






 BHEL Tenders	Government eProcurement System Published Corrigendum Details		Date : 06-Oct-2021 09:33 AM  Print										
	<table border="1"> <tr> <td>Organisation Chain :</td> <td>Bharat Heavy Electricals Limited BAP - Ranipet Purchase</td> </tr> <tr> <td>Tender ID :</td> <td>2021_BHEL_5153_1</td> </tr> <tr> <td>Tender Ref No :</td> <td>7710333E</td> </tr> <tr> <td>Tender Title :</td> <td>SUPPLY OF SEWAGE TREATMENT PLANT</td> </tr> <tr> <td>Corrigendum Type :</td> <td>Date</td> </tr> </table>			Organisation Chain :	Bharat Heavy Electricals Limited BAP - Ranipet Purchase	Tender ID :	2021_BHEL_5153_1	Tender Ref No :	7710333E	Tender Title :	SUPPLY OF SEWAGE TREATMENT PLANT	Corrigendum Type :	Date
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Corrigendum:2													
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Bharat Heavy Electricals Limited

Boiler Auxiliaries Plant

Ranipet – 632406, Tamil Nadu

Materials Management / Purchase

Ref No. : 7710333E/Corrigendum2

DATE: 06.10.2021

Title of TENDER: SUPPLY OF SEWAGE TREATMENT PLANT ALONG WITH ALL THE ACC.AS PER SPEC. NO. ROS 6279, REV 00 RELEVANT ANNEXURES (MAIN SUPPLY, MANDATORY SPARES and ERECTION, COMMISSIONING PG TEST) FOR TSGENCO YADADRI TPS 5 X 800 MW PROJECT

TENDER ID : 2021_BHEL_5153_1

Tender date: 03.09.2021

Following Corrigendum to TENDER ID : 2021_BHEL_5153_1

1. Amendment 1 as enclosed is issued to technical specifications. Bidders have to submit offers in line with amendment 1 dt 01.10.2021. All other terms and conditions remain unchanged.
2. Offer submission due date is extended as below

Event	Existing Date	Revised Date
Last date for receipt of offers	08 th Oct 2021 12:00 HRS IST	27 th Oct 2021 10:00 HRS IST
Date for bid opening	09 th Oct 2021 12:00 HRS IST	27 th Oct 2021 17:00 HRS IST

(Sachin Saini)

Sr. Engineer /Purchase/Water Systems



**AMENDMENT ON SPECIFICATION FOR
PRE TREATMENT PLANT-YADADRI**

SPEC. NO.: ROS 6279, Rev:00

AMENDMENT NO # 1

DT 01.10.2021

The following modifications with respect to Technical Specification, ROS:6279, for **Sewage Treatment Plant** shall apply. This shall be read along with ROS:6279 Rev:0 and other amendments/ corrigendum's released from time to time.

Bidder to note that existing clauses/details as appearing in the specification stands deleted and clauses/details as mentioned in "Modified to or Read as" column shall be applicable and complied to by the bidder. All other details of BHEL's specification ROS:6279 Rev-0 remain unchanged.

MODIFIED CLAUSES/PAGE NUMBERS

Sl. No.	Clause No.	Page No.	Existing Clause/details	Modified to or Read as
1.	21, Datasheet-A	532 of 1172	Sewage transfer pumps (Lifting stations) Material of Construction Casing: CI Impeller: CI Shaft: CI	Sewage transfer pumps (Lifting stations) Material of Construction Casing: SS316 Impeller: SS316 Shaft: SS316
2.	24, Datasheet-A	533 of 1172	-	New Clause added 24. Oil & Grease (O&G) skimmer and acc. a. Quantity: 1No. b. Capacity: Bidder to specify c. MOC: Body: MS-epoxy, Belt-Oleophilic polymer d. Type: Belt Driven e. Design feed & outlet O&G: Bidder to decide based on Cl. 1 & 2 of Page 511 & 512 of 1172.
3.	22, Datasheet-A	532 of 1172	Piping i) Sewage transfer piping: CI ii) Air: CS iii) Hypochlorite piping: PVC (Sch.20 min.)	Piping i) Sewage transfer piping: CI ii) Air: CS iii) Hypochlorite piping: cPVC (Sch.80.) iv) Interconnecting Piping between equipment within STP boundary: MS-epoxy



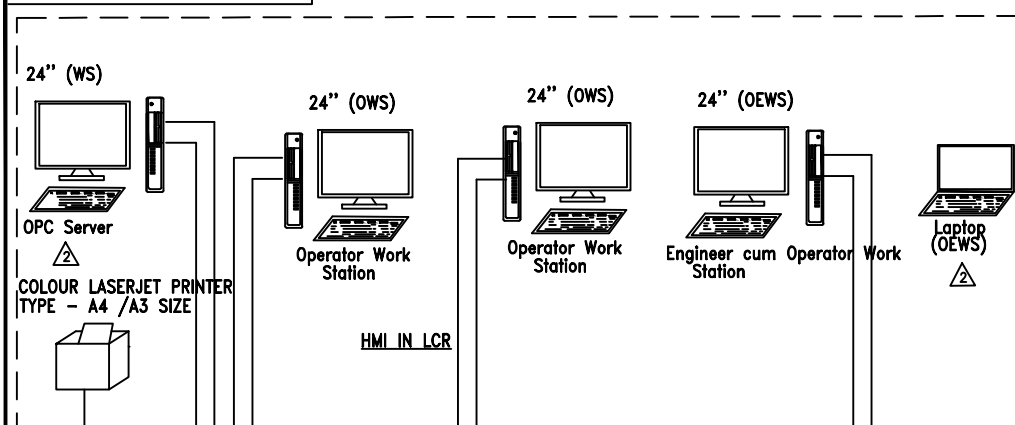
AMENDMENT ON SPECIFICATION FOR PRE TREATMENT PLANT-YADADRI

SPEC. NO.: ROS 6279, Rev:00

AMENDMENT NO # 1

DT 01.10.2021

4.	4.0	514 of 1172	In general, the Centralized Sewage Treatment System..... PLC based control system	Bidder shall refer to PID (1-WT-055-01590) and PLC Configuration STP (4-WT-055-01143) for instrument redundancy philosophy. Annunciation Windows showing tripping of different motors shall be provided in the Back up Control Panel. The plant operation shall be carried out from the PLC based control system.
5.	--	200 of 1172	PLC Configuration ETP 4-WT-060-01143	PLC Configuration STP 4-WT-055-01143 (attached)
6.	2 a)	15 of 1172	a) Operation & Control of STP System shall be from STP PLC (BIDDER Scope) as well as through Backup Mimic Control Panel (BIDDER Scope).Detailed specification of PLC (KTPS VOLUME-VI, SECTION VI) and with respective PLC configuration diagram (4-WT-060-01143) consisting of master clock interface, dedicated OPC server, operator workstation, engineering workstation, Laptop, Optic fiber cables, PLB HDPE conduits, Light Interface units, FO patch cords etc are also part of the specification and bidder shall consider the same.	a) Operation & Control of STP System shall be from STP PLC (BIDDER Scope) as well as through Backup Mimic Control Panel (BIDDER Scope).Detailed specification of PLC (KTPS VOLUME-VI, SECTION VI) and with respective PLC configuration diagram (4-WT-055-01143) consisting of master clock interface, dedicated OPC server, operator workstation, engineering workstation, Laptop, Optic fiber cables, PLB HDPE conduits, Light Interface units, FO patch cords etc are also part of the specification and bidder shall consider the same.
7.	2.5 e)		e) A copy of this sheet "PLC configuration diagram (4-WT-060-01330) & "UPS single line Diagram (PE-DG-417-145-I004)" with bidder's signature and company stamp	e) A copy of this sheet "PLC configuration diagram (4-WT-055-01143) & "UPS single line Diagram (PE-DG-417-145-I004)" with bidder's signature and company stamp



REDUNDANT DATA COMMUNICATION BUS

PLC PANEL

PROCESSOR SYSTEM
PROCESSOR SYSTEMREDUNDANT PROCESSOR
(HOT STAND BY)

INPUT/OUTPUT MODULES

INPUT/OUTPUT MODULES

FIELD

FIELD

FIBER OPTIC CABLE

I/O MODULE

RIO PANEL

NO. OF RIOS TO BE SELECTED AS PER LAYOUT

LEGEND:

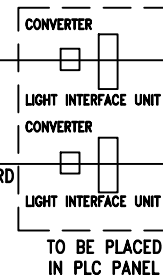
PLC	- PROGRAMMABLE LOGIC CONTROLLER
DCS	- DISTRIBUTED CONTROL SYSTEM
UPS	- UNINTERRUPTED POWER SUPPLY
OWS/EWS	- OPERATOR WORK STATION/ENGINEERING WORK STATION
HMI	- HUMAN MACHINE INTERFACE
NTP	- NETWORK TIME PROTOCOL
OPC	- OLE PROCESS CONTROL
MCCB	- MOULDED CASE CIRCUIT BREAKER
MCB	- MINIATURE CASE CIRCUIT BREAKER
LCR	- LOCAL CONTROL ROOM
CCR	- COMMON CONTROL ROOM

NOTES:

- 1) INDUSTRIAL GRADE OWS/OEWS & 24" TFT MONITORS SHALL BE PROVIDED.
 - 2) ALL PLCS SHALL HAVE DUAL HOT REDUNDANT PROCESSOR AND EACH RACK SHALL HAVE DUAL POWER SUPPLY MODULES, DUAL NETWORK COMMUNICATION CARDS/MODULE FOR DUAL REDUNDANT RING OR DUAL REDUNDANT STAR NETWORK.
 - 3) REDUNDANT UPS POWER SUPPLY SHALL BE USED FOR PLC PANEL(S),RIO,BACKUP PANELS, OWS/EWS,4 WIRE INSTRUMENTS AND NETWORK COMPONENTS.FOR APPLICABLE UPS SCHEME REFER DWG:PE-DG-417-145-1004
 - 4) PLC PANEL SHALL HAVE PROVISION TO ACCEPT TIME SYNC. SIGNAL (NTP/IRIG-B) FROM MASTER CLOCK SYSTEM.
 - 5) PLC PANEL SHALL HAVE PROVISION FOR DATA EXCHANGE (OPC) WITH PLANT DCS. NECESSARY OPC CLIENT/SERVER SOFTWARE TO BE PROVIDED IN OPC SERVER.
 - 6) NECESSARY PATCH CORD/CONVERTERS, LIU AT BOTH PLC AND DCS END SHALL BE IN BIDDER SCOPE FOR OPC LINK TO DDCMIS.
 - 7) PLC SPECIFICATION SHALL BE AS PER KTPS TENDER SPECIFICATION VOLUME-VI, SECTION VI, SUBSECTION B ONLY
 - 8) PLC PROCESSOR AND IO CARDS/MODULES SHALL BE FROM SAME FAMILY AND SHALL BE OF LATEST MODEL.
 - 9) UPS SPECIFICATION SHALL BE AS PER KTPS TENDER SPECIFICATION VOLUME-V B,SECTION XIV.UPS SIGNALS TO PLC SHALL BE THROUGH HARD WIRED AND SOFT SIGNALS(MODBUS).
 - 10) FIELD INSTRUMENT REDUNDANCY SHALL BE AS PER SPECIFICATION ONLY.
- PROTECTION & CLCS: TRIPLE REDUNDANCY; INTERLOCK/ PERMISSIVE: DUAL REDUNDANCY; MONITORING/ ALARM: SINGLE
- 11) ALL RTDS/ THERMO COUPLES IF APPLICABLE SHALL BE DUPLEX TYPE AND ALL TERMINALS SHALL BE WIRED TO RESPECTIVE DCS/ PLC

REFER NOTE 4

FO PATCH CORD



VENDOR SCOPE

FIBER OPTIC CABLE

LIGHT INTERFACE UNIT

LIGHT INTERFACE UNIT

FIBER OPTIC CABLE

LIGHT INTERFACE UNIT

LIGHT INTERFACE UNIT

BHEL SCOPE

DDCMIS
BIDIRECTIONAL OPC
LINK TO DDCMIS(TCP/IP)DDCMIS
BIDIRECTIONAL OPC
LINK TO DDCMIS(TCP/IP)

CAUTION: The information on this document is the property of SINHA & BHARAT HEAVY ELECTRICALS LTD. It must not be used or indirectly in any way detrimental to the interest of the company.

PROJECT		YADADRI TPS - 5 x 800 MW									
OWNER		TELANGANA STATE POWER GEN. CORPN. LTD.									
OWNER'S CONSULTANT		TATA Consulting Engineers Limited									
CONTRACTOR		BHARAT HEAVY ELECTRICALS LTD. UNIT: BOILER AUXILIARIES PLANT. RANIPET - 632 406.									
SUB CONTRACTOR				DRN	NAME	SIGN	DATE	NO.OF			
				CHD		MKV	24.08.19	VAR.			
				APPD		VNS	24.08.19	---			
DEPT	NPG	GRADE OF UNTOLO.DIM	SCALE	WEIGHT (KG.)	CWL DRG. NO:	ITEM NO.	NO. OF				
CODE	9776	PR: QA: 500	NTS				ITEMS				
TITLE				CARD CODE	DRAWING NO.	VER					
PLC CONFIGURATION STP				U 01	4-WT-055-01143	(A)	A				
							REV 02				