

Annex-I**PROFORMA FOR BANK GUARANTEE FOR BID SECURITY**

To

The Punatsangchhu-II Hydroelectric Project Authority (PHPA-II)

(Address of PHPA-II)

WHEREAS, (Name of Bidder) _____ (hereinafter called “the BIDDER”) has submitted his bid dated (_____ for the construction of (Name of Contract) _____ (hereinafter called “the Bid”).

KNOW ALL MEN by these presents that we (Name of Bank) _____ of (Name of Country) _____ having our registered office at _____ (hereinafter called “the Bank”) are bound unto the Punatsangchhu-II Hydroelectric Project Authority (PHPA-II) in the sum of _____ for which payment well and truly to be made to the PHPA-II the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____.

THE CONDITIONS of this obligation are;

- i) If the Bidder withdraws his Bid during the period of bid validity specified in the Proforma of Bid; or
- ii) If the Bidder having been notified of the acceptance of his Bid by the PHPA-II during the period of bid validity;
 - a) fails or refuses to execute the Proforma of Agreement in accordance with the Instructions to Bidders, if required; or
 - b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders,

We undertake to pay to the PHPA-II upto the above amount upon receipt of its first written demand, provided that in its demand the PHPA-II will note that amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force upto and including the date 210 days after the closing date for submission of bids as stated in the Invitation to Bid or as extended by you at any time prior to this date, notice of which extension to the Bank being hereby waived, and any demand in respect thereof should reach the Bank not later than the above date.

DATE

.....

WITNESS

(Signature, Name and Address)

SIGNATURE OF THE BANK

SEAL

PROFORMA FOR BID

To

Subject: **Bid for Construction of** _____
(Description of Works)

Sir,

With reference to the Bidding Documents forwarded to us under your letter
 No. _____ dated _____

We the undersigned, having examined the Drawings, Conditions of Contract, Specifications and Bill of Quantities for the execution of the above named Works offer to execute and complete the whole of the said Works in conformity with the said Drawings, Conditions of Contract, Specifications and Bill of Quantities given in the Bidding Documents for the sum of _____ (Total Bid Price both in figures and words) or such other sum as may be ascertained in accordance with the said Conditions.

2. The Bid Security for the amount of Nu./Rs. _____ in the form of _____ is enclosed.

3. We undertake, if our Bid is accepted, to commence the Works within thirty days of receipt of the orders of the Engineer-in-Charge to commence and to complete and deliver the whole of the Works comprised in the Contract within _____ months (Time should conform to the timing specified by the Punatsangchhu-II Hydroelectric Project Authority (PHPA-II) in the Bidding Documents) calculated from the last day of the aforesaid period in which the Works are to be commenced.

4. If our Bid is accepted, we will furnish a security in the form of a bank guarantee to be jointly and severally bound with us in an amount of 2.5 (two and half) percent of the above named sum in accordance with the Conditions of Contract.

5. We agree to abide by this Bid for the period of 180 days from the date of Bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

6. Unless and until an agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding Contract between us.

7. We understand that you are not bound to accept the lowest or any Bid you may receive.

Dated _____

Signature _____
in the capacity of _____
duly authorized to sign on
behalf of _____

Witness;

1. _____
Address and Occupation

2. _____
Address and Occupation

Annex-III**PROFORMA OF AGREEMENT**

Note; This Proforma is included in the Bidding Documents only for the information of Bidders. Only the successful Bidder shall, in due course, be required to fill this Proforma.

THIS AGREEMENT MADE the _____ day of _____ BETWEEN Punatsangchhu-II Hydroelectric Project Authority (PHPA-II) _____ of (Mailing address of PHPA-II) _____ (hereinafter called “the PHPA-II”) of the one part and (Name of Contractor) _____ of (Mailing address of Contractor) _____ (hereinafter called “the Contractor”) of the other part.

WHEREAS the PHPA-II is desirous that certain Works should be executed, viz. (Brief description of Works) _____ and has, by a Letter of Award dated _____ accepted a Bid by the Contractor for the execution and completion of such Works.

NOW THIS AGREEMENT WITNESSETH as follows;

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz;
 - a) this Proforma of Agreement,
 - b) the Letter of Award,
 - c) the Additional Conditions of Contract,
 - d) the General Conditions of Contract,
 - e) the Technical Specifications,
 - f) the Drawings,
 - g) the Priced Bill of Quantities,
 - h) the said Bid and Appendix, if any,
 - i) the Invitation to bid,
 - j) the Information and instructions for Bidders,
 - k) the Schedules of Supplementary Information, if any,
 - l) the Geotechnical Report.
3. The aforesaid documents shall be taken as complementary and mutually explanatory of one another, but in case of ambiguities or discrepancies, shall take precedence in the order set out above.
4. In consideration of the payment to be made by the PHPA-II to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the PHPA-II to execute and complete the Works in conformity, in all respects, with the provisions of the Contract.

5. The PHPA-II hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works the Contract Price at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused their respective common Seals to be hereunto affixed (or have hereunto set their respective hands and Seals) the day and year first above written.

SIGNED, SEALED AND DELIVERED

By the said

By the said

NAME _____
on behalf of the Contractor
in the presence of;

NAME _____
on behalf of the PHPA-II
in the presence of;

NAME _____

NAME _____

Address _____

Address _____

Annex-IV**PROFORMA FOR BANK GUARANTEE FOR
PERFORMANCE SECURITY**

To

The Punatsangchhu-II Hydroelectric Project Authority,

(Address of PHPA-II)

WHEREAS (Name and Address of Contractor) _____ (hereinafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ dated _____ to execute (Name of Contract and Brief Description of Works) _____ (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor, upto a total of Rs./Nu. _____ (Amount of Guarantee) (in words) to be inserted by the Guarantor, representing the percentage of the Contract Price, specified in the Contract, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of Rs./Nu. _____ (Amount of Guarantee) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee is valid until the date of 30 days after issuing of the Maintenance Certificate.

SIGNATURE AND SEAL OF THE GUARANTOR

Name of Bank

Address

Date

Note; The Bidders are not required to fill this Proforma.

PROFORMA FOR BANK GUARANTEE FOR ADVANCE FOR MOBILISATION/CONSTRUCTIONAL PLANT

(ON A NON-JUDICIAL STAMP PAPER OF THE REQUISITE VALUE).

In consideration of the Punatsangchhu-II Hydroelectric Project Authority (PHPA-II) (which expression shall unless repugnant to the subject or context include its administrators, successors and assigns), (hereinafter called the “Principal”) having agreed to make advance payment to (Name and full address of the Contractor) _____ (hereinafter called “the Contractor(s)”, (which expression shall unless repugnant to the subject or context or meaning thereof include its successors, administrator, executors and permitted assigns), whose bid for (Name of the Contract) _____ has been accepted and to whom the acceptance of the bid has been communicated by a Letter of Award and who is required to execute a formal agreement on conditions of production of a Bank Guarantee for Rs. (Both in figures and words) _____ we, the _____ Bank Limited (Bank of Bhutan or State Bank of India or any scheduled Bank of Bhutan/India) hereinafter referred to as “the Bank”) do hereby undertake promise and guarantee payment to the Principal on demand all the amounts advanced by the Principal to the said Contractor.

2. The Bank Further agrees that;
 - a) The Principal shall have the fullest liberty without affecting in any way the liability of the Bank under the Guarantee or Indemnity, from time to time, to vary any of the terms and conditions of the said Contract or to extend time for performance by the said Contractor or to postpone for any time and from time to time any of the powers exercisable by it against the said Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said Contract or the securities available to the Principal and the Bank shall not be released from its liability under these presents by any exercise by the Principal of the Liberty with reference to the matters aforesaid or by reason of time being given to the said Contractor or any other forbearance, act or omission on the part of the Principal or any indulgence by the Principal to the said Contractor or of any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of a releasing the Bank from its such liability.
 - b) These presents shall be governed by and constructed in accordance with Bhutanese/Indian laws.
 - c) the Bank hereby declares that it has the power to issue this Guarantee and the undersigned has full power to do so.
 - d) It shall not be necessary for the Principal to proceed against the Contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank, notwithstanding any other security which the Principal may have obtained or obtain from the Contractor, shall at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealized.

- e) The Guarantee herein contained shall remain in full force and effect, during the period that would be taken for the performance of the terms and conditions of the said Contract, Letter of Award and the Agreement which is to be executed as aforesaid and that it shall continue to be enforceable until all the dues of the Principal have been duly paid and its claims satisfied and discharged and till the Principal discharges the Guarantee in writing or until _____ whichever is earlier.

- 3 The Bank lastly undertakes not to revoke this Guarantee until all the dues of the Principal have been duly paid except with the previous consent of the Principal in writing.

Dated the _____

Day of _____
here affix the Common Seal of the
Bank for _____ Bank Ltd.

Note: The Bidders are not required to fill this Proforma.

PROFORMA FOR HYPOTHECATION DEED FOR ADVANCE FOR CONSTRUCTIONAL PLANT

THIS INDENTURE MADE this _____ day of _____ between _____ (hereinafter called “the Contractor”) (which expression shall include his successors and assignees) of the one part and the Punatsangchhu-II Hydroelectric Project Authority (PHPA-II) (which expression shall include its successors and assigns) of the other part.

WEREAS

1. Pursuant to the PHPA-II’s Invitation to Bid for construction of _____ of Punatsangchhu-II Hydroelectric Project as per stipulation contained in the Invitation to Bid, Information and Instructions for Bidders and other documents forming part of the Bidding Documents, the Contractor submitted a Bid dated _____ and the PHPA-II accepted the Contractor’s said Bid and awarded the work to the Contractor vide Letter of Award dated _____.

2. The PHPA-II at the request of the Contractor agreed to make advance to the Contractor upto a limit of Nu./Rs. (Both in figures and words) _____ against hypothecation of unencumbered Constructional Plant at 90% value of new Constructional Plant brought by the Contractor to the site for bonafide use on the said Work on the terms and conditions hereinafter appearing.

NOW THIS INDENTURE WITNESSETH AND IT IS HEREBY AGREED AND DECLARED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS;

- i) that in consideration of the sum of Nu./Rs. (Both in figures and words) _____ agreed to be advanced by the PHPA-II to the Contractor, the Constructional Plant of the Contractor fully described in the Schedule hereto, which the Contractor declares as his absolute and unencumbered property, having fully and wholly paid the cost thereof and which has been brought to the site, shall be hypothecated by way of first and specific charge as security for the repayment to the PHPA-II on demand, of the said sum of Nu./Rs. _____ or so much thereof as from time to time remain due and outstanding, with costs and expenses thereof.
- ii) The recovery of the advance will start after 10% (ten percent) of the Contract Price under the said AGREEMENT has been paid and will be effected on prorata percentage basis to the value of work from the interim payments certified by the Engineer-in-Chare, in such a way that the full advance is recovered by the time 80% of the Contract Price has been paid.
- iii) that during continuance of this security, deduction (on prorata percentage basis to the value of work, as per para (ii) above) shall be made from each application for the interim payment submitted by the Contractor and the same shall be appropriated towards the payment of the Contractor’s dues to the PHPA-II hereby secured so that

the entire advance may be recovered by the PHPA-II within the stipulated period as per Para (ii) above.

- iv) that the Contractor has insured the Constructional Plant listed in the Schedule for their full value at his costs, against loss or damage with an Insurance Company, approved by the PHPA-II and that the Insurance Company has been notified that the PHPA-II has interest in the said Policy. The Contractor undertakes to maintain this Insurance Policy in force till such time as the advance is fully repaid to the PHPA-II.
- v) that the Contractor hereby undertakes not to remove the Constructional Plant described in the schedule from the site without the written permission of the PHPA-II.
- vi) that the Contractor hereby undertakes that he will not sell, transfer, convey, pledge or otherwise encumber or part with the said Constructional Plant described in the Schedule until the aforesaid sum of advance is fully repaid to the PHPA-II.
- vii) that the Contractor shall keep and maintain the Constructional Plant in good working condition and shall not do anything to impair the value of the said Constructional Plant except for normal depreciation and wear and tear and in the event of any loss or damage arising out of causes other than normal wear and tear during the period of hypothecation, the Contractor shall make good such losses or damage to the satisfaction of the PHPA-II, failing which the PHPA-II shall be entitled to recover the cost of such loss or damage from the Retention Money or from any money due to the Contractor by the PHPA-II.
- viii) that in the event of the Contractor not repaying the aforesaid advance on demand or in the event of the Contractor discontinuing or not completing the Works entrusted to the Contractor by the PHPA-II in terms of the said AGREEMENT or in the event of the Contractor becoming insolvent, the PHPA-II will be at liberty to take immediate possession of the said Constructional Plant and sell or otherwise dispose of the same either by public auction or by private contract and appropriate the said proceeds thereof after meeting the expenses of such sale, towards payment of outstanding advance without prejudice to the PHPA-II's other rights and remedies under the said AGREEMENT.
- ix) that the PHPA-II should also be entitled without prejudice to the PHPA-II's other rights and remedies under the said Agreement, to realise the amount advanced or so much thereof as shall remain due and outstanding from any dues and security deposits of the contractor in respect of the said AGREEMENT and/or any other Contract/Agreement with the PHPA-II.
- x) that the Contractor hereby agrees to pay stamp duty that may be assessed on this deed.

THE SCHEDULE ABOVE REFERRED TO

Description of Constructional Plant (New)	Manufacturer's Name	Engine No.	Chassis/ Plant No.	Purchased from	Total cost as per the bill Rs./Nu.	90% of cost Rs./Nu.

IN WITNESS WHEREOF the parties have hereunder set and subscribed their respective hands hereunto the day and year first above written.

1. Signed, sealed and delivered for and on behalf _____

2. (NAME AND DESIGNATION)

In presence of

1. Signed for and on behalf of the PHPA-II

2. _____
(NAME AND DESIGNATION)

Note:- The Bidders are not required to fill this proforma.

Annex-VII**PROFORMA FOR INSURANCE OF CONSTRUCTIONAL PLANT**

From

Name of the Contractor

To

Insurance Company (with whom the Constructional Plant is insured)

Dear Sir,

I am to inform you that the Punatsangchhu-II Hydroelectric Project Authority (PHPA-II) is interested in the Insurance Policy No. _____ secured in your company and to request that you will kindly insert a clause to the following effect in the policy.

Clause to be inserted in the Insurance Policy

1. It is hereby declared and agreed that M/s _____ (the owner of the Constructional Plant, hereinafter referred to as the Insured in the Schedule to this policy) have agreed to hypothecate the Construction Plant to the PHPA-II as security and it is further declared and agreed that the PHPA-II is interested in any money which, but for this endorsement, be payable to the said Insured in respect of the loss or damage to the said Constructional Plant (which, loss or damage is not made good by repair, reinstatement or replacement) and such monies shall be paid to the PHPA-II as long as the PHPA-II is the mortgagee of the Constructional Plant and its receipt shall be full and final discharge to the company irrespective of such loss or damage.

2. Save as by this endorsement expressly agreed, nothing herein shall modify or affect the rights or liabilities of the insured or the Company, respectively, under or in connection with this policy or any term, provision or condition thereof.

Yours faithfully,

Place

Date

Note:- The Bidders are not required to fill this Proforma

Annex-VIII**SCHEDULE OF TARIFF FOR ELECTRICITY**

NOTIFICATION

The electricity tariff rates and miscellaneous charges shall be as under;

For Low Voltage Customers		From 1st August, 2010-30th June, 2011	From 1st July, 2011-30th June, 2012	From 1st July, 2012-30th June, 2013
For Low Voltage -Domestic Customers:		Energy Charge Nu./kWh	Energy Charge Nu./kWh	Energy Charge Nu./kWh
Block I (Lifeline):	Upto 100 kWh/month	0.85	0.85	0.85
Block II:	Beyond 100 upto 300 kWh/month	1.47	1.54	1.62
Block III:	Beyond 300 kWh/month	1.94	2.04	2.14
For Low Voltage –Bulk Customers		1.94	2.04	2.14
For Medium Voltage Customers (33/11/6.6kV)		Energy Charge Nu./kWh	Energy Charge Nu./kWh	Energy Charge Nu./kWh
		1.63	1.71	1.79
		Demand Charge Nu./kW/month	Demand Charge Nu./kW/month	Demand Charge Nu./kW/month
		95	105	115
For High Voltage Customers (66kV and above)		Energy Charge Nu./kWh	Energy Charge Nu./kWh	Energy Charge Nu./kWh
		1.51	1.54	1.54
		Demand Charge Nu./kW/month	Demand Charge Nu./kW/month	Demand Charge Nu./kW/month
		85	105	105

Annex-IX**PROFORMA FOR REQUIREMENT OF POWER LOAD**

(Refer para 1.10 (ii) of Chapter – I)

Sl. No.	Site	Load Requirement in KW	Remarks
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Total _____

Annex-X**Cost, Make and Broad Specifications of the Equipment**

All figures in Rs. Million

Sl. No.	Equipment	Model	Cost/unit (at P'ling/Project Store)	Qty. (No.)	Amount
1	2 Boom Hydraulic drill jumbo	Atlas Copco E2C-ABC- Regular	45.0	2	90.0
2	i) Hydraulic Excavator having bucket capacity 1.5m ³ , min. operating wt. 30T	Komatsu PC 300-8	9.0	1	9.0
	ii) Hydraulic Excavator having bucket capacity 2.2m ³ , min. operating wt. 45T	Komatsu PC 450-8	12.60	1	12.60
3	Wheel loader with side dump, bucket capacity 2.5m ³	Liebherr L550	14.0	2	28.0
4	Tippers, 6m ³ capacity	TATA LPK 1613TC	1.0125	4	4.05
5	Transit Mixer, 6m ³ capacity	TATA LPK 2516/ AM6N	2.30	3	6.90
6	Shotcreting machine (wet type) 30m ³ /hr. capacity	CIFA, CSS-3	16.50	1	16.50
7	Electric Air Compressors 500 cfm, Screw Type	Chicago Pneumatic CPE 150-10	1.025	2	2.05
8	Transformer(s) 11/0.433 kV, 630 KVA	Melcon	0.50	1	0.50
9	Dumper, 25T capacity	TATA NOVUS LPK 2530	3.9	8	31.20
10	Lining shutter 2x15m with traveler, 12m dia..	CIFA	43.0	1 set	43.0

11	Usage charges for CIFA make concrete shutter (2 x 15m), 11m dia. with traveler for lining of Highway Tunnel	-	-	1 set	10.0
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Total: Rs. 253.80 million

Make, model and detailed specifications for each of the above equipment are enclosed.

- Note:
1. The above prices are exclusive of Customs Duty and Central Excise Duty.
 2. The Customs Duty payable in India on the depreciated value of the equipment imported from 3rd Countries on re-export shall be borne by the Contractor.
 3. The Central Excise Duty on the depreciated value of the equipment upon re-export to India shall be recovered by PHPA-II as per Clause – 1.11.4 of Section-I, Volume-I of the Bidding Documents.

Equipment : 2 Boom Hydraulic Drill Jumbos with single service platform

Model : Atlas Copco , E2C-ABC-Regular

Basic Machine includes:

- 1 x Articulated Carrier E2
- 2 x COP 1838 HD Rock Drills
- 2 x BUT 45 Booms
- 2 x BMH 6821 feeds
- 2 x 75 kW Electrical Motors
- 1 x RCS 4 Drilling System
- 1 x FOPS approved air-conditioned cabin & 1.2 kW electric heater
- 1 x SP2 Service Platform
- 1 x Hole blowing kit
- 1x Set of working lights
- 1 x Cable reel
- 1 x Cable 60 meter long
- 1 x Hydraulically powered water pump
- 1 x Hydraulically powered screw compressor
- 1 x power supply including male plug
- 1 x ABC Regular including Tunnel Manager Software
- 1 x Service Tools Box for CANbus
- 1 x Bolt View software
- 1 x Navigation method C
- 1 x Exhaust Catalyzer
- 1 x Manual Rig washing Kit with hose and reel

Other items provided:

- 1 x Set of Spares for 1000 Hrs. of operation comprising 76 items
- 2 x Spares parts and Instruction books & 2 set on CD

Equipment : 1.5 m³ Bucket Capacity Hydraulic Excavator

Model : PC300-8 Komatsu make, Thailand

Engine	Komatsu 260 HP (gross) @ 1950 rpm
Operating weight	≈32 T
Fuel Tank capacity	605 L
Swing speed	9.5 rpm
Boom Cylinder	140x1480 mm
Arm cylinder	160x1825 mm
Bucket cylinder	140 x 1285mm
Strengthened Boom	6500 mm
Strengthened Arm	3200 mm
Max. digging ht.	9.46m
Max. Dumping ht.	6.52m
Max. digging depth	6.4m
Max. digging reach	10.12m
Cabin	A.C with all standard features
Dimensions/worming ranges	L - 11.3m
	W - 3.19m
	H – 3.42m

Other items provided

Spare parts for 2000 hrs. or one year of operation (21 items with each machine)

Equipment : 2.2m³ Bucket Capacity Hydraulic excavators

Model : PC450-8 Komatsu make, Japan

Engine	Komatsu SAA6D125E5 (260 HP)
Operating Weight	43.32 T
Boom cylinder	160x1570 mm
Arm cylinder	185x1985mm
Bucket cylinder	160x1270mm
Boom	7000mm HD
Arm	3400mm HD
Max. Digging ht.	10.92m
Max. Dumping ht.	7.62m
Max. Digging Depth	7.79m
Max. Digging Reach	12m
Cabin	A.C with all features
Dimensions/worming ranges	L-12.04m
	W-3.43M
	H-3.28M

Other items provided

Spare parts for 2000 hrs. or one year of operation (10 Items with each machine)

Equipment : Wheel Loader with 2.5m³ capacity side tilt buckets.

Model :L550 of Liebherr make, Austria

Bucket Width	2.7m
Engine	Liebherr D934SA6
HP	177
Bore & Stroke Displacement	6.36 L
Wheel Base	3280 mm
Dumping height	2.88m
Overall length	8.24m
Overall working height	3.36m
Ground clearance	530mm
Sound proofed ROPs/FOPs-cab	
4 front working area lights + 2 reversing lights	
Air conditioning system	
Operating weight	16.59T
Lift arms 2600mm	
4 wheels 23.5R25EM Michelin XHAL3	
Tool box with tool kit, lockable	

Other items provided

Spare parts + Operating manual

Equipment : TATA Tippers with approximately 6 m³ heaped capacity.

Model/ Make : SK 1613 TC /Tata Motors

Engine	Cummins 6BT 6 cylinders, (5883CC)
Max. power	125 HP @ 2500 rpm
Max. Torque	41 kg m @ 1400-1700 rpm
Load Carrying Capacity	6 m ³
Clutch	Single disc, dry type
Transmission	6 speed ZF synchromesh
Suspension	Semi elliptical multi leaf spring
Brakes	Dual CKT full air S-Cam brakes
Tyres	10.00 x 20 - 16 PR
Wheel base	3625 mm
Overall length	5884 mm
Overall width	2300 mm
Electrical System	12V, 150 A-H capacity
Gross weight	16200 kg
Inside body dimensions	3278 x 2180 x 930 mm
Body type	Scoop

Equipment : Transit mixer with 6 m³ drum concrete capacity.
Make/Model : AM 6N - Schwing Stetter (Mixer)
: LPK 2516 – (Tata chassis)

Engine	Cummins 6BT, Turbo charged
HP	152 HP @ 2500 rpm
Displacement/CC	5883 CC
Wheel base	4880 mm
Fuel tank	250 liters
Steering	Hydraulic Power steering
Mixer drum	GV - 11.7 m ³ NV - 6.0 m ³
Water tank	450 L
Hyd. System	Pump - motor
Dimensions	L - 7950 mm W - 2498 mm H - 3610 mm
Turning radius	-
Gross weight	6650 kg (Kerb) 25000 kg
Tyres	10.00 - 20 - 16 PR

Equipment : Wet Shotcrete machine having 30m³/hr. pumping capacity.
Model : CSS-3 of make CIFA Spritz, Italy

Chassis/Engine	Shot Truck 2 (72kW)
Concrete spraying pump	PAS 307
Output (theoretical)	30m ³ /hr.
Max. Concrete pressure	65bar
Hopper Capacity	300liters
Electric Motor	45kW-61 kW (electric-diesel)
Telescopic spraying arm	CSS-3
Electric motor	
Vertical reach	15.7m with third section Z folding
Cable length	100m

Other items provided:

Spare parts for one year of operation (59 items per machine)

Equipment : 500 cfm. Capacity, Air Compressor, Electric Screw Type.

Model CPE150-10

Manufacturer/Make	Chicago Pneumatic
Capacity	562
Working pressure (Kg/cm ²)	10
KW (Motor)	110
Sound level in dB(A)	79
Type of cooling	Air Cooled

Equipment : 630 kVA, 11/0.433 kV Distribution Transformers.

Make	Melcon
Max. Rating	630 KVA
Rated Voltage	
a. HV Side	11 KV
b. LV Side	0.433 KV
Rated Frequency	50 HZ
Temp. Rise	
a. of winding by resistance	55° C
b. of oil by thermometer	45° C
Guaranteed no load loss at rated voltage & frequency	1200W
Guaranteed full load losses	7500 W
Total loss at rated voltage & frequency	8700W
Material of winding	Copper
Type of cooling	ONAN
Efficiency at 75° (Unity power factor)	
i. 100% load	98.64%
ii. 75% load	98.87%
iii. 50% load	99.03%

Equipment : Rear Dumpers of 25T capacity.

Model : Tata NOVUS LPK 2530H

Engine	Cummins C8.3-300
Max. power	300 HP@1400 rpm
Max. Torque	1150 NM
Bore X stroke	114 x 135 mm
Displacement	8.27 Liters
Transmission	T14 S10 Six, Speed gear box.
Steering	Power Assisted
Speed	79 km/hr.
Tyres	12.00 x 20-18PR
Wheel base	4705 mm
Size (L x W x H)	7230 x 2580 x 3155 mm
Min. ground clearance	315 mm
Min. turning radius	7.5 m
Gradeability	35.7%
Total weight (laden) GVW	40 T
Dump Capacity	16 m ³

Equipment : 12m dia. lining shutter 2 x 15m complete in all respects.

2 x 15.0 m. long forms, each divided into 10 rings of 1.50m, bolted each other. Each ring consists of one vault rib, two pier ribs.

Hinges between the ring elements with “labyrinth” joints are applied by means of bolts with insertion of adjusting shims. The locking of the hinges is obtained by adjustable screw struts of quick application. The steel form elements are built with 8mm. thick mantle sheet. Each form is provided with 2 side working platforms for wood foothold, no.20 doors for casting inspection and for insertion of vibrators (immersion type), no. 22 screw props for hinges locking and no. 40 clamps at the base (tyloops type).

2 nos. fixed Vibration system, each consisting of:

- 76 cradles for vibrators
- 76 pipes and valves for air distribution
- 76 turbo vibrators of 4,000 Kg

1 No. long traveler for the lowering, transport and lifting on site of 1 steel form section 15.0m long and sliding on the precast invert slabs.

The traveler is mainly constituted by:

- Frame in steel structural work, provided with 2 portals (front rear one), connected each other by means of a longitudinal beam. With upper working platform
- The legs of the traveler will be external as to the section of the forms

Main components:

- 4 nos. steel wheels, double-flange type, dia. 500 mm. sliding on tracks laying on precast invert slab (total weight 160 tons.)
- 2 nos. units of hydraulic motor reduction gear
- 4+4 nos. vertical hydraulic jack for lowering and lifting
- 2 nos. side hydraulic jack for transversal adjustments
- 4 nos. hydraulic jack for dismantling for the piers.
- 1 nos. hydraulic gearbox, consisting of :
 - Electric motor 17.5kW (220/380 volts-50 Hz-three-phase)
 - 2 nos. hydraulic pumps (one high-delivery pump of translation and one with reduced capacity for steel formwork displacement)
 - 1 no. control panel for displacement of the forms (distribution valves, overpressure valves, manometers etc.)
 - 1 no. oil tank with filter, inlet pipe unions, level indicator, etc.
 - 1 no. hydraulic gearbox for the feeding of different users.

Concrete distribution trolley, complete with articulated pipe up to the concrete pump. The trolley type DCL 500, is self propelled and equipped with rotating telescopic boom and no. 8 casting pipes dia. 5” with gates to be applied to the steel form.

Equipment : 11m dia. lining shutter 2 x 15m complete in all respects.

2 x 15.0 m. long forms, each divided into 10 rings of 1.50m, bolted each other. Each ring consists of one vault rib, two pier ribs.

Hinges between the ring elements with “labyrinth” joints are applied by means of bolts with insertion of adjusting shims. The locking of the hinges is obtained by adjustable screw struts of quick application. The steel form elements are built with 8mm. thick mantle sheet. Each form is provided with 2 side working platforms for wood foothpath, no.20 doors for casting inspection and for insertion of vibrators (immersion type), no. 22 screw props for hinges locking and no. 40 clamps at the base (tyloops type).

2 nos. fixed Vibration system, each consisting of:

- 70 cradles for vibrators
- 70 pipes and valves for air distribution
- 70 turbo vibrators of 4,000 Kg

1 No. long traveler for the lowering, transport and lifting on site of 1 steel form section 15.0m long and sliding on the precast invert slabs.

The traveler is mainly constituted by:

- Frame in steel structural work, provided with 2 portals (front rear one), connected each other by means of a longitudinal beam. With upper working platform
- The legs of the traveler will be external as to the section of the forms

Main components:

- 4 nos. steel wheels, double-flange type, dia. 500 mm. sliding on tracks laying on precast invert slab (total weight 160 tons.)
- 2 nos. units of hydraulic motor reduction gear
- 4+4 nos. vertical hydraulic jack for lowering and lifting
- 2 nos. side hydraulic jack for transversal adjustments
- 4 nos. hydraulic jack for dismantling for the piers.
- 1 nos. hydraulic gearbox, consisting of :
 - Electric motor 17.5kW (220/380 volts-50 Hz-three-phase)
 - 2 nos. hydraulic pumps (one high-delivery pump of translation and one with reduced capacity for steel formwork displacement)
 - 1 no. control panel for displacement of the forms (distribution valves, overpressure valves, manometers etc.)
 - 1 no. oil tank with filter, inlet pipe unions, level indicator, etc.
 - 1 no. hydraulic gearbox for the feeding of different users.

Concrete distribution trolley, complete with articulated pipe up to the concrete pump. The trolley type DCL 500, is self propelled and equipped with rotating telescopic boom and no. 8 casting pipes dia. 5” with gates to be applied to the steel form.

PRE-CONTRACT INTEGRITY PACT

Note: This Proforma is included in the Bidding Documents for information of Bidders and shall be signed by successful Bidder when the work(s) is awarded.

1. General

Whereas the Punatsangchhu-II Hydroelectric Project Authority (PHPA-II) hereinafter referred to as the Employer on one part and the..... (Name of Bidder) as the other part hereby execute this agreement as follows.

2. Objectives

Now, therefore, the Employer and the Bidder agree to enter into this pre-contract agreement, hereinafter referred to as Integrity Pact, to avoid all forms of corruption by following a system that is fair, transparent and free from any influence/unprejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

- 2.1 Enabling the Employer to obtain the desired works at a reasonable and competitive price in conformity with the defined specifications of the goods and services;
- 2.2 Enabling bidders to abstain from bribing or any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also refrain from bribing and other corrupt practices and the Employer will commit to prevent corruption, in any form by their officials by following transparent procedures.

3. Commitments of the Employer:

The Employer Commits itself to the following:-

- 3.1 The Employer undertakes that no official of the Employer, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favor or any material or immaterial benefit or any other advantage from the Bidder, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the Contract.
- 3.2 The Employer will, during the pre-contract stage, treat all Bidders alike, and will provide to all Bidders the same information and will not provide any such information to any particular Bidder which could afford an advantage to that particular Bidder in comparison to other Bidders.
- 3.3 All the officials of the Employer will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

- 3.4 In case of any such preceding misconduct on the part of such official(s) is reported by the Bidder to the Employer with full and verifiable facts and the same is prima facie found to be correct by the Employer, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the Employer and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the Employer, the proceedings under the contract would not be stalled.

4. Commitments of Bidders

The Bidder commits himself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of his bid or during any pre-contract or post contract stage in order to secure the contract or in furtherance to secure it and in particular commits himself to the following:-

- 4.1 The Bidder will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Employer, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.
- 4.2 The Bidder further undertakes that he has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Employer or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the Contract or any other contract with the Government for showing or forbearing to show favor or disfavor to any person in relation to the Contract or any other contract with the Government.
- 4.3 The Bidder will not collude with other parties interested in the contract to preclude the competitive bid price, impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 4.4 The Bidder, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the Employer or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 4.5 The Bidder commits to refrain from giving any complaint direct or through any other manner without supporting it with full and verifiable facts.
- 4.6 The Bidder shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.

5. Previous Transgression

- 5.1 The Bidder declares that no previous transgression occurred in the last three years immediately, with any other Employer in respect of any corrupt practices envisaged hereunder that could justify bidder's exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, Bidder can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

6. Sanctions

- 6.1 The provisions regarding Sanctions for violation of the Integrity Pact include forfeiture of Performance Bond incase the Employer decides to forfeit the same without assigning any reason for imposing sanction for violation of Integrity Pact.

7. Sanctions for Violation

Any breach of the aforesaid provisions by the Employer shall face administrative charges and penal actions as per the existing relevant rules and laws. The breach of the Pact by the Bidder or any one employed by him or acting on his behalf (whether with or without the knowledge of the Bidder) or the commission of any offence by the Bidder or any one employed by him or acting on his behalf, shall be dealt with as per the provisions of the Bhutan Penal Code 2004, and the Anti-Corruption Act, 2006. The Employer / relevant agency shall also take all or any one of the following actions, wherever required:-

- 7.1 To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the Bidder. However, the proceedings with the other Bidder(s) would continue.
- 7.2 The Earnest Money / Security Deposit / Performance Bond shall stand forfeited.
- 7.3 To immediately cancel the contract, if already awarded / signed, without giving any compensation to the Bidder.
- 7.4 To recover all sums already paid by the Employer.
- 7.5 To encash the advance bank guarantee and performance bond / warranty bond, if furnished by the Bidder, in order to recover the payments, already made by the Employer, along with interest.
- 7.6 To cancel all or any other Contracts with the Bidder.
- 7.7 To debar the Bidder from entering into any bid from the government of Bhutan as per the Debarment clause of the Procurement Manual.

8. Conflict of Interest

- 8.1 A conflict of interest involves a conflict between the public duty and private interest (for favor or vengeance) of a public official, in which the public official has private interest which could improperly influence the performance of their official duties and responsibilities. Conflict of Interest would arise in a situation when any concerned members of both the parties are related either directly or indirectly, or has any association or had any confrontation. Thus, conflict of interest of any official of the Employer must be declared in the prescribed form attached.
- 8.2 The Bidder shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Employer, and if he does so, the Employer shall be entitled forthwith to rescind the Contract and all other contracts with the Bidder.

9. Examination of Books of Accounts

- 9.1 In case of any allegation of violation of any provisions of this Integrity Pact or payment of commission, the Employer or its agencies shall be entitled to examine the Book of Accounts of the Bidder and the Bidder shall provide necessary information of the relevant financial documents and shall extend all possible help for the purpose of such examination.

10. Monitoring and Arbitration

- 10.1 The Procurement Division of the Ministry of Finance be responsible for monitoring and arbitration of IP.

11. Legal Actions

- 11.1 The actions stipulated in the Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

12. Validity

- 12.1 The validity of this Integrity Pact shall be from the date of its signing and extend up to years or the complete execution of the contract to the satisfaction of both the Employer and the Bidder, whichever is later.
- 12.2 Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

The parties hereby sign this Integrity Pact at _____ on _____

EMPLOYER

BIDDER

Witness:

Witness:

1. _____

1. _____

2. _____

2. _____