	2000	1500	1000	370	3	1110
			1	ii	2000	1500	1000	602	3	1806
			1	iii	1500	1500	1000	12	3	36
			1	iv	1500	1500	1000	70	3	210
2	Runner	5	1	i	1500	1500	1000	800	5	4000
3	Turbine Shaft	4	1	i	1500	1500	1000	800	4	3200
4	G V Servo	6	4	i	1000	800	800	1200	24	28800
5	Shaft Sealing	6	1	i	2500	2500	500	800	6	4800
6	Guide Bearing	6	1	i	800	800	500	350	6	2100
			1	ii	800	400	400	300	6	1800
7	Monorail in Turbine Pit	6	1	i	800	500	420	125	6	750
			1	ii	800	500	420	125	6	750
8	Arrgt of flowmeter & discharge measuring instruments piping	6	1	i	2700	2700	750	2400	6	14400
			1	ii	2100	2100	1500	700	6	4200
9	Pipes in Turbine Pit	6	1	i	800	500	420	100	6	600
			1	ii	800	500	420	100	6	600
			1	iii	800	500	420	100	6	600
			1	iv	800	500	420	100	6	600
				1	i	800	500	420	100	600

**ANNEXURE- II A(REV-01)**

**PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)**

**List of Non-OD Consignments for direct transportation from BHEL Bhopal to Punatsangchhu Site in Bhutan**

S. NO.	Item Description	No. of Units	No. of Boxes / Unit	Box Sizes in mm			Gr. weight kg	Qty	Total Wt. kg	
				L	B	H				
10	Oil Pipe Lines	6	1	ii	800	500	420	100	6	600
			1	iii	800	500	420	100	6	600
			1	iv	800	500	420	100	6	600
11	Cooling Water System	1	24	i	3500	2000	1500	1500	24	36000
			36	ii	2000	2000	2000	4000	36	144000
			6	iii	2500	2500	2500	1600	6	9600
		6	1	iv	800	500	420	100	6	600
			1	v	800	500	420	100	6	600
			1	vi	800	500	420	100	6	600
			1	vii	800	500	420	100	6	600
12	Compressed Air System	1	2	i	2300	1100	1800	2500	2	5000
13	Drainage & Dewatering system	1	8	i	3000	3000	3000	8000	8	64000
14	Governing Items									
	Hydro Mechanical Cabinet (H.M.C.)	6	1	i	1400	1200	2500	1700	6	10200
	Microprocessor Based Digital Governor (EHGC)	6	1	ii	2520	1200	1000	1100	6	6600
	Oil Sump Tank for GOV	6	1	iii	2000	2000	2200	2800	6	16800
	Oil Pressure Accumulator for GOV	6	1	iv	2300	1600	4000	4200	6	25200
	Nitrogen Bottle Bank	6	1	v	1500	2000	2000	2200	6	13200
	Oil Sump Tank for MIV	6	1	vi	2700	2200	2400	3400	6	20400
	Oil Pressure Accumulator for MIV	6	1	vii	3100	2200	4000	9200	6	55200
	Nitrogen Bottle Bank	6	1	viii	3250	2000	3350	6200	6	37200
	MIV Hydraulic Control Panel	6	1	ix	700	1000	2350	500	6	3000
	MIV Electrical Control Panel	6	1	x	800	1000	2500	400	6	2400
	Oil Sump Tank for BFV per valve	2	1	xi	3200	3100	2600	4700	2	9400
	Oil Pressure Accumulator for BFV per valve	2	1	xii	3100	1600	4000	6200	2	12400
	Nitrogen Bottle Bank per valve	2	1	xiii	2100	1800	3000	3700	2	7400
	BFV Hydraulic Control Panel per valve	2	1	xiv	700	1000	2350	500	2	1000
	BFV Electrical Control Panel per valve	2	1	xv	800	1000	2500	400	2	800
	LUB. Oil Purifier Centrifugal Type (4M3 / Hr.) - 2 Nos. common for Powerhouse	1	1	xvi	3000	2000	2000	2450	1	2450
Oil Storage Tank (14 M3) - 2 Nos. Common for Powerhouse	1	1	xvii	2500	2500	3000	1600	1	1600	
Pipe, Pipe Fittings and Accessories for Oil Handling System Common for Powerhouse	1	1	xviii	5000	2000	2000	4200	1	4200	

## ANNEXURE- II A(REV-01)

## PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)

## List of Non-OD Consignments for direct transportation from BHEL Bhopal to Punatsangchhu Site in Bhutan

S. NO.	Item Description	No. of Units	No. of Boxes / Unit	Box Sizes in mm			Gr. weight kg	Qty	Total Wt. kg	
				L	B	H				
	Piping for Head Race, Tail Race, Drainage, Dewatering & Flood Level System Common for Powerhouse	1	1	xix	3000	1000	1000	500	1	500
15	Arrgt of Penstock butterfly valve									
	Rubber items	2	1	i	2000	2000	2000	550	2	1100
	DS seat ring carrier ( in halves)	2	1	ii	7500	3600	300	1200	2	2400
	Al Br Housing	2	1	iii	4000	1500	1500	400	2	800
16	Arrgt of Servomotor									
	RH Servomotor	2	1	i	4500	1500	1500	4700	2	9400
	LH Servomotor	2	1	ii	4500	1500	1500	4700	2	9400
17	Inlet Pipe									
	Misc items	2	1	i	2000	2000	2000	1200	2	2400
18	Bypass valve									
	By pass valve -1	2	1	i	2000	800	800	1000	2	2000
	Misc-1	2	1	ii	500	500	500	250	2	500
	By pass valve -2	2	1	iii	2000	800	800	1000	2	2000
	Misc-2	2	1	iv	500	500	500	250	2	500
19	Tools, Tackles & Erection devices									
	D shackles	1	1	i	2000	2000	1000	550	1	550
	Hardwares	1	1	ii	1500	1500	1500	850	1	850
20	Testing devices									
	Hardwares	1	1	i	2000	2000	2000	550	1	550
	Misc.	1	1	ii	2000	2000	2000	250	1	250
21	BFV Pipelines									
	Rubber items	2	1	i	2000	2000	2000	1200	2	2400
	Instruments	2	1	ii	1000	1000	1000	120	2	240
	Hardwares	2	1	iii	1000	1000	1000	850	2	1700
22	Platform,railing stair case etc									
	Hardwares	2	1	i	2000	2000	2000	550	2	1100
	Misc	2	1	ii	2000	2000	2000	550	2	1100
23	Air valve									
	Air valve	2	1	i	1500	1000	1000	550	2	1100
	Hardwares	2	1	ii	1000	500	500	250	2	500
	Misc	2	1	iii	1000	500	500	350	2	700
	Air valve	2	1	iv	1500	1000	1000	550	2	1100
	Hardwares	2	1	v	1000	500	500	250	2	500
	Misc	2	1	vi	1000	500	500	350	2	700
24	Vaccum breaking valve									
	Valve-1	2	1	i	2500	2500	2500	1500	2	3000
	Valve-2	2	1	ii	2500	2500	2500	1500	2	3000
	Valve-3	2	1	iii	2500	2500	2500	1500	2	3000
	Valve-4	2	1	iv	2500	2500	2500	1500	2	3000
	Hardwares	2	1	v	1000	1000	1000	450	2	900
	Misc	2	1	vi	1000	1000	1000	300	2	600
25	BFV spares									
	Service seal, screws	1	1	i	2000	2000	2000	1700	1	1700
	Piston rings, bushes	1	1	ii	2000	2000	2000	550	1	550
	Bypass valve	1	1	iii	2000	800	800	1000	1	1000
	Drain valve, Rubber seals	1	1	iv	1000	500	500	550	1	550

**ANNEXURE- II A(REV-01)**

**PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)**

**List of Non-OD Consignments for direct transportation from BHEL Bhopal to Punatsangchhu Site in Bhutan**

S. NO.	Item Description	No. of Units	No. of Boxes / Unit		Box Sizes in mm			Gr. weight	Qty	Total Wt.
					L	B	H	kg		kg
	Anti vaccum valve	1	1	v	2500	2500	2500	1200	1	1200
	Air valve	1	1	vi	1500	1000	1000	550	1	550
	Main Inlet Valve									
26	MIV Servomotor	6	2	i	4500	800	800	8000	12	96000
	Bypass Valve	6	2	ii	1600	800	500	850	12	10200
	Seals, Hardwares etc	6	20	iii	1500	1500	1000	1000	120	120000
	MCPs	1	30	iv	3000	2000	2000	800	30	24000
27	Bottom Shaft	3	1	i	800	700	800	1000	3	3000
28	Generator Instruments	6	34	i	800	500	410	200	204	40800

Total Wt. 3044235

**ANNEXURE-IIB(REV-01)**

**PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)**

Consignments having weight less than 35 tonnes to be transported by trucks/ mechanical trailers from BHEL Bhopal to storage area in Bhutan including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border & further transportation from storage area to Punatsangchhu Project Site on site requirement.

**SHIPPING DETAILS OF SUPPLIES (UPTO MAR'2013)**

**TURBINE ITEMS**

S. No.	Item Description	No. of Units	No. of Boxes / Unit	Box Sizes in mm			Gr. weight	Total Qty.	Total Wt.	
				L	B	H	kg		kg	
1	Installation of D T Cone with securing items	4	9	i	3370	3370	1000	8484	4	33936
				ii	3653	3653	1345	4530	4	18120
				iii	3800	3800	1470	5180	4	20720
				iv	4430	4430	732	2580	4	10320
				v	2000	1400	900	1550	4	6200
				vi	6500	50	50	8	4	32
				vii	1800	500	500	475	4	1900
				viii	6000	400	350	550	4	2200
				ix	1220	780	560	800	4	3200
2	Pipes & Embedments in First Stage	6	10	i	5300	800	800	1632	6	9792
				ii	5300	800	800	1632	6	9792
				iii	1220	780	560	760	6	4560
				iv	1220	780	560	760	6	4560
				v	1600	850	800	2000	6	12000
				vi	1220	660	420	460	6	2760
				vii	1800	500	500	100	6	600
				viii	2500	1100	1100	200	6	1200
				ix	6300	4900	820	14000	6	84000
				x	1220	660	420	460	6	2760
3	Tubes & Embedments for field Efficiency	6	4	i	6400	500	600	2000	6	12000
				ii	1220	660	420	370	6	2220
				iii	1500	1500	800	100	6	600
				iv	6000	1500	1500	13000	6	78000
4	Installation of Spiral Inlet Pipe with securing items	5	1	i	3500	3500	2610	14241	5	71205
5	Embedded Pipes in Second Stage	6	10	i	5300	800	800	1632	6	9792
				ii	5300	800	800	1632	6	9792
				iii	1220	780	560	760	6	4560
				iv	1220	780	560	760	6	4560
				v	1600	850	800	2000	6	12000
				vi	1220	660	420	460	6	2760
				vii	1800	500	500	100	6	600
				viii	2500	1100	1100	200	6	1200
				ix	6300	4900	820	14000	6	84000
				x	1220	660	420	460	6	2760

**TURBINE & GENERATOR ITEMS**

1	Installation of Stay Ring with securing items	5	4	i	8098	4049	635	29800	5	149000
				ii	8098	4049	635	28000	5	140000
				iii	1440	1120	800	950	5	4750
				iv	1600	700	850	2200	5	11000
2	Installation of Spiral Casing with securing items	6	10	i	6100	3500	3000	17503	6	105018
				ii	7400	3300	2700	16374	6	98244
				iii	6800	2900	2300	9543	6	57258
				iv	4700	1800	1650	2946	6	17676
				v	3200	2800	2300	10001	6	60006
				vi	2400	2300	1950	3540	6	21240
				vii	1900	1800	1750	1712	6	10272
				viii	3000	2950	1400	5125	6	30750
				ix	2900	2900	3000	11000	6	66000
				x	6000	500	500	1685	6	10110

**ANNEXURE-IIB(REV-01)**

**PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)**

**Consignments having weight less than 35 tonnes to be transported by trucks/ mechanical trailers from BHEL Bhopal to storage area in Bhutan including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border & further transportation from storage area to Punatsangchhu Project Site on site requirement.**

3	Installation of Pit Liner with securing items	6	10	i	5600	4600	2400	3116	6	18696
				ii	1200	800	1200	800	6	4800
				iii	5600	4600	2400	3000	6	18000
				iv	1200	800	800	800	6	4800
				v	1200	800	800	800	6	4800
				vi	5600	4600	2400	3116	6	18696
				vii	5600	4600	2400	3116	6	18696
				viii	5600	1300	2000	3116	6	18696
				ix	2200	1200	1200	800	6	4800
				x	250	250	3250	800	6	4800
4	Guide Apparatus	3	13	i	6600	4500	1000	25466	3	76398
				ii	6600	4500	1000	25466	3	76398
				iii	4500	4500	500	9245	3	27735
				iv	5600	5600	500	3996	3	11988
				v	5600	5600	500	3996	3	11988
				vi	2500	1660	1300	3720	3	11160
				vii	2500	1660	1300	3720	3	11160
				viii	2500	1660	1300	3720	3	11160
				ix	2500	1660	1300	3720	3	11160
				x	2500	1660	1300	3720	3	11160
				xi	2000	1500	1000	1395	3	4185
				xii	2000	1500	1000	1178	3	3534
				xiii	2000	1500	1000	8412	3	25236
5	Stator Frame Assembly	6	4	i	6600	3100	1600	9191	6	55146
				ii	6600	3100	1600	9191	6	55146
				iii	6600	3100	1600	9191	6	55146
				iv	6600	3100	1600	9191	6	55146
6	Upper Bracket Assembly	6	9	i	3550	3550	850	8800	6	52800
				ii	3150	500	825	1888	6	11328
				iii	3150	500	825	1888	6	11328
				iv	3150	500	825	1888	6	11328
				v	3150	500	825	1888	6	11328
				vi	3150	500	825	1888	6	11328
				vii	3150	500	825	1888	6	11328
				viii	3150	500	825	1888	6	11328
				ix	3150	500	825	1888	6	11328
7	Lower Bracket Assembly	6	8	i	4100	2050	2500	28878	6	173268
				ii	2200	650	600	2908	6	17448
				iii	2200	650	600	2908	6	17448
				iv	2200	650	600	2908	6	17448
				v	2200	650	600	2908	6	17448
				vi	2200	650	600	2908	6	17448
				vii	2200	650	600	2908	6	17448
				viii	2200	650	600	2908	6	17448
8	Rotor Spider	6	2	i	5800	2800	2400	21000	6	126000
				ii	5800	2800	2400	21000	6	126000
9	Air Coolers	3	8	i	2300	2100	550	1200	3	3600
				ii	2300	2100	550	1200	3	3600
				iii	2300	2100	550	1200	3	3600
				iv	2300	2100	550	1200	3	3600
				v	2300	2100	550	1200	3	3600
				vi	2300	2100	550	1200	3	3600
				vii	2300	2100	550	1200	3	3600
				viii	2300	2100	550	1200	3	3600

**ANNEXURE-IIB(REV-01)**

**PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)**

**Consignments having weight less than 35 tonnes to be transported by trucks/ mechanical trailers from BHEL Bhopal to storage area in Bhutan including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border & further transportation from storage area to Punatsangchhu Project Site on site requirement.**

**SHIPPING DETAILS OF SUPPLIES (FROM APR'2013 TO MAR'2014)**

1	Guide Apparatus	3	1	i	6600	4500	1000	25466	3	76398
			1	ii	6600	4500	1000	25466	3	76398
			1	iii	4500	4500	500	9245	3	27735
			1	iv	5600	5600	500	3996	3	11988
			1	v	5600	5600	500	3996	3	11988
			1	vi	2500	1660	1300	3720	3	11160
			1	vii	2500	1660	1300	3720	3	11160
			1	viii	2500	1660	1300	3720	3	11160
			1	ix	2500	1660	1300	3720	3	11160
			1	x	2500	1660	1300	3720	3	11160
			1	xi	2000	1500	1000	1395	3	4185
			1	xii	2000	1500	1000	1178	3	3534
1	xiii	2000	1500	1000	8412	3	25236			
2	Guide Bearing	6	1	i	3000	3000	800	750	6	4500
			1	ii	1200	1200	800	500	6	3000
3	Monorail in Turbine Pit	6	1	i	3000	1000	600	1600	6	9600
4	Platform & Railing in Turbine Pit	6	1	i	2100	1100	600	900	6	5400
			1	ii	400	400	400	20	6	120
			1	iii	3000	1000	850	950	6	5700
5	Runner Aeration Equipment	6	1	i	2700	2700	750	2400	6	14400
			1	ii	2100	2100	1500	700	6	4200
			1	iii	1300	800	600	750	6	4500
			1	iv	2300	1200	800	1250	6	7500
			1	v	700	650	950	315	6	1890
			1	vi	1800	700	550	100	6	600
			1	vii	1300	800	600	750	6	4500
			1	viii	700	650	950	315	6	1890
6	Pipes in Turbine Pit	6	1	i	1220	780	560	715	6	4290
			1	ii	1220	780	560	715	6	4290
			1	iii	1220	780	560	715	6	4290
			1	iv	1220	780	560	715	6	4290
			1	v	1220	780	560	715	6	4290
			1	vi	1220	780	560	715	6	4290
7	Oil Pipe Lines	6	1	i	1220	780	560	715	6	4290
			1	ii	1220	780	560	715	6	4290
			1	iii	1220	780	560	715	6	4290
			1	iv	1220	780	560	715	6	4290
			1	v	1220	780	560	715	6	4290
			1	vi	1220	780	560	715	6	4290
8	Arrgt of Air Valve	6	1	i	2700	2700	750	2400	6	14400
			1	ii	2700	2700	750	2400	6	14400
9	Cooling Water System	1	12	i	2800	1500	1500	800	12	9600
			8	ii	2000	2000	3000	1000	8	8000
		6	1	iii	1220	780	560	715	6	4290
			1	iv	1220	780	560	715	6	4290
10	Compressed Air System	1	4	i	1000	1000	2200	900	4	3600
			4	ii	1100	1100	2500	2000	4	8000
			4	iii	6500	500	500	200	4	800
			6	iv	1500	1500	1000	1200	6	7200
11	Drainage & Dewatering system	1	2	i	2000	2000	2000	4000	2	8000
			1	ii	2500	2500	2500	1600	1	1600
			1	iii	700	700	1000	1600	1	1600
			1	iv	5500	2000	2000	10000	1	10000

**ANNEXURE-IIB(REV-01)**

**PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)**

**Consignments having weight less than 35 tonnes to be transported by trucks/ mechanical trailers from BHEL Bhopal to storage area in Bhutan including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border & further transportation from storage area to Punatsangchhu Project Site on site requirement.**

			3	v	5500	2000	2000	31000	3	93000
			11	vi	5500	2000	2000	16000	11	176000
12	Arrgt of Penstock butterfly valve									
	LH Lever	2	1	i	4200	1600	500	4500	2	9000
	RH Lever	2	1	ii	4200	1600	500	4500	2	9000
	Seal clamping ring( Main & maintenance)	2	1	iii	2500	1000	2800	600	2	1200
	Foundation bolt, wedge, Plate	2	1	iv	2600	1000	1000	1650	2	3300
	LH counter weight	2	1	v	1500	1500	1000	8000	2	16000
	RH counter weight	2	1	vi	1500	1500	1000	8000	2	16000
	Hardwares	2	1	vii	1000	1000	1000	300	2	600
	Foundation Plates	2	1	viii	2700	1000	500	4000	2	8000
	Door hardware	2	1	ix	1000	1000	1000	550	2	1100
	Misc items	2	1	x	500	500	500	300	2	600
Push pull hardware	2	1	xi	1000	1000	1000	300	2	600	
13	Arrgt of Servomotor									
	RH Foundation plates & Hardware	2	1	i	2000	2000	2000	1900	2	3800
	RH Foundation bolts & misc items	2	1	ii	1000	1000	1000	1500	2	3000
	LH Foundation Plates & Hardwares	2	1	iii	2000	2000	2000	1900	2	3800
	LH Foundation bolts & misc items	2	1	iv	1000	1000	1000	1500	2	3000
14	Inlet Pipe									
	Inlet Pipe ( In half)	2	1	i	7000	3500	3100	13000	2	26000
	Inlet Pipe ( In half)	2	1	ii	7000	3500	2100	13000	2	26000
15	Outlet pipe with dismantling joint									
	Outlet pipe (In halves)	2	1	i	6600	3300	3200	13000	2	26000
	Outlet Pipe ( In halves)	2	1	ii	6600	3300	3200	13000	2	26000
	Dismantling ring ( In halves)	2	1	iii	8000	4000	1000	2100	2	4200
	Dismantling ring ( In halves)	2	1	iv	8000	4000	1000	2100	2	4200
16	Tools, Tackles & Erection devices									
	Hardwares	1	1	i	2000	2000	1000	1700	1	1700
	Supports	1	1	ii	5000	3000	3000	1900	1	1900
	Slings	1	1	iii	3000	3000	2000	3200	1	3200
	Lifting Plates	1	1	iv	5000	3000	3000	2500	1	2500
	Lifting Brackets	1	1	v	5000	3000	3000	4000	1	4000
	Testing devices									
17	Testing equipments	1	1	i	7200	3800	2300	15000	1	15000
	Testing equipments	1	1	ii	7200	3800	2300	15000	1	15000
18	BFV Pipelines									
	Pipes	2	1	i	6000	3000	2000	5000	2	10000
	Pipes	2	1	ii	6000	3000	2000	2000	2	4000
	Pipe fittings	2	1	iii	2000	2000	2000	1000	2	2000
	Pipe supports	2	1	iv	1800	1800	1800	2500	2	5000
	Beam / channel	2	1	v	6000	3000	2000	1000	2	2000
	Valves	2	1	vi	2800	2800	2800	2000	2	4000
Pipes	2	1	vii	6000	3000	2000	5000	2	10000	

**ANNEXURE-IIB(REV-01)**

**PUNATSHANGCHHU-1 HYDROELECTRIC PROJECT (6X200MW)**

**Consignments having weight less than 35 tonnes to be transported by trucks/ mechanical trailers from BHEL Bhopal to storage area in Bhutan including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border & further transportation from storage area to Punatsangchhu Project Site on site requirement.**

19	Base & Foundation Plate	2	1	viii	2500	2500	2500	1700	2	3400
	Platform,railing stair case etc									
	Frame	2	1	i	6000	3000	2000	2000	2	4000
	Support	2	1	ii	6000	3000	2000	1000	2	2000
	Main Inlet Valve			iii						
	U/S Body	6	1	iv	4500	1085	4500	16000	6	96000
	Trunnion	6	2	v	1700	1700	1600	9000	12	108000
	Lever	6	2	vi	4000	550	3000	10000	12	120000
	Weight Casing	6	1	vii	6400	800	4900	14000	6	84000
	Inlet Pipe to MIV	6	1	viii	3500	3500	2750	18000	6	108000
20	Outlet Pipe to MIV	6	1	ix	3500	3500	2000	12000	6	72000
	Cable	1	120	x	2000	2000	1000	1000	120	120000
	Spare Labyrinths (Rotating) Upper	1	18	xi	5600	5600	500	1400	18	25200
	Spare Labyrinths (Rotating) Lower	1	18	xii	5600	5600	500	1200	18	21600
	Spare Labyrinths (Fixed) Upper	1	18	xiii	5600	5600	500	1400	18	25200
	Spare Labyrinths (Fixed) Lower	1	18	xiv	5600	5600	500	1200	18	21600
	Spare Liner Plates (Upper)	1	18	xv	5600	5600	500	1200	18	21600
	Spare Liner Plates (Lower)	1	18	xvi	5600	5600	500	1200	18	21600
	Spare Guide Vanes	1	20	xvii	2500	1660	1300	4000	20	80000
	21	Air Cooler	3	8	i	2300	2100	550	1200	24
22	Oil Coolers	6	2	i	800	500	350	180	12	2160
		6	8	ii	900	900	700	350	48	16800

Total Wt. 4687865

**VOLUME-III, REV-02  
PRICE SCHEDULE**

**Transportation of Consignments from Various Manufacturing Units of BHEL to Punatsangchhu HEP with intermediate storage facility in Bhutan FOR 6 X 200 MW PUNATSANGCHHU-I HYDROELECTRIC PROJECT, PUNATSANGCHHU, BHUTAN.**

**TENDER NO. PSER:SCT:PSC-M1443:13**

**PREAMBLE**

1.0	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 other volumes of tender as applicable.
2.0	The work shall be carried out strictly as per specifications, description of the items in these schedule and / or engineer's instructions.
3.0	Items of work provided in this schedule but not covered in this specification shall be executed strictly as per instruction of the engineer.
4.0	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.
5	The items/quantities/weights of the various transportations mentioned in this schedule of items are approximate, based on preliminary information .
6.0	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.
7.0	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 language.
8.0	All works item wise shall be measured upon completion and paid for at the rates quoted and accepted.
9.0	The tender shall be deemed to have studied the specifications, details of work to be done within the time schedule attached and to have acquainted himself of the conditions prevailing at site.
10.0	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.
11.0	Evaluation shall be on total amount as per SCH-01 (MAIN PRICE) only.
12.0	In the case of arrival of new items , Bidder shall have to execute the same as per notes given in Price schedule ( SCH-2).

**VOLUME-III, REV-02  
PRICE SCHEDULE**

**Transportation of Consignments from Various Manufacturing Units of BHEL to Punatsangchhu HEP with intermediate storage facility in  
Bhutan  
FOR 6 X 200 MW Punatsangchhu-I Hydroelectric Project, PUNATSANGCHHU, BHUTAN.**

**TENDER NO. PSER:SCT:PSC-M1443:13**

**MAIN PRICE (SCH-1)**

SL NO	DESCRIPTION	QTY	AMOUNT (IN RS) (IN FIG. & IN WORDS)
1	Total price for transportation of all the consignments as per Annexure-I, IIA, IIB, III & IV from Various BHEL Unit i.e. Bhopal, EDN Bangalore & Jhansi to Punatsangchhu Project Site in Bhutan including custom clearance of all export consignments at Indo-Bhutan Border with the provision of storage area to be developed and maintained for the given stipulated time and storage of items as per Annexure-I & Annexure-II B as per the scope of work mentioned in the tender & any other related job whether mentioned or not but essentially required for completion of contract taking into account all changes/ clarifications indicated through TCNs .	1 Lot	
NOTE	<b>The break up of prices of this summary of Prices(SCH-1) to be detailed in Price Schedule-SCH-2 &amp; SCH-3.</b>		

VOL-III , REV-02 PRICE SCHEDULE				
Transportation of Consignments from Various Manufacturing Units of BHEL to Punatsangchhu HEP with intermediate storage facility in Bhutan for 6 X 200 MW Punatsangchhu -I Hydroelectric Project , Punatsangchhu , Bhutan .				
TENDER NO. PSER:SCT:PSC-M1443:13				
PRICE FOR TRANSPORTATION (SCH-2)				
SI. NO.	Description	Total weight as per list ( In MT) (a)	Rate per tonne ( In Rupee) (b)	Total Amount (axb)
1	<b>PART-A</b> Transportation of consignments having weight more than or equal to 35 tonnes by Hydraulic trailers as mentioned in <b>Annexure -I</b> from <b>BHEL Bhopal</b> to storage area at Phuentsholing in Bhutan including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border & further transportation from storage area to Punatsangchhu Project Site on site requirement.	2379.396		
2	(i) Transportation of consignments having weight less than 35 tonnes by trucks/ trailers as mentioned in <b>Annexure -II A</b> from <b>BHEL Bhopal</b> to Punatsangchhu Project Site including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border & (ii) Transportation of consignments having weight less than 35 tonnes by trucks/ trailers as mentioned in <b>Annexure -II B</b> from <b>BHEL Bhopal</b> to storage area in Bhutan including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border & further transportation from storage area to Punatsangchhu Project Site on site requirement.	7732.100		
3	<b>PART-C</b> Transportation of all consignments having weight less than 35 tonnes by trucks/ trailers as mentioned in <b>Annexure -III</b> from <b>BHEL-EDN, Bangalore</b> to Punatsangchhu Project Site including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border.	194.550		
4	<b>PART-D</b> Transportation of all consignments having weight less than 35 tonnes by trucks/ trailers as mentioned in <b>Annexure -IV</b> from <b>BHEL Jhansi</b> to Punatsangchhu Project Site including all clearances like custom/Sales tax etc. of all consignments at Indo-Bhutan Border.	46.200		
TOTAL				
<b>TOTAL ( In Words):</b>				
<b>Note :</b>	(i) Weight & dimension of individual item listed in Annexure-I, IIA, IIB, III & IV is indicative & may vary up to +/- 5% . Transportation charge will be paid on actual weight of individual item as per packing list.			
	(ii) Total considered weight of all consignments in Annexure-I, IIA, IIB, III & IV may individually vary upto any extent on arrival of new items/deletion of existing items. However, the total variation in quantity(weight) of consignments in Annexure- I, IIA, II B, III & IV taken together will be limited to +/-25% of total weight of tendered quantity.			
	(iii) In case of addition of new items, transportation charge will be governed by MT rate of respective part as above.			

**VOL-III, REV-02  
PRICE SCHEDULE**

**Transportation of Consignments from Various Manufacturing Units of BHEL to Punatsangchhu HEP with intermediate storage facility in Bhutan FOR 6 X 200 MW PUNATSANGCHHU-I HYDROELECTRIC PROJECT, PUNATSANGCHHU, BHUTAN.**

**TENDER NO. PSER:SCT:PSC-M1443:13**

**PRICE SCHEDULE FOR STORAGE (SCH-3)**

SI. NO.	Description	Quantity	Rate Lumpsum	Total amount
1.a	Construction/development of Open Storage Area (7250 sq.-m) at Phuentsholling or nearby area in Bhutan and necessary earth works like excavation, filling, compaction, levelling, grading, hard surfacing etc. including fencing of total storage area (8000 sq.-m), construction of internal roads, gate, security post ,office and other such things as per the specifications/details provided in the tender.	1 Lot		
1.b	Construction/ development of semi-covered Storage Area (750 sq.-m) at Phuentsholling or nearby area in Bhutan and necessary earth works like excavation, filling, compaction, levelling, grading, hard surfacing, PCC flooring, CGI sheet covering and other such things as per specifications/details provided in the tender.	1 Lot		
		<b>No. of Months (c)</b>	<b>Rate Per Month (d)</b>	<b>Total amount (cxd)</b>
2	Hiring, operating and maintenance charges of total Storage Area(8000 sq.-m) at Phuentsholling or nearby area in Bhutan with facilities like unloading & loading of consignments, store-keeping, security, lighting, necessary material handling equipments,sleepers, T&P, manpower & preservation of equipments etc. as detailed in the tender.	32		
	<b>TOTAL Amount (in Figure)</b>			
	<b>(in Words)</b>			
<b>Note:</b>	1. Requirement of Storage area may increase beyond envisaged 8000 sq.-m upto +30 %.			
	2. If additional area of storage is required, the additional amount will be paid on pro rata basis.			

**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	Transportation of Consignments from Various Manufacturing Units of BHEL to Punatsangchhu HEP with intermediate storage facility in Bhutan for 6 X 200 MW Punatsangchhu-I Hydroelectric Project, Punatsangchhu, Bhutan.	
Ref	1.0	Tender no PSER:SCT:PSC-M1443:13
	2.0	BHEL's NIT, vide reference no Ref: PSER:SCT:PSC-M1443:13 Dated 08/02/2013
	3.0	BHEL's TCN-01, vide ref no PSER:SCT:PSC-M1443:13:TCN-01 Dated 13/02/2013
	4.0	BHEL's TCN-02, vide ref no PSER:SCT:PSC-M1443:13:TCN-02 Dated 20/02/2013
	5.0	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, Integrity Pact (If applicable) 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)

<p>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</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------