



Bharat Heavy Electricals Limited

(A Govt. of India Undertaking)

पारेषण व्यापार समूह, नोएडा, ऊ.प्र. / TBG, Noida, U.P.

सामग्री प्रबंधन / Material Management

Tower-A, 5th Floor, Advant Navis IT Business Park, Plot-7,

Sector-142, Expressway Noida, Noida-201305

Phone: 0120-6748484, Fax: 0120-6748550, Email: rajeevroy@bhel.in

Subject: Corrigendum-02 for extension of due date for opening of bids & revision of BOQ for supply & ETC works for CCTV Camera – UPPTCL Ballia & Shamli Project.

Project : UPPTCL BALLIA & SHAMLI PROJECT
Equipment / Item : SUPPLY & ETC WORKS FOR CCTV CAMERA.
Enquiry No. / Date : 70Q2000356-357, DATED 10-12-2019, ORIGINAL DUE ON: 31-12-2019
BHEL NIT NO : 50499.

TENDER SUBMISSION:

The corrigendum-02 has been issued against this NIT/ enquiry for extension of due date for opening of bid up to 10-01-2020 & incorporation of revised BOQ. The same is uploaded in BHEL/ CPP Portal.

The extended due date for submission of offers is **10-01-2020 at 14.00 Hrs** & bidder to ensure for submission of their offer on or before extended due date **in line with revised BOQ.**

Thanking you

Enclosed:

- Revised BOQ/ UN-PRICED BID FOR **SUPPLY & ETC WORKS.**
- Technical Specification, Rev-01 & Pre-bid clarification

21-12-19
31/12/19
Rajeev Kr. Roy/Manager, TBMM

राजीव कुमार रॉय / Rajeev Kr. Roy
प्रबंधक (टी.बी.एम.एम.) / Manager (T.B.M.M.)
पारेषण व्यापार समूह / Transmission Business Group
भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
5th Floor, Tower-A, Advant Navis IT Business Park
Plot No.-7, Sector-142, Expressway Noida-201305 (U.P.)

SCHEDULE OF PRICE BID - SUPPLY

(BIDDERS TO STRICTLY ENSURE SUBMITTING THE PRICE BIDS IN THIS FORMAT)

PROJECT: UPPTCL BALLIA & SHAMLI PROJECT
ENQUIRY NO:70Q2000356-357, DATED 10-12-2019
ITEM: CCTV CAMERA - SUPPLY WORKS

SN	DESCRIPTION OF ITEM (As per Tech Spec. TB-404-316-029)	UNIT	QTY	HSN CODE	UNIT EX. WORKS (Rs.)	TOTAL EX. WORKS (Rs.)	UNIT FREIGHT & INSURANCE UP TO SITE (Rs.)	TOTAL FREIGHT & INSURANCE UP TO SITE (Rs.)	GST @..... % OF TOTAL EX-WORKS (Rs.)	GST @.....% OF (TOTAL FREIGHT & INSURANCE UP TO SITE)	TOTAL F.O.R. DESTINATION PRICE
PROJECT: UPPTCL BALLIA PROJECT											
1	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : PTZ CAMERA- OUTDOOR	NO	3								
2	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : BULLET CAMERA	NO	12								
3	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : NETWORK VIDEO RECORDER (NVR)	SET	1								
4	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : POWER SUPPLY	SET	15								
5	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : 32 INCH FULL HD 1080P LED SMART TV. WITH WALL MOUNTING BRACKET.	NO	2								
6	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : POWER CABLE	MTR	2000								
7	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : COMPUTER TABLE	SET	1								
8	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : 2 KVA ONLINE UPS WITH ISOLATION TRANSFORMER SUITABLE FOR SINGLE PHASE AC INPUT & SINGLE PHASE AC OUTPUT, FLOOR MOUNTED TYPE WITH 60 MIN BACKUP	SET	1								
9	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : 6 CORE ARMoured FIBRE OPTIC CA	MTR	2500								
10	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : CAT 6 UTP CABLE (UTP) INCLUDING TERMINAL CONNECTORS	MTR	1000								
11	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : 40MM HDPE PIPE	MTR	3000								
12	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : EARTHING OF CAMERA / DVR	SET	16								
PROJECT: UPPTCL SHAMLI PROJECT											
1	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : PTZ CAMERA-OUTDOOR	NO	3								
2	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : BULLET CAMERA	NO	13								
3	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : NETWORK VIDEO RECORDER (NVR)	SET	1								
4	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : POWER SUPPLY	SET	16								
5	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : 32 INCH FULL HD 1080P LED SMART TV. WITH WALL MOUNTING BRACKET.	NO	2								
6	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : POWER CABLE	MTR	2000								
7	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : COMPUTER TABLE	SET	1								
8	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : 2 KVA ONLINE UPS WITH ISOLATION TRANSFORMER SUITABLE FOR SINGLE PHASE AC INPUT & SINGLE PHASE AC OUTPUT, FLOOR MOUNTED TYPE WITH 60 MIN	SET	1								
9	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : 6 CORE ARMoured FIBRE OPTIC CA	MTR	2500								
10	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : CAT 6 UTP CABLE (UTP) INCLUDING TERMINAL CONNECTORS	MTR	1000								
11	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : 40MM HDPE PIPE	MTR	3000								
12	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : EARTHING OF CAMERA / DVR	SET	17								
A	TOTAL DELIVERED COST TO BHEL=										

NOTE:

- PLEASE NOTE THAT UNPRICED COPY OF PRICE BID (i.e. WITH ALL PRICES BLANKED) SHALL BE FURNISHED ALONG WITH TECHNO-COMMERCIAL BID.
- REQUIRED COPIES OF FORMAT BE MADE & DETAILS MAY BE ANNEXED.
- THE PRICES MUST BE QUOTED IN THE PRESCRIBED UNIT ONLY.
- BHEL STANDARD SPECIFICATION NO:TB-406-316-029 & SUBSEQUENT REVISION, IF ANY, IS APPLICABLE

SIGNATURE & SEAL OF TENDERER

SCHEDULE OF PRICE BID - ETC WORKS

(BIDDERS TO STRICTLY ENSURE SUBMITTING THE PRICE BIDS IN THIS FORMAT)

PROJECT: UPPTCL BALLIA & SHAMLI PROJECT

ENQUIRY NO:

ITEM: CCTV CAMERA - ETC WORKS

SN	DESCRIPTION OF ITEM (As per Tech Spec. TB-404-316-029)	UNIT	QTY	HSN CODE	UNIT CHARGES (Rs.)	TOTAL CHARGES (Rs.)	GST @..... % OF TOTAL CHARGES (Rs.)	TOTAL F.O.R. DESTINATION PRICE
PROJECT: UPPTCL BALLIA PROJECT								
1	ETC - PTZ Dome Camera of BOSCH make / Sony make / Any equivalent make (36X extended Zoom), 12X Digital Zoom as per detailed technical specification	NO	3					
2	ETC - Static (Bullet) Cameras of BOSCH make/ Sony make / Any equivalent make as per detailed technical specification	NO	12					
3	ETC - 32 channel Network Video Recorder (NVR) of BOSCH make / Sony make / Any equivalent make as per detailed technical specification	SET	1					
4	ETC - POWER SUPPLY for item no. 1 & 2	SET	15					
5	ETC - 32" LED TV Sony make (Model No. 32R402) as per detailed technical specification.	NO	2					
6	ETC - 3 core 1.5 Sq. mm. copper power cable of Finolex / Standard make as per IS	MTR	2000					
7	ETC - Computer table as per the specification of Godrej / Methodex / Standard Make.	SET	1					
8	ETC - 2 KVA online UPS with isolation transformer suitable for single phase AC input & single phase AC output, Floor Mounted Type with 60 min backup	SET	1					
9	ETC - FO Cable 6 core	MTR	2500					
10	ETC - CAT-6 cable for connecting PTZ cameras to DVR as per specification. (only D-link make)	MTR	1000					
11	ETC - 40MM HDPE pipe	MTR	3000					
12	ETC - Earthing of camera / DVR as per specification	SET	16					
PROJECT: UPPTCL SHAMLI PROJECT								
1	ETC - PTZ Dome Camera of BOSCH make / Sony make / Any equivalent make (36X extended Zoom), 12X Digital Zoom as per detailed technical specification	NO	3					
2	ETC - Static (Bullet) Cameras of BOSCH make/ Sony make / Any equivalent make as per detailed technical specification	NO	13					
3	ETC - 32 channel Network Video Recorder (NVR) of BOSCH make / Sony make / Any equivalent make as per detailed technical specification	SET	1					
4	ETC - POWER SUPPLY for item no. 1 & 2	SET	16					
5	ETC - 32" LED TV Sony make (Model No. 32R402) as per detailed technical specification.	NO	2					
6	ETC - 3 core 1.5 Sq. mm. copper power cable of Finolex / Standard make as per IS	MTR	2000					
7	ETC - Computer table as per the specification of Godrej / Methodex / Standard Make.	SET	1					
8	ETC - 2 KVA online UPS with isolation transformer suitable for single phase AC input & single phase AC output, Floor Mounted Type with 60 min backup	SET	1					
9	ETC - FO Cable 6 core	MTR	2500					
10	ETC - CAT-6 cable for connecting PTZ cameras to DVR as per specification. (only D-link make)	MTR	1000					
11	ETC - 40MM HDPE pipe	MTR	3000					
12	ETC - Earthing of camera / DVR as per specification	SET	17					
A	TOTAL DELIVERED COST TO BHEL=							

NOTE:

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- REQUIRED COPIES OF FORMAT BE MADE & DETAILS MAY BE ANNEXED.
- THE PRICES MUST BE QUOTED IN THE PRESCRIBED UNIT ONLY.
- BHEL STANDARD SPECIFICATION NO:TB-406-316-029 IS APPLICABLE

SIGNATURE & SEAL OF TENDERER



BHARAT HEAVY ELECTRICALS LIMITED

TRANSMISSION BUSINESS ENGINEERING MANAGEMENT

(108)

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BHEL Document No. TB-404-316-029		Rev. 01	Name	Prepared by SB	Checked by VK	Approved by AG
Type of Document Technical Specification			Sign	-sd-	-sd-	-sd-
Title CCTV SYSTEM			Date	28.11.19		
			Group	TBEM		
			W.O. No	88005		
CUSTOMER UPPTCL						
CONSULTANT -						
PROJECT 400/220/132kV GIS Substation at Rasara, Ballia (U.P.)						
CONTENTS						
SN	TITLE					No. of Pages
1	Section – 1: Technical Specification					
2	Section – 2: Equipment Specification ○ Specification of CCTV System					
3	Section – 3: Project details & General Specification					
4	Corrigendum TB-404-316-029- Corr1					
01	30-12-2019	SB	VK	AG	In line with Corrigendum No TB-404-316-029- Corr1. All other Specification remains unchanged.	
Rev No.	Date	Altered	Checked	Approved	REVISION DETAILS	
Distribution				To		
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107



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BHEL Document No. TB-406-316-029		Rev. 01	Name	SB	VK	AG
			Sign	-sd-	-sd-	-sd-
Type of Document		Technical Specification		Date	28.11.19	
Title CCTV SYSTEM		Group	TBEM			
		W.O. No	88009			
CUSTOMER		UPPTCL				
CONSULTANT		-				
PROJECT		400/220/132kV GIS Substation at Shamli (UP)				
CONTENTS						
SN	TITLE					No. of Pages
1	Section – 1: Technical Specification					
2	Section – 2: Equipment Specification ○ Specification of CCTV System					
3	Section – 3: Project details & General Specification					
4	Corrigendum TB-404-316-029- Corr1					
01	30-12-2019	SB	VK	AG	In line with Corrigendum No TB-404-316-029- Corr1. All other Specification remains unchanged.	
Rev No.	Date	Altered	Checked	Approved	REVISION DETAILS	
Distribution				To		
				Copies		

Sumit Banja
[Signature]

106

Replies to Pre Bid Queries for CCTV System for UPPTCL Ballia and Shamli project (PI No 70I2000455 and 70I2000456 dated 29-11-2019)				TB-404-316-029-Corr1
Sr No	Clause No	Specification	Bidder's Query	BHEL Clarification
1	Annexure BOQ to Section-1	Supply - 16 channel DVR of BOSCH make / Sony make / Any equivalent make as per detailed technical specification	As per our understanding ,It is 16 Channel NVR because require camera's specification are IP .Please clarify our understanding .	It is clarified that Bidders have to quote for 32 channel NVR in place of 16 Channel DVR. Refer revised BOQ
2	Section-2 Network Video Recorder Table Sr No 13 and 14	No of Video Channels: 16 Audio Recording Capable: 16		No of Video Channels: 32 Audio Recording Capable: 32
3	Section-2 Network Video Recorder Table	Server Spec: Intel Quad Core (or better) 3.0 Ghz (min.) , 8 MB Cache , 4 GB memory , with suitable NVIDIA graphics card,3 TB HDD , Raid 5	Referring to BOQ and solution designed by BHEL.We understand that you require NVR-16 Channel however as per clause the specification are from Server/Workstation .Kindly clarify whether we need to provide NVR-16 channel or Server/Workstation.	The line in the data table Sr No1 of "Network Video Recorder" Server Spec: Intel Quad Core (or better) 3.0 Ghz (min.) , 8 MB Cache , 4 GB memory , with suitable NVIDIA graphics card,3 TB HDD , Raid 5 <u>is deleted.</u>
4	Section-2 General	Hard disk playback facilities for at least 1 month of continuous recording;	Please clarify what resolution,frame per second need to consider for the said 1 month recording.	Please refer specification under "Network Video Recorder"
5	Annexure BOQ to Section-1	Minimum 10x (minimum) optical in High Definition (The system shall be able to zoom the images on the monitor without any distortion to the maximum level of optical zoom)	Referring to BOQ PTZ camera asked with 36 x zoom ,12X Digital Zoom but as per specification PTZ Camera asked with 10x Zoom .Both specification contradict to each other , have different meaning.Request you to consider 2 MP PTZ with 30x Optical zoom & 16x digital zoom which is very generic and easily available with maximum OEM.	As per Annexure BOQ
6	Annexure BOQ to Section-1	SUPPLY- VISUAL MONITORING SYSTEM/CCTV : 32 INCH FULL HD 1080P LED SMART TV. WITH WALL MOUNTING BRACKET.SONY MAKE (MODEL NO. 32R402)	Mentioned 32 inch Monitor Model 32R402 is belong to a specific OEM & Brand .It would limit the competition therefore request you to add LG/Samsung/Panasonic OEM in preferred Make.	As per Specification
7	SECTION 1 SCOPE, SPECIFIC TECHNICAL REQUIREMENTS AND QUANTITIES ,Clause 1.3 (10)	Earthing: 40MM Dia MS Rod/ 75 X 12, 50 X 6 Galvanized MS Flat will be free issue supplied by BHEL. The requirement shall be intimated by the Supplier after placement of order. However, any other special material required shall be in vendor scope. Also installation of all earthing material will be in vendor scope	We understand that, earthing pit will be provided by BHEL with 50x6 Galvanized MS Flat upto the each Camera & NVR.Kindly clarify our understanding.	Refer Clause No 1.3 (10) and 1.3 (8) of Section-1
8	Section-2 (CCTV SPECIFICATION ,General	All CCTV equipment shall be of industrial quality (no domestic-type equipment is acceptable) and shall be of a type which has been specifically designed and manufactured for use in 100% duty cycle surveillance systems	As per our understanding ,For outdoor equipment i.e Media converter near camera should be industrial type .Please clarify our understanding .	As per Specification all cameras and other CCTV equipment which shall be used shall be suitable for industrial application
9	Section-2 (CCTV SPECIFICATION),Operational Protocol	Recorder "A" — standby; • Recorder "B" — recording screen "B", time lapse of all cameras; and	As per the clause ,2 NVR require here one for live recording & one for standby however In BOQ only one number 16 Channel NVR require . Both the above two clause contradict to each other. Please clarify	Please refer ealier clarification. Rest as per Specification
10	General	Network Switch	For Interconnecting different-2 Cameras to NVR ,we need 24 Port 10/100/1000 mbps Ethernet switch .So request you to kindly consder 1 Nos 2 4 Port Giga Network switch for Ballia & Shamli respectively.	Please refer Section Note-1 regarding the same.
11	Annexure BOQ to Section-1	Bullet Camera	Lens: Varifical/ Fixed	Please refer Clause "Technical Standards" of Section-2
12	General	Software		Please refer Clause 1.0 of Section-1 and Clause 1.3 Note 1 of Section-1

Handwritten signature

Sanmit Banerjee