

# Madhya Bhotekoshi Jalavidyut Company Limited

# Middle Bhotekoshi Hydroelectric Project (102MW)

# **BIDDING DOCUMENTS**

For

Design, Supply, Construction, Testing and Commissioning of Single Circuit 220kV Transmission Line from Middle Bhotekoshi Hydroelectric Project to Barhabise Sub-Station

International Competitive Bidding (ICB)
Single Stage Two Envelope Bidding Procedure
Contract Identification No: MBJCL/MBKHEP-074/75-TL-01

#### Volume III of III

[Should be submitted SEPARATELY in accordance with ITB Sub-Clause 23.4]

Date of Notice Publication:	22	January 2018	
Last Date/Time of Purchasing:	05	February 2018	during Office Hour
Last Date/Time of Submission:	06	February 2018	12:00 Hour
Date and Time of Bid Opening:	06	February 2018	14:00 Hour

Madhya Bhotekoshi Jalavidyut Company Limited Madhya Bhotekoshi Hydroelectric Project

Maharajgunj, Kathmandu, Nepal Tel: 00977 01 4721641/ 4721642,

Fax: 00977 01 4721643

Email: admin@mbjcl.com.np
Website: www.mbjcl.com.np

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ISSUPO IO.	1017.5	

January 2018 Kathmandu, Nepal

# **Table of Contents - Summary Description**

# PART I BIDDING PROCEDURES

### Section I Instructions to Bidders (ITB)

Vol I

This section specifies the course of actions to be taken by Bidders in the preparation and submission of their Bids following a Two-Stage bidding procedure. Information is also provided on the submission, opening, and evaluation of bids and on the award of contract.

# Section II Bid Data Sheet (BDS)

Vol I

This section consists of provisions that are specific to each procurement and supplement the information or requirements included in Section 1 - Instructions to Bidders.

#### Section III Evaluation and Qualification Criteria (EQC)

Vol I

This section contains all the criteria that the Employer shall use to evaluate bids and qualify Bidders. In accordance with ITB 25, ITB 48 and ITB 50, no other factors, methods or criteria shall be used. The Bidder shall provide all the information requested in the forms included in Section IV (Bidding Forms).

# Section IV Bidding Forms (BDF)

Vol I/III

This Section contains the forms which are to be completed by the Bidder and submitted as part of his Bid.

#### PART II REQUIREMENTS

# Section V Works Requirements (WRQ)

Vol I/II

This Section contains the Specification, the Drawings, and supplementary information that describe the plant and services to be procured.

### Section VI Preamble to the Bill of Quantities (BOQ)

Vol III

This Section contains the price schedules, Bill of Quantities of the plant and services to be procured.

#### PART III CONDITIONS OF CONTRACT AND CONTRACT FORMS

#### Section VII General Conditions of Contract (GCC)

Vol I

This Section contains the general clauses to be applied in all contracts. These Conditions are subject to the variations and additions set out in Section VIII (Special Conditions of Contract).

# Section VIII Special Conditions of Contract (SCC)

Vol I

This Section supplements the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC. The clause number of the SCC is the corresponding clause number of the GCC.

### Section IX Contract Forms (COF)

Vol I

This Section contains the Letter of Acceptance, the Contract Agreement and Appendices to the Contract Agreement which, once completed, will form part of the Contract.

# Section IV Bidding Forms (Price Bid and Schedules) Table of Contents

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# Section IV Bidding Forms

# **B.** Letter of Price Bid

The Bidder must accomplish the Letter of Price Bid in its letterhead clearly show complete name and address.	ing the Bidder's
Date:	
Name of the Bid:	
Invitation for Bid No.:	
To:	
Madhya Bhotekoshi Jalavidyut Company Limited	
Madhya Bhotekoshi Hydroelectric Project	
Maharajgunj, Kathmandu, Nepal	
We, the undersigned, declare that:  a. We have examined and have no reservations to the Bidding Documents, including A accordance with Instructions to Bidders (ITB) Clause 8;	Addenda issued ir
b. We offer to design, manufacture, test, deliver, install, pre-commission and commiss with the Bidding Document the following Plant and Services	
c. The total price of our Bid, excluding any discounts offered in item (d) below is	
d. The discounts offered and the methodology for their application are:	
e. Our Bid shall be valid for a period of [insert validity period as specified in ITB 18.1] do fixed for the bid submission deadline in accordance with the Bidding Documents, as binding upon us and may be accepted at any time before the expiration of that period;	nd it shall remair
f. If our bid is accepted, we commit to obtain a performance security in accordance Document;	with the Bidding
g. We understand that this bid, together with your written acceptance thereof notification of award, shall constitute a binding contract between us, until a formal co and executed;	•
h. We understand that you are not bound to accept the lowest evaluated bid or any of may receive;	other bid that you
<ol> <li>We agree to permit the Employer/DP or its representative to inspect our accounts other documents relating to the bid submission and to have them audited by auditors Employer; and</li> </ol>	
j. If awarded the contract, the person named below shall act as our Representative:	
Name/Address of the Bidder:	
Name of the person duly authorized to sign the Bid on behalf of the Bidder:	
Title of the person signing the Bid:	
Signature of the person named above:	

### C. Price Schedules

#### **PREAMBLE**

#### General

1. The Price Schedules are divided into separate Schedules as follows:

Schedule No. 1: Plant (Including Mandatory Spare Parts) Supplied from Abroad

Schedule No. 2: Plant (Including Mandatory Spare Parts) Supplied from within Nepal

Schedule No. 3: Design services and Prototype testing

Schedule No. 4: Construction and Installation Services

Schedule No. 5: Grand Summary

- 2. The Schedules do not generally give a full description of the plant to be supplied and the services to be performed under each item. Bidders shall be deemed to have read the Employer's Requirements and other sections of the Bidding Document and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling in the rates and prices. The entered rates and prices shall be deemed to cover the full scope as aforesaid, including overheads and profit.
- 3. If bidders are unclear or uncertain as to the scope of nay item, they shall seek clarification in accordance with ITB 7 prior to submitting their bid.

#### **Pricing**

- 4. Prices shall be filled in indelible ink, and any alterations necessary due to errors, etc., shall be initialed by the Bidder.
  - As specified in the Bid Data Sheet and Special Conditions of Contract, prices shall be fixed and firm for the duration of the Contract, or prices shall be subject to adjustment in accordance with the corresponding Appendix (Price Adjustment) to the Contract Agreement.
- 5. Bid prices shall be quoted in the manner indicated and in the currencies specified in the Instructions to Bidders in the Bidding Document.
  - For each item, bidders shall complete each appropriate column in the respective Schedules, giving the price breakdown as indicated in the Schedules.
  - Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in Section 6 (Employer's Requirements) or elsewhere in the Bidding Document.
- 6. Payments will be made to the Contractor in the currency or currencies indicated under each respective item.
- 7. When requested by the Employer for the purposes of making payments or part payments, valuing variations or evaluating claims, or for such other purposes as the Employer may reasonably require, the Contractor shall provide the Employer with a breakdown of any composite or lump sum items included in the Schedules.

# **SCHEDULES OF RATES AND PRICES**

# Schedule No. 1: Plant (Including Mandatory Spare Parts) Supplied from Abroad

Item	Description		Estimated		(Excludir	pal Border ng Taxes and uties)	Insurance, Clearing, Forwarding and Transportation to site		Total Excluding Taxes and Duties	
no	Beschption	of Origin			Foreign currency		Local C	urrency	Foreign	Local
			Qty	Unit	Rate	Amount	Rate	Amount	Currency	Currency
Α	Design, fabrication, galvanizing & supply of fo additional galvanized steel works etc. but exc	_			_	-	•	-		bolts & nuts,
1	Tension Tower D-Type Single Circuit		13	Nos						
В	Design, fabrication & Supply of Tower Earthing materials complete with necessary bolts, nuts and washers with required accessories (complete set)		13	Set						
С	Supply of following Tower Accessories									
1	Danger Plate		14	Nos						
2	Number Plate		14	Nos						
3	Phase Plate (3 nos per tower)		14	Set						
4	Anti-Climbing Device (4 nos per tower)		14	Set						
D	Supply of Line Materials and Accessories									
1	ACSR Bison Conductor		KM	13.3						
2	Composite Long Rod Insulator with necessary arcing ring and other accessories all complete		Set	90						

4 of 13

# Schedule No. 1: Plant (Including Mandatory Spare Parts) Supplied from Abroad

Item	Description	Country of	f   Estimated		CIP Nepal Border (Excluding Taxes and Duties)		Insurance, Clearing, Forwarding and Transportation to site		Total Excluding Taxes and Duties	
no	Description	Origin			Foreigr	n currency	Local Currency		Foreign	Local
			Qty	Unit	Rate	Amount	Rate	Amount	Currency	Currency
3	Jumper Set with pilot insulators, armour rod & suitable counter weight complete with all accessories for a tower		Set	16						
4	Hardware Fittings all complete as per design's requirements (1 Set per tower)		Set	14						
5	Conductor and Earthwire Accessories									
	<ul> <li>Mid Span compression joint for ACSR Bison conductor</li> </ul>		Nos	24						
	- Repair Sleeve		Nos	24						
	- Vibration Damper		Nos	154						
Е	Supply of Fiber Cable and Accessories									
1	24 Fiber (DWSM) OPGW fiber optic cable		KM	5.3						
2	Installation Hardware set for above 24 Fiber OPGW Fiber Optic cabling including all cable fittings & accessories									
	- Suspension Preformed Assembly		Sets	7						
	- Dead End Assembly		Sets	4						
	- Tension Preformed Assembly (For Joint Box Location)		Sets	8						
	<ul> <li>Special Fitting Assembly at Suspension Tower (For Joint Box Locations)</li> </ul>		Sets	4						

# Schedule No. 1: Plant (Including Mandatory Spare Parts) Supplied from Abroad

ltem	Description	Country of	Estimated		CIP Nepal Border (Excluding Taxes and Duties)		Insurance, Clearing, Forwarding and Transportation to site		Total Excluding Taxes and Duties	
no		Origin			Foreign	currency	Local	Currency	Foreign	Local
			Qty	Unit	Rate	Amount	Rate	Amount	Currency	Currency
	- Vibration Damper		Sets	40						
	- Down Lead Clamp Assembly		Sets	16						
3	Joint Box (24 Fiber)		Nos	3						
4	FODP 48F: Indoor Type, rack mounted with FCPC coupling & pig tails (5m each)		Nos	2						
5	Fiber Optic Approach Cable									
	- 24 Fiber (DWSM) optic cable		KM	1.5						
	- Installation Hardware set		Sets	3						
F	Supply of Required Earthwire (Galvanized Steel Wire)		Lump	Sum						
								Sub-total (E)		
				7	otal to be c	arried to Sche	edule 5: Gra	nd Summary		

Name and Signature of Signatory	Name of Bidder	Seal of Bidder

# Schedule No. 2: Plant (Including Mandatory Spare Parts) Supplied from within Nepal

Item	Description	Esti	mated		ce (Excluding Taxes d Duties)	Inland Transportation to site		Total Excluding Taxes and
no	•	Qty	Unit	Rate	Amount	Rate	Amount	Duties
Α	Design, fabrication, galvanizing & supply of following towers & additional galvanized steel works etc. but excluding tower acce		-	•			•	bolts & nuts,
1	Tension Tower D-Type Single Circuit	13	Nos					
В	Design, fabrication & Supply of Tower Earthing materials with required accessories (complete set)	13	Set					
С	Supply of following Tower Accessories							
1	Danger Plate	14	Nos					
2	Number Plate	14	Nos					
3	Phase Plate (3 nos per tower)	14	Set					
4	Anti-Climbing Device (4 nos per tower)	14	Set					
D	Supply of Line Materials and Accessories							
1	ACSR Bison Conductor	KM	13.3					
2	Composite Long Rod Insulator with necessary arcing ring and other accessories all complete	Set	90					
3	Jumper Set with pilot insulators, armour rod & suitable counter weight complete with all accessories for a tower	Set	16					
4	Hardware Fittings all complete as per design's requirements (1 Set per tower)	Set	14					
5	Conductor and Earthwire Accessories							
	- Mid Span compression joint for ACSR Bison conductor	Nos	24					
	- Repair Sleeve	Nos	24					
	- Vibration Damper	Nos	154					

# Schedule No. 2: Plant (Including Mandatory Spare Parts) Supplied from within Nepal

Item	Description	Estii	mated	Ex-works Price (Excluding Taxes and Duties)		Inland Transportation to site		Total Excluding Taxes and
no		Qty	Unit	Rate	Amount	Rate	Amount	Duties
Ε	Supply of Fiber Cable and Accessories							
1	24 Fiber (DWSM) OPGW fiber optic cable	KM	5.3					
2	Installation Hardware set for above 24 Fiber OPGW Fiber Optic cabling including all cable fittings & accessories							
	- Suspension Preformed Assembly	Sets	7					
	- Dead End Assembly	Sets	4					
	- Tension Preformed Assembly (For Joint Box Location)	Sets	8					
	- Special Fitting Assembly at Suspension Tower (For Joint Box Locations)	Sets	4					
	- Vibration Damper	Sets	40					
	- Down Lead Clamp Assembly	Sets	16					
3	Joint Box (24 Fiber)	Nos	3					
4	FODP 48F: Indoor Type, rack mounted with FCPC coupling & pig tails (5m each)	Nos	2					
5	Fiber Optic Approach Cable							
	- 24 Fiber (DWSM) optic cable	KM	1.5					
	- Installation Hardware set	Sets	3					
F	Supply of Required Earthwire (Galvanized Steel Wire)	Lum	p Sum					
Total to be carried to Schedule 5: Grand Summary								

Name and Signature of Signatory	Name of Bidder	Seal of Bidder

# Schedule No. 3: Design services and Prototype testing

Item	Item Description	Estimated		Foreign	Currency	Local Currency	
iteiii		Quantity	Unit	Unit Rate	Amount	Unit Rate	Amount
1	Design Service of Tower Type SD	1	Lot				
2	Prototype Assembly and Testing of Towers with +24m Body Extension at various Design Loads and then up to destruction including the cost of materials after allowing rebate for scrap value of steel of destroyed tower.	1	Lot				
	Total to be carried to Schedule 5: Grand Summary						

Name and Signature of Signatory	Name of Bidder	Seal of Bidder

# Schedule No. 4: Construction and Installation Services

S. No.	Item Description	Unit	Qty	Foreign	n Currency	Local Currency	
3. NO.			Q Q I	Unit Rate	Amount	Unit Rate	Amount
Α	Survey Check survey, Detailed survey including route alignment, profiling, tower spotting all complete	KM	4				
В	Geotechnical Investigation including all associated works	Loc.	12				
С	Measurement of Soil resistivity / Ground Resistance	Loc.	12				
D	Benching for maintaining Sag along the transmission line						
1	All kind of soil except FR & HR	m³	50				
2	Fissured Rock	m³	25				
3	Hard Rock	m³	25				
Sub-total: I (A+B+C+D)							

S. No.	Harry December 1		Qty per tower	Total	Foreig	n Currency	Local Currency	
	Item Description	Unit		Qty	Unit Rate	Amount	Unit Rate	Amount
E All the complete work associated with construction of tower foundations including stub setting for tower type SD of all extensions								
1	Normal Dry soil	4	Nos					
а	Excavation	m³	160	640				
b	M20 Lean Concrete Nominal Mix 1:1.5:3	m³	35	140				
С	M10 Lean Concrete Nominal Mix 1:3:4	m³	6	24				
d	Supply and placement of Reinforcement Steel	kg	4,000	16,000				
Sub-total (E1)								

# Schedule No. 4: Construction and Installation Services

C No	Item Description	Unit	Qty per tower	Total Qty	Foreig	n Currency	Local Currency	
S. No.					<b>Unit Rate</b>	Amount	<b>Unit Rate</b>	Amount
E	All the complete work associated with construct	ion of	tower fou	ındations iı	ncluding stub settin	g for tower type SD of a	ll extensions	
2	Dry Fissured Rock	3	Nos					
а	Excavation	m³	210	630				
b	M20 Lean Concrete Nominal Mix 1:1.5:3	m³	66	198				
С	M10 Lean Concrete Nominal Mix 1:3:4	m³	7	21				
d	Supply and placement of Reinforcement Steel	kg	8,000	24,000				
3	Hard Rock Type	5	Nos					
а	Excavation	m³	50	250				
b	M20 Lean Concrete Nominal Mix 1:1.5:3	m³	20	100				
С	M10 Lean Concrete Nominal Mix 1:3:4	m³	-	-				
d	Supply and placement of Reinforcement Steel	kg	2,300	11,500				
	Sub-total (E2+E3)							
Sub-total: II (E1+E2+E3)								

C N-	Item Description	Unit	Qty	Foreig	n Currency	Local Currency		
S. No.				Unit Rate	Amount	Unit Rate	Amount	
F	<b>Erection of following types of</b> towers & tower/leg extension works etc. but excluding tower accessories such as danger pl		-		er, bolts & nuts, ad	ditional galvanized steel		
	Tension Tower SD	Nos.	12					
G	Installation of Earthing of towers all complete	Set	12					
Sub-total: III			(F+G)					

# Schedule No. 4: Construction and Installation Services

C N-	Itom Description	11!4	Qty	Foreign Currency		Local Currency	
S. No.	Item Description	Unit		Unit Rate	Amount	Unit Rate	Amount
н	Installation of tower accessories such as danger plates, number plates, phase plates, anti-climbing devices, etc. all complete	Set	12				
ı	Protection of tower footing						
1	Random rubble stone masonry including excavation (1:5 cement concrete)	m³	300				
2	Stone bound in galvanizing wire netting including excavation	m³	100				
3	Back filling and levelling of volumes enclosed by revetment	m³	300				
4	M15 Conc. Nominal Mix 1:2:4 for top seal cover	m³	50				
J	Installation of insulator strings complete with arcing horns & necessary hardware, stringing of Bison conductor including fixing of conductor accessories etc. all complete	KM	12.3				
К	Stringing of 24 Fiber (DWSM) OPGW fiber optic cable including Installation of vibration damper, intermediate splice boxes, terminal splice boxes, Joint boxes, FODP 48F, Fiber Optic approach cable all complete	Lot	1				
	Sub-total: IV (F+0	+J+K)					
	Total to be carried to Schedule 5: Grand Summary (Sub-tota	III+IV)					

Name and Signature of Signatory	Name of Bidder	Seal of Bidder

# Schedule No. 5: Grand Summary

Price	Description	Total Amount				
Schedule	Description	Foreign Currency	Local Currency			
1	Plant (Including Mandatory Spare Parts) Supplied from Abroad					
2	Plant (Including Mandatory Spare Parts) Supplied from within Nepal					
3	Design services and Prototype testing					
4	Construction and Installation Services					
	Grand Total					

Name and Signature of Signatory	Name of Bidder	Seal of Bidder