44	LCM	TAR-S-966
45	LCM	TAR-S-969
46	LCM	TAR-S-1001
47	LCM	TAR-S-1007
48	LCM	R01.KK34.30/40UMA.LCM.TM.OK.WD002
49	LCM	DCN-DSG34-2499-19
50	LCM	DCN-DSG34-2497-19
51	LCM	DCN-DSG34-461-18
52	LCM	DCN-DSG34-1355-19
53	LCM	DCN-DSG34-1356-19
54	LCM	DCN-DSG34-462-18
55	LCM	TAR-S-1116
56	LCM	TAR-S-1117
57	LCM	R01.KK34.30/40UMA.LCM.TM.OK.WD003
58	LDN	R01.KK34.30/40UMA.LDM.TM.OK.WD001
59	LDN	DCN-DSG34-4855-21
60	LDN	DCN-DSG34-4856-21
61	LDN	DCN-DSG34-1901-19
62	LDN	DCN-DSG34-1829-19
63	LFN	R01.KK34.30/40UMA.LFN.TM.OK.WD001
64	LFN	DCN-DSG34-4858-21
65	LFN	DCN-DSG34-4859-21
66	LFN	DCN-DSG34-2475-19
67	LFN	DCN-DSG34-2468-19
68	LBA	R01.KK34.30/40UMA.LBA.TM.OK.WD001
69	LBA	DCN-DSG34-4301-21
70	LBA	DCN-DSG34-1718-19
71	LBA	DCN-DSG34-1351-19
72	LCN	R01.KK34.30/40UMA.LCN.TM.OK.WD001
73	LCN	DCN-DSG34-406-18
74	LCN	DCN-DSG34-405-18
75	LCS	R01.KK34.30/40UMA.LCS.TM.OK.WD001
76	LCS	R01.KK34.30/40UMA.LCS50.TM.OK.WD001
77	LCS	R524 KK34 30/40UMA LCS TU MC WD001
78	LCS	R524 KK34 30/40UMA LCS TU MC WD002
79	LCS	R524 KK34 30/40UMA LCS TU MC WD003
80	LCS	R524 KK34 30/40UMA LCS TU MC WD004
81	LCT	R01.KK34.30/40UMA.LCT51.TM.OK.WD001
82	LCT	R524 KK34 30/40UMA LCT TU MC WD001
83	LCT	R524 KK34 30/40UMA LCT TU MC WD002
84	LCT	R524 KK34 30/40UMA LCT TU MC WD003
85	LCT	R524 KK34 30/40UMA LCT TU MC WD004
86	QJB50	R01.KK34.30/40UMA.QJB50.TM.OK.WD001
87	QJC10	R01.KK34.30/40UMA.QJC10.TM.OK.WD001
88	SCB10	R01.KK34.30/40UMA.SCB10.TM.OK.WD001

89	LCB	R288.KK34.30/40UMA.LCB10.TM.OK.WD001
90	LCB	R01.KK34.30/40UMA.LCB11.TM.OK.WD001
91	LCB	R288.KK34.30/40UMA.LCB41.TM.OK.WD001
92	LCB	DCN-DSG34-5784-22
93	LCB	DCN-DSG34-5785-22
94	LCB	DCN-DSG34-5780-22
95	LCB	DCN-DSG34-5781-22
96	LCB	DCN-DSG34-1896-19
97	LCB	DCN-DSG34-1897-19
98	LCH	R01.KK34.30/40UMA.LCH.TM.OK.WD001
99	LCH	R524 KK34 30/40UMA LCH TU MC WD001
100	LCH	R524 KK34 30/40UMA LCH TU MC WD002
101	LCH	R524 KK34 30/40UMA LCH TU MC WD003
102	LCH	DCN-DSG34-5793-22
103	LCH	DCN-DSG34-5792-22
104	LCH	DCN-DSG34-319-18
105	LCH	DCN-DSG34-320-18
106	LDB	R01.KK34.30/40UMA.LDB.TM.OK.WD001
107	LDB	DCN-DSG34-4862-21
108	LDB	DCN-DSG34-4861-21
109	LDB	DCN-DSG34-1539-19
110	LDB	DCN-DSG34-1538-19
111	LDF	R288.KK34.30/40UMA.LDF.TM.OK.WD001
112	LDF	DCN-DSG34-2928-20
113	LDF	DCN-DSG34-2929-20
114	LDP	R01.KK34.30/40UMA.LDP.TM.OK.WD001
115	LDP	R288.KK34.30/40UMA.LDP.TM.OK.WD002
116	LDR	R01.KK34.30/40UMA.LDR.TM.OK.WD001
117	LDR	DCN-DSG34-3856-20
118	LDR	DCN-DSG34-3855-20
119	LDR	DCN-DSG34-1508-19
120	LDR	DCN-DSG34-1512-19
121	LDR	TAR-S-3601
122	LDR	TAR-S-3600
123	LDR	TAR-S-3592
124	LDR	TAR-S-3591
125	LCA	R01.KK34.30/40UMA.LCA20.TM.OK.WD001
126	LCA	R01.KK34.30/40UMA.LCA70.SR.OK.WD001
127	LCA	R01.KK34.30/40UMA.LCA70.TM.OK.WD001
128	LCA	R01.KK34.30/40UMA.LCA90.SR.OK.WD001
129	LCA	R288.KK34.30/40UMA.LCA23.TM.OK.WD001
130	LCA	R288.KK34.30/40UMA.LCA34.TM.OK.WD001
131	LCA	R288.KK34.30/40UMA.LCA57.TM.OK.WD001
132	LCA	R288.KK34.30/40UMA.LCA90.TM.OK.WD001
133	LCA	R01.KK34.30/40UMA.LCA20.TM.OK.WD002
134	LCA	R01.KK34.30/40UMA.LCA70.TM.OK.WD002
135	LCA	R288.KK34.30/40UMA.LCA23.TM.OK.WD002
136	LCA	R288.KK34.30/40UMA.LCA34.TM.OK.WD002

137	LCA	R288.KK34.30/40UMA.LCA90.TM.OK.WD002
138	LCA	R524 KK34 30UMA LCA TU MC WD001
139	LCA	R524 KK34 30UMA LCA TU MC WD002
140	LCA	R524 KK34 30UMA LCA TU MC WD003
141	LCA	R524 KK34 30UMA LCA TU MC WD004
142	LCA	R524 KK34 30UMA LCA TU MC WD005
143	LCA	R524 KK34 30UMA LCA TU MC WD006
144	LCA	R524 KK34 30UMA LCA TU MC WD007
145	LCA	R524 KK34 30UMA LCA TU MC WD008
146	LCA	R524 KK34 30UMA LCA TU MC WD009
147	LCA	R524 KK34 30UMA LCA TU MC WD010
148	LCA	DCN-DSG34-2301-19
149	LCA	DCN-DSG34-2302-19
150	LCA	DCN-DSG34-2303-19
151	LCA	DCN-DSG34-2304-19
152	LCA	DCN-DSG34-3095-20
153	LCA	DCN-DSG34-3097-20
154	LCA	DCN-DSG34-3098-20
155	LCA	DCN-DSG34-3099-20
156	LCA	DCN-DSG34-3100-20
157	LCA	DCN-DSG34-3127-20
158	LCA	DCN-DSG34-3129-20
159	LCA	DCN-DSG34-3130-20
160	LCA	DCN-DSG34-3131-20
161	LCA	DCN-DSG34-3132-20
162	LCA	DCN-DSG34-3387-20
163	LCA	DCN-DSG34-3388-20
164	LCA	DCN-DSG34-3389-20
165	LCA	DCN-DSG34-5395-21
166	LCA	DCN-DSG34-5396-21
167	LCA	DCN-DSG34-6261-22
168	LCA	DCN-DSG34-6262-22
169	LCA	DCN-DSG34-6263-22
170	LAA	R01.KK34.30/40UMA.LAA.TM.OK.WD001
171	LAA	DCN-DSG34-6332-22
172	LAA	DCN-DSG34-6333-22
173	LAB	R01.KK34.30/40UMA.LAB.TM.OK.WD001
174	LAB	R01.KK34.30/40UMA.LAB.TM.OK.WD002
175	LAB	R01.KK34.30/40UMA.LAB.TM.OK.WD003
176	LAB	R524 KK34 30/40UMA LAB TU MC WD001
177	LAB	R524 KK34 30/40UMA LAB TU MC WD002
178	LAB	R524 KK34 30/40UMA LAB TU MC WD003
179	LAC	R288.KK34.30/40UMA.LAC.TM.OK.WD001
180	LAC	R288.KK34.30/40UMA.LAC.TM.OK.WD002
181	LAC	R288.KK34.30/40UMA.LAC.TM.OK.WD003
182	LAC	DCN-DSG34-2282-19
183	LAC	DCN-DSG34-1987-19
184	LAD	R01.KK34.30/40UMA.LAD.TM.OK.WD001

185	LAD	R01.KK34.30/40UMA.LAD.TM.OK.WD011
186	LAH	R01.KK34.30/40UMA.LAH.TM.OK.WD001
187	LAH	R01.KK34.30/40UMA.LAH.TM.OK.WD002
188	LAH	DCN-DSG34-4417-21
189	LAH	DCN-DSG34-4416-21
190	LAJ	R288.KK34.30/40UMA.LAJ.TM.OK.WD001
191	LAJ	DCN-DSG34-3372-20
192	LCG	R01.KK34.30UMA.LCG.TM.OK.WD001
193	LCG	DCN-DSG34-3096-20
194	LCG	DCN-DSG34-3128-20
195	LCR	R288.KK34.30UMA.LCR50.TM.OK.WD001
196	LCR	R01.KK34.30UMA.LCR10.TM.OK.WD001
197	LCR	DCN-DSG34-4303-21
198	GHA	R03 KK34 30UMA GHA TU MC WD001
199	LBB	R524 KK34 30/40UMA LBB TU MC WD001
200	LBQ	R524 KK34 30/40UMA LBQ TU MC WD001
201	LBS	R524 KK34 30/40UMA LBS TU MC WD002
202	LBS	R524 KK34 30/40UMA LBS TU MC WD004
203	LST	R524 KK34 30/40UMA LST TU MC WD001
204	LCC	R524 KK34 30/40UMA LCC TU MC WD001
205	LCE	R524 KK34 30/40UMA LCE TU MC WD001
206	LCJ	R524 KK34 30/40UMA LCJ TU MC WD002
207	LCJ	R524 KK34 30/40UMA LCJ TU MC WD003
208	LCJ	R524 KK34 30/40UMA LCJ TU MC WD004
209	LCJ	R524 KK34 30/40UMA LCJ TU MC WD006

VALVE ERECTION REPORT

	PROJECT :	KKNPP	UNIT	WP No :	I46/KK34/0/0/CC/WPR/WD032	Format No :	BHEL/KKNPP-3&4/TSS/FQP/008/F-009
	CLIENT :	M/s NPCIL		WD No :		REV No.	0
	CONTRACTOR:	M/s BHEL		KKS CODE:		Report No :	BHEL/TSS/VER/F-009/
	NAME OF WORK:	TSS-Package				Category of pipe line:	

Sl no	Date	Line No.	Valve No/Tag No.	Test Report No.	Valve Type	Weight in MT	IMIR No.

M/s BHEL / Erection	M/s BHEL / QA	M/s NPCIL / Mech

	INCOMING MATERIAL INSPECTION REPORT (FOR M/S NPCIL SUPPLY ITEMS)			
	WORK ORDER No.		FORMAT No.	BHEL/KKNPP-3&4/TSS/WP/006/F-001
	WORK PROCEDURE No.		REV No.	0
	QAP No.		REPORT No.	
	SSIR No.		DATE	

Sl.No.	WD No.	Material description / Specification	CIV No & Date	UOM	Qty. as per SSIR	Identification Heat/Batch No.	M/s BHEL Identification Details	Remarks

Storage location : & Preservation of Materials

Attachments (if any):-

Name			
Designation			
Signature			
Date			
	M/s BHEL - EXE	M/s BHEL - QA	M/s NPCIL - EXE

	INCOMING MATERIAL INSPECTION REPORT (FOR M/S BHEL SUPPLY ITEMS)				
	WORK ORDER No.		FORMAT No.	BHEL/KKNPP-3&4/TSS/WP/006/F-002	
	WORK PROCEDURE No.		REV No.	0	
	QAP No.		REPORT No.		
			DATE		

Sl.No.	SOQR No/WD No	Material description / Specification	Delivery Challan No / Invoice No	UOM	Quantity (Unit)		Identification Heat/Batch /Lot No	M/s BHEL Identification Details	MTC No. if any by Manufacturer / Check Testing Report No.& Date	Remarks
					Received	accepted				

The Above Material is Accepted / Not Accepted

Storage location : & Preservation of Materials.

Attachments (if any):-

Name				
Designation				
Signature				
Date				
	M/s BHEL - EXE	M/s BHEL - QA	M/s NPCIL - EXE	M/s NPCIL - QA

	Bharat Heavy Electricals Limited KUDANKULAM NUCLEAR POWER PROJECTS –UNIT 3 & 4	FORMATE: BHEL/KKNPP-3&4/TSS/FQP/003/F-003	
	Instrument Calibration Status	Rev: 00	Date:

CLIENT:-		
QAP No.:-		Date:-

Following instruments are to be used for quality check during inspection.
Applicable Instruments are stated in QAP.

Sr. No.	Instrument	Instrument No.	Certificate No.	Calibration Date	Valid Up to

Calibration of the instrument has been verified as per the calibration certificate.

		Reviewed by
BHEL Execution	BHEL QA	NPCIL QA

INSPECTION REPORT FOR DE-PRESERVATION				
	PROJECT :	KKNPP	FORMAT No.	BHEL/KKNPP-3&4/TSS/WP/008/F-001
	UNIT :		REPORT No.	
	CLINT :	M/s NPCIL	DATE OF INSPECTION	
	CONTRACTOR:	M/s BHEL	EQIPMENT DESCRIPTION	
	KKS CODE :		WD No. / DOCUMENT REF.	
	BUILDING :			

Sl. No.	Description of item	Status
1.	Degreasing of surface using Kerosene	
	a). External	Done / Not done / Not applicable
	b). Internal	Done / Not done / Not applicable
2.	Cleaning of rust using emery paper / metal brush (Except machined surface)	
	a). External	Done / Not done / Not applicable
	b). Internal	Done / Not done / Not applicable
3.	Cleaning of surface using white sprite/Acetone (Cleaner)	
	a). External	Done / Not done / Not applicable
	b). Internal	Done / Not done / Not applicable
4.	Cleaning the temporary protective coating using rotary wire brush.	
	a). Welding area	Done / Not done / Not applicable

Remarks:

M/s BHEL(Mech.) M/s BHEL/QA M/s NPCIL(Mech.) M/s NPCIL/QA

FME INSPECTION RECORD

	PROJECT :	KKNPP	FORMAT No.	BHEL/KKNPP-3&4/TSS/WP/014/F-001
	UNIT :		REPORT No.	
	CLIENT :	M/s NPCIL	DATE OF INSPECTION	
	CONTRACTOR:	M/s BHEL	QA CATEGORY	
	KKS CODE		ACTIVITY	

Work Scope:	
FME Control:	[Found OK/ ~~Unsatisfactory~~] Temporary covers over openings [Found OK/ ~~Unsatisfactory~~] Good housekeeping [Found OK/ ~~Unsatisfactory~~] Pipe dams/ barriers [Found OK/ ~~Unsatisfactory~~] Lanyards [Found OK/ ~~Unsatisfactory~~] Prior to Final closure Inspection [Found OK/ ~~Unsatisfactory~~] Control Log [Visual/Boroscope/Sponge/Other:_____] Inspection Technique Other:-_____
Immediate Actions:	**(For foreign material intrusion and retrieval)** [ ] Notify Supervisor and concerned Erection Head [ ] FM Control Loss Form attached
FM Close - Out:	Closeout inspections have been completed and the system or component has been reassembled to the extent necessary to ensure foreign material cannot enter. [ ] N/A [ ] Control Log has been reviewed and any discrepancies resolved.

BHEL (Execution) **BHEL(QA)** **NPCIL(Execution)** **NPCIL(QA)**

BHARAT HEAVY ELECTRICALS LIMITED

Kudankulam Nuclear Power Project 3&4

Welding Consumable Receipt Register

Format: BHEL/KKNPP-3&4/TSS/WP/13/F02

Sl. No.	KKS Code	Item no.	CIV no.	Date	Description	Size	Quantity

BHARAT HEAVY ELECTRICALS LIMITED

Kudankulam Nuclear Power Project 3&4

Welding Consumable Issue Register

Format: BHEL/KKNPP-3&4/TSS/WP/13/F03

Sl. No.	KKS code	Item no.	Description	Size	Running Stock	Issue Qty. (kg)	Balance Qty.

BHARAT HEAVY ELECTRICALS LIMITED

Kudankulam Nuclear Power Project . 3&4

Electrode Reconciliation Statement

Format: BHEL/KKNPP-3&4/TSS/WP/13/F04

S.No.	CIV No	CIV date	WD No	Item No	Unit No	Electrode type	WD Qty in kg	Qty Received in size			Total electrode consumed in kg	Balance available	Balance Required	Remarks
								2.5	3	4				

BHEL/KKNPP-3&4/TSS/WP/002/F-004

BHARAT HEAVY ELECTRICALS LIMITED
NUCLEAR POWER CORPORATION OF INDIA LTD
KKNPP STAGE 3 & 4

WELDING PROCEDURE SPECIFICATION

WPS No : ----- Date : --- Supporting PQR No: ----
Rev No : -- Date : ---
Welding Process : -----
Type : ------
(Auto/Semi-Auto/Manual/Machine)
Application : ----------

JOINTS

Joint Design : ----
Root Spacing : ----
Backing (Yes/No) : ----
Backing Material (Type) : ----
(Metal/Non fusing metal/Nonmetallic/other)

BASE METAL

Specification/ Group No : ----- to Specification/ Group No : ------

OR

Specification and type / grade : ----- to Specification and type / grade : ------

OR

Chem. Analysis & Mech. Prop. : ---- to Chem. Analysis & Mech. Prop. : ----

Thickness Range of Base material Groove: ------ Fillet: -----
Max. Pass Thickness ≤ : ----
Other : ----

FILLER METALS		1	2
Name/Class	:	---	---
Specn.No.	:	---	---
Supplemental filler metal	:	---	---
Size of filler metal	:	---	---
Flux trade name	:	---	---
Electrode-flux (Class)	:	---	---
Consumable Insert	:	---	---
Alloy Element	:	---	---

Weld Metal Thickness Range

Groove : --- ---
Fillet : --- --- Other : ---

POSITION

Position(s) of Groove : ---
Position(s) of Fillet : ---
Weld Progression : ---
Other : ---

PREHEAT

Preheat Temp. (Min) : ---
Interpass Temp. (Max) : ---
Preheat Maintenance : ---
Other : ---

PWHT

Temp.Range	:	---
Time Range	:	---
ROH & ROC	:	---
Other	:	---

GAS

	Gas(es)	Purity	Percent Compositions (Mixture)	Flow Rate
Shielding:	---	---	---	---
Trailing :	---	---	---	---
Backing :	---	---	---	---
Other :	---	---	---	---

ELECTRICAL CHARACTERISTICS

Current (AC/DC)	:	---	Polarity :	---
Amps (Range)	:	---	Volts :	---
Tungsten Electrode type and size	:	---		
Mode of metal transfer for GMAW	:	---		
Electrode wire feed speed range	:	---		
Pulsing current (GTAW)	:	---		
Heat Input (max)	:	---		

TECHNIQUES (QW-410)

String or Weave Bead	:	---
Oscillation/Weaving	:	---
Initial and interpass cleaning	:	---
Method of back gouging	:	---
Orifice or Gas cup size	:	---
Contact tube to work distance	:	---
Multiple or single pass per side	:	---
Multiple or single Electrode	:	---
Travel speed range	:	---
Use of thermal process	:	---
Closed to out chamber	:	---
Manual or Automatic	:	---
Peening	:	---
Other	:	---

Weld Layer(s)	Process	Filler metal		Current		Voltage (Range)	Travel Speed (Range)	Other
		Classification	Diameter (mm)	Type & Polarity	Amps. (Range)			
---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---

Prepared by	Reviewed by	Approved by	Accepted by
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BHEL/KKNPP-3&4/TSS/WP/002/F-005

BHARAT HEAVY ELECTRICALS LIMITED
NUCLEAR POWER CORPORATION OF INDIA LTD
KKNPP STAGE 3 &4

PROCEDURE QUALIFICATION RECORD

PQR No. : ---- Date : ----- WPS No. : ------
Rev. No. : --- Date : ----
Welding Process(es) : -------- Type : ---
(Auto/Semi-Auto/Manual/Machine)

JOINTS

Groove Design of Test Coupon

BASE METAL

Matl. Specn. : ----
Type /Grade : ----
Group No : ----
Thickness of Test Coupon : ----
Diameter of test Coupon : ----
Max. Pass Thickness : ----
Other : ----

FILLER METALS

		1	2
Name/Class	:	----	----
Specn. No.	:	----	----
Size of filler metal (Ø mm)	:	----	
Supplemental Filler Metal	:	----	-
Electrode Flux Classification	:	----	
Flux Type	:	----	----
Alloy element	:	----	----
	:	----	----
Weld Metal Thickness	:	----	----
Other	:	----	----

POSITION

Welding Position : ----
Weld Progression : ----
(Uphill / Downhill)
Other : ----

PREHEAT

Preheat Temp. : ----
Interpass Temp. : ----
Preheat Maintenance : ----
Other : ----

GAS

	Percent Composition Gas(es)	(Mixture)	Flow Rate
Shielding :	----		
Trailing :	----		
Backing :	----		
Other :	----		

PWHT

Temp. Range : ----
Time Range : ----
ROH & ROC : ----
Other :

TECHNIQUES

String/Weave Bead : ----
Gas cup size : ----
Oscillation/Weaving : ----
Multiple or single pass(per side) : ----
Multiple or single electrode : ----
Method of Back gouging : ----
Initial & inter pass cleaning : ----
Use of thermal process : ----
Peening : ----
Manual or Automatic : ----
Other : ----

ELECTRICAL CHARACTERISTICS

Current (AC/DC):DC Polarity :

	1	2
Amps:	----	----
Volts:	----	----

Tungsten Electrode type & size: ----
Mode of Metal Transfer for GMAW : ----
Heat Input : ----
Pulsing Current (GTAW) : ----
Other : ----

PQR No: Rev. No. : ---

TENSILE TEST

Specimen No.	Width mm	Thickness mm	CS Area mm^2	Ultimate Total Load kN	Ultimate Unit Stress N/mm^2	Type of Failure and Location
---	--	--	--	--	--	--

GUIDED BEND TESTS

Type & Fig No.	Result
----	---

TOUGHNESS TEST

Specimen No	Notch Location	Specimen Size	Test Temp.ºC	Impact Values J/SqCm			Result
					---	---	---
					---	---	---
					---	---	---

CHEMICAL ANALYSYS

Elements										
Wt%										

Report Details:

RT Report No	
DPT Report	
UT report No	
Tensile,Bend,chemical,Toughness test report no.	

Welder Name : ----
Test conducted by : --- Test No. : ---

We certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of Sec IX of the ASME Boiler and Pressure Vessel code.

Date : -----

Prepared By: Review by Approved by Accepted by

----- -----

	BHARAT HEAVY ELECTRICALS LTD. Kudankulam Nuclear Power Project 3 & 4.	Format No : BHEL/KKNPP-3&4/TSS/WP/002/F-02
		Date :
	WELDER PERFORMANCE QUALIFICATION REPORT	Report No :

Test procedure No :

Welder's Name	:	Welder Certificate No.	:	Affix Latest Passport size photo
Welder No.	:	Date	:	
WPS No.	:	Package	:	
Revision No.	:	Welding Process	:	
Ref. Procedure	:	Specification of weld material	:	
Qualified welded joint category	:	**Type**	: Manual/ Semi-Automatic/ Automatic	
Permitted welded joint category	:	**Qualification test on**	: Test Coupon/ Production Joint	

Welding Variables	Actual Values	Range Qualified
Backing (metal, weld metal, welded from both side, flux etc.		
Welding Processes		
Base material group		
Plate-Thickness		
Pipe-Dia & Thickness		
Filler Metal Specification		
Consumables inserts for GTAW		
Weld deposit thickness for welding process		
Welding Position		
Progress (Uphill/ Downhill)		
Backing gas with purity for GTAW/ GMAW		
GMAW Transfer mode		
Welding Current Type and Polarity		

Total Practice/ Experience :

Theoritical knowledge :	Execellent/ Good/ Satisfactory/ Bad	
Weld Visual Examination :	Satisfactory/ Not satisfactory	
Radiographic Test result :	Accepted/ Not accepted	Report No :
Ultrasonic Test result :	Accepted/ Not accepted/ NA	Report No :
LPT/ MPT result on finished Weld :	Accepted/ Not accepted/ NA	Report No :
Filler weld fracture test result :	Accepted/ Not accepted/ NA	Report No :
Metallographic test result :	Accepted/ Not accepted/ NA	Report No :

Welding test conducted by BHEL : Tested on :

We certify that the statement in this record are correct and that the test coupons were prepared, welded and tested in accordance with the requirements of WP No :

	BHEL-QA	NPCIL-QA
Name		
Designation		
Signature		
Date		

Certificate No :
Test Held on :
Valid upto :
Extended upto :

TEST RECORD

This is to certify that this welder has been tested in accordance with the requirements of WP :
on behalf of NPCIL.

Authorised by,

SAMPLE

BHEL Welding Engineer

For NPCIL QA

BHEL QA Engineer

BHARAT HEAVY ELECTRICALS LTD.
Kudankulam Nuclear Power Project 3 & 4.

Format Number :BHEL/KKNPP-3&4/TSS/WP/002/F-03

WELDER IDENTITY CARD

Affix Latest Passport size photo

Welder Name :
Welder No :
Material Used :
Process :
Type : Manual/ Semi-Automati/ Automatic
Welder Category : I/ II/ III
Qualified Weld Category

Range of Qualification
- Thickness :
- Dia :
- Position :
- Group :

Welding Consumable specification :
Date of Issue :
Date of Issue :

SAMPLE

VISUAL AND MEASURING INSPECTION REPORT

PROJECT :	KKNPP	UNIT		WP No :		QA Category :		Format No :	BHEL/KKNPP-3&4/TSS/WP/001/F - 001
CLIENT :	M/s NPCIL			WD No :		NDT Procedure No :		Report No :	
CONTRACTOR:	M/s BHEL			KKS CODE:		Weld Category :		Date :	
NAME OF WORK:				LINE No:		Reference Document :			
				WPS No:		IMIR No for material & consumable :			

SL. No	Joint No.	Pipe size	Type of Joint	Welder ID	Surface preparation / Cleanliness		Fit up						Weld visual and measuring						Surface Finish		Result	BHEL/QA	NPCIL/QA
					Observation	Details of rectification	Bevel angle		Land		Root gap		Weld concavity/convexity		Weld width		Weld thickness		Observation	Details of rectification			
							Observation	Details of rectification	Observation	Details of rectification	Observation	Details of rectification	Observation	Details of rectification	Observation	Details of rectification	Observation	Details of rectification					

	BHEL / QA	NPCIL / QA
Name		
Designation		
Signature		
Date		

Verified 12/01/2020.

PIPING ERECTION REPORT

PROJECT :	KKNPP	UNIT	3 & 4	WP No :	146/KK34/O/O/CC/WPR/WD018	Category of pipe line	III	Format No :	BHEL/KKNPP-3&4/TSS/Piping/018 /A
CLIENT :	M/s NPCIL			WD No :				Report No :	
CONTRACTOR:	M/s BHEL			KKS CODE:				Date :	
NAME OF WORK:	TSS-Package			LINE No:		Reference Document :		Process :	
						IMIR No for material & consumable :		Electrode :	

Sl no	Description of Materials	KKS code	Drawing no	Block no	Length of Block (M)	Erection (Inch Meter)

SAMPLE

M/s BHEL / Erection	M/s BHEL / QA	M/s NPCIL / Mech

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SIMPLE SLIDING SUPPORT INSPECTION REPORT

	PROJECT :	Kudankulam Nuclear Powe Project -3&4	QAP No :	BHEL/KKNPP-3&4/TSS/QAP/~~008~~
	CLIENT :	NPCIL	Format No	BHEL/KKNPP-3&4/TSS/QAP/008/F07
	CONTRACTOR:	BHEL	Report No	
	NAME OF THE SYSTEM	LINE No:	Date	
			WD No :	
QA Category:	WPS No:	Type of Record: Permenent	KKS CODE:	

Activity	Report No/ value/status	BHEL Exe	BHEL QA	NPCIL Exe	NPCIL QA	Remarks
Suppoprt KKS Code						
Line No						
Weight						
IMIR Report						
De preservation Report No(If applicable)						
Welding of Base Plate on EP/Structural Members						
Assembly of clamp						
Location and Elevation of support						
Tightness of fasteners						

Note:
Dimensional requirement as per WD (Actual Dimension marked in the enclosed support drawing).
BOQ of Structural steel and Support material used against each support is enclosed along with this report(If applicable)

BHEL EXE	BHEL QA	NPCIL EXE	NPCIL QA

SUPPORT ERECTION REPORT

PROJECT :	KKNPP	UNIT	3 & 4		WP No :	I46/KK34/O/O/CC/WPR/WD04&			Format No :	BHEL/KKNPP-3&4/TSS/Piping/018 /B
CLIENT :	M/s NPCIL				WD No :				Report No :	
CONTRACTOR:	M/s BHEL				KKS CODE:				Date :	
NAME OF WORK:	TSS-Package				LINE No:		Reference Document :	BHEL/KKNPP-	Process :	
							IMIR No for material &		Electrode :	

Sl no	KKS	Drawing No.	Support No	Tag No.	Support Type	Wt (MT)

SAMPLE

M/s BHEL / Erection	M/s BHEL / QA	M/s NPCIL / Mech

SUPPORT FIT-UP AND WELDING INSPECTION REPORT

PROJECT :	Kudankulam Nuclear Powe Project -3&4	QAP No :	BHEL/KKNPP-3&4/TSS/QAP/~~008~~	Format No	BHEL/KKNPP-3&4/TSS/QAP/008/F -005
CLIENT :	NPCIL	WD No :		Report No	
CONTRACTOR:	BHEL	KKS CODE:		Date	
NAME OF THE SYSTEM		LINE No:		QA category	
		WPS No:		Type of record	Permenent

SL. No	Support KKS code	Line No	Type of Support	IMIR Report No	De Preservation Report No	Support Fit Up				Support Weld Visual Inspection			Remarks
						BHEL EXE	BHEL QA	NPCIL EXE	NPCIL QA	Welder ID	BHEL QA	NPCIL QA	

BHEL EXE	BHEL QA	NPCIL EXE	Verified By NPCIL QA

SPRING HANGER INSPECTION REPORT

	PROJECT :	Kudankulam Nuclear Powe Project -3&4	QAP No :	BHEL/KKNPP-3&4/TSS/QAP/~~008~~
	CLIENT :	NPCIL	Format No	BHEL/KKNPP-3&4/TSS/QAP/008/F006
	CONTRACTOR:	BHEL	Report No	
	NAME OF THE SYSTEM	LINE No:	Date	
			WD No :	
QA Category:	WPS No:	Type of Record: Permenent	KKS CODE:	

Activity	Report No/ value/status		BHE/L Exe	BHEL QA	NPCIL Exe	NPCIL QA	Remarks
Suppoprt KKS Code							
Line No							
Weight							
IMIR Report							
De preservation Report No							
Cutting and welding of hanger rod							
Pre compression of Spring	As per Drg	Actual					
Assembly of Spring hanger							
Welding of Lug on Embeded plate/Structure							
Welding of stopper plate on Vertical pipe for Spring Hanger							
Location and Elevation of support							
Tigtness of Hanger assembly							
De locking of Spring after clearance							

Note:
Dimensional requirement as per WD (Actual Dimension marked in the enclosed support drawing).
BOQ of Structural steel and Support material used against each support is enclosed along with this report(If applicable)

BHEL EXE	BHEL QA	NPCIL Exe	NPCIL QA

	DYE PENETRANT TEST REPORT	Doc. No: BHEL/ KKNPP-3&4/ TSS/ WP/ 004/ F-01.
		WP No: BHEL/ KKNPP-3&4/ TSS/ WP/ 004
	Project : Kudankulam Nuclear Power Project 3&4	Report No:
	Client : Nuclear Power Corporation of India Ltd	Report Type:
	Contractor : Bharat Heavy Electricals Ltd	Date:

Drawing Number :

1. KKS Code :
2. Equipment/ System Category :
3. Location/ Room Nos. :
4. Surface condition :
5. Temperature of Part :
6. Unit :
7. Dwell Time (in minutes) :
8. Developing Time (in minutes) :
9. Weld category :
10. QA category :

Details of DPT Materials: -

	Solvent/ Cleaner	Penetrant	Developer
Make/ Brand			
Batch Nos.			
Date of Manufacture			
Date of Expiry			

Sl. Nos.	Item Nos.	Joint Nos.	Observation	Result		Remarks
				Accepted	Repair	

	NDT - Agency	BHEL - QA	NPCIL - QA
Signature			
Name			
Designation			
Date			

SUPPORT/SYSTEM BOLT TORQUE TIGHTENING REPORT

PROJECT	KKNPP	FORMAT NO	BHEL/KKNPP/TSS/FQP/008/F003
UNIT		REPORT NO	
CLIENT	M/s NPCIL	DATE	
CONTRACTOR	M/s BHEL	QA CATEGORY	III
KKS CODE		TYPE OF RECORD	PERMANENT

Location/Room No :

Name of Equipment/ System :

WD No./Document Ref. :

Sl No.	Bolt Position as per Drg	Torque required as per Drg	Remarks

Comments (If any):

BHEL EXE BHEL QA NPCIL EXE NPCIL QA

	BHARAT HEAVY ELECTRICALS LIMITED **Kudankulam Nuclear Power Project - 3&4.**	Doc. No: BHEL/ KKNPP-3&4/ TSS/ WP/ 005/ F-01 Test report No. : Date :

RADIOGRAPHIC EXAMINATION REPORT OF WELDED JOINTS

Job Description: -

Client : M/s NPCIL	Contract No. : 400442 Dt 05-08-2019
KKS Code :	Drawing No. :
Unit :	Location :
QA Category :	Equipment/ System Category :
Material Specification :	Weld Joint & Technique :
Weld Category :	Surface Condition :
Temperature :	Limitation (If any) :

Radiography Technique Details: -

Gamma Ray Source		Source Size		Source Strength	
X-Ray Machine		Focal Size		KV & MA	
SFD		Exposure Time		Film Make & Type	
Exposure Technique		Nos. of IQI		Sensitivity Level	
IQI Type & ID No.		Shim Thickness		Optical Density	

Reference Documents: -

Radiographic Test Specification : PNAE G-07-017-89	Document Type : Permanent
RT Procedure No. : BHEL/ KKNPP-3&4/ NIEP/ WP/ 005	QA Category :
Acceptance Standard : PNAE G-07-010-89	Technique Sheet No. :

Test Result: -

Sl. Nos.	Identification Nos.	Joint Nos.	Welder No.	Size (Dia. & Thickness)	Segment	Observation	Remarks

ACC – Acceptable, BT – Burn Through, C/S – Check Surface, CR - Crack, CON – Concavity, EP - Excess Penetration, P - Porosity, Gr. Por - Group Porosity, LF – Lack of Fusion, LP/ IP – Lack of Penetration or Incomplete Penetration, SI - Slag Inclusion, TI - Tungsten Inclusion, UC - Undercut, Rep- Repair.

	NDT - Tech	BHEL - QA	NPCIL - QA
Signature			
Name			
Designation			
Date			

BHARAT HEAVY ELECTRICALS LIMITED **Kudankulam Nuclear Power Project - 3&4.**	Doc. No: BHEL/ KKNPP-3&4/ TSS/ WP/ 029 R00 Format No. : F-01 Report No: Date :	
ULTRASONIC EXAMINATION REPORT OF WELDED JOINTS	Page No	

ANNEXURE-I

Job Description:

Client : M/s NPCIL	Contract No. : 400442 Dt. 05-08-2019
KKS Code :	Drawing No. :
Unit :	Location :
QA Category :	Equipment/ System Category :
Material Specification :	Joint Dimensions :
Weld Category :	Surface Condition :
Type of Joint :	Limitation (If any) :

UT Equipment & Accessories Details:

UT Instrument:		**Transducer:**	Normal	Angle	
		Probe Angle:	0°		
Make/ Model:		Serial No:			
Serial No:		Make:			
Due date for Calibration:		Type:			
Couplant:		Size:			
Calibration Block:		Frequency:			
Reference Block No:		Reference dB:			
Reflector Size:		Scanning dB:			
Sensitivity:		Transfer correction:			
		Sensitivity Correction:			

Reference and Acceptance Details:

UT Ref Standard : PNAE G-07-030-91	Document Type : Permanent			
UT Procedure No. : BHEL/ KKNPP-3&4/ TSS/ WP/ 029	Technique Sheet No. :			
Acceptance Standard : PNAE G-07-010-89	DAC No:			

Test Result:

S. No	Joint No.	Welder No.	Size (mm)	Identification Nos.	Position and Orientation of Indications						Result	Remarks
					Angle	Position	Depth (mm)	Max. Echo Height %	Beam Path (mm)	Length (mm)		

	NDT - Tech	BHEL - QA	NPCIL - QA
Signature			
Name			
Designation			
Date			

INSPECTION REPORT FOR RE-PRESERVATION

	PROJECT :	KKNPP	FORMAT No.	BHEL/KKNPP-3&4/NIEP/WP/008/F-002
	UNIT :		REPORT No.	
	CLINT :	M/s NPCIL	DATE OF INSPECTION	
	CONTRACTOR:	M/s BHEL	EQIPMENT DESCRIPTION	
	KKS CODE :		WD No. / DOCUMENT REF.	
	BUILDING :			

Sl. No.	Description of item	Status
1.	Cleaning of weld using metal brush / Grinding a). External b). Internal	 Done / Not done / Not applicable Done / Not done / Not applicable
2.	Cleaning of surface using Acetone (Cleaner) a). External b). Internal	 Done / Not done / Not applicable Done / Not done / Not applicable
3.	Touch-up paint for all welding areas a). External b). Internal	 Done / Not done / Not applicable Done / Not done / Not applicable

Remarks:

M/s BHEL(Exe.)	BHEL (QA)	M/s NPCIL (Exe.)	Verified by NPCIL QA

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WELDING INSPECTION REPORT FOR CS PIPING

PROJECT :	KKNPP-3&4	Package :	TSS	Welding Process :	GTAW/ GTAW+SMAW	WP No :	BHEL/ KKNPP-3&4/ TSS/ WP/ 034.
UNIT :		KKS CODE :		QA Category :		Format No :	BHEL/ KKNPP-3&4/ TSS/ QAP/ 008/ F-01.
CLIENT :	M/s NPCIL	WD No :		Weld Category :		Report No :	
CONTRACTOR :	M/s BHEL	QAP No :	BHEL/ KKNPP-3&4/ TSS/ QAP/ 0(	Welding Consumables :	GTAW / SMAW	Report Type :	Permanent
WORK ORDER No	400442	WPS No :		Argon Purity :		Date :	
				Argon Flow Rate (LPM) :	Shielding- / Backing-		

Sl. No.	Joint No.	Line No.	Pipe Size	Block/ Supply No.	IMIR Report No.	Welder No.	Alignment & Fit-Up Inspection		Weld Fit-Up Inspection				Weld Visual Inspection		NDT Inspection			Remarks
							BHEL (Mech)	NPCIL (Mech)	BHEL (Mech)	BHEL (QA)	NPCIL (Mech)	NPCIL (QA)	BHEL (QA)	NPCIL (QA)	DPT Report No.	RT Report No.	UT Report No.	

SAMPLE FORMAT

	BHEL (Mech)	BHEL (QA)	NPCIL (Mech)	Verified by NPCIL (QA)
Signature				
Name				
Designation				
Date				

बी एच ई एल BHEL	**BHARAT HEAVY ELECTRICALS LIMITED** **KUDANKULAM NUCLEAR POWER PROJECT UNIT 3 & 4** ***FRONT INSPECTION REPORT***	FORMAT: BHEL/KKNPP-3&4/TSS/FQP/008/F-001/R00

CLIENT	M/s NPCIL	UNIT NO.:	REPORT NO -	DATE -
		LOCATION:		
CONTRACTOR	M/s BHEL	KKS CODE:		
		SYSTEM:		

Inspection Date:

Sl No	Pedestal/Foundation /Structure Identification	Size of Pedestal/Foundation/ structure (in mm)		Elevation (in mm)		Flatness of surface/EP		Pocket size & Depth		Acceptance Status	Remark
		As Per Drg	Actual	As Per Drg	Actual	As Per Drg	Actual	As Per Drg	Actual		

Note :-

	BHEL EXE	NPCIL EXE
Signature		
Name		
Designation		
Date		

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
(A Govt. of India Undertaking)
Kudankulam Nuclear Power Project – Unit 3&4
Kudankulam Post, Radhapuram Taluk, Tirunelveli Dist.,
Tamil Nadu- 627106

BHEL: PSSR: KKNPP: TSS: F- 1002/TO-733 26.08.2022

To
Shri Lenin Mathew,
Scientific Officer-F,
Engineer In-charge,
TG-Package-NPCIL-KKNPP Unit3&4,

Dear Sir,

Sub: - Submission of Quality Plan for Fabrication & Erection of Stainless steel piping in TSS Package
Ref: Work order: 400442

After incorporating NPCIL comments, we are herewith submitting the QP for Fabrication & Erection of Stainless steel piping in TSS Package for your review and approval.

Document No.: I46/KK34/0/0/QA/QP/WD039

For and on behalf of
BHARAT HEAVY ELECTRICALS LTD

Sanjiba Nanda Naik/SDGM/BHEL
Site Incharge/TSS Package
KKNPP-3&4

Controlled Copy Distribution List

Sl. No.	Controlled Copy No.	ISSUED TO		
		Department	Responsible Person	Type of Control
NPCIL				
01	01	NPCIL MECH	CE - MECHANICAL	CONTROL COPY
02	02	NPCIL QA	QA - HEAD	CONTROL COPY
03	03	NPCIL FE	FE - HEAD	CONTROL COPY
BHEL				
04	04	BHEL	SITE INCHARGE	CONTROL COPY
05	05	BHEL QA	QA - HEAD	CONTROL COPY
06	06	BHEL DOCUMENTATION	DOCUMENT CONTROLLER	MASTER COPY

	Prepared by	Reviewed by	Approved by	Issued by
Name	R. Arun	SHASHIKANT	Sanjiba Nanda Naik	M.Chandramouli
Designation	Engineer-QA	Head-QA	Site Incharge	Manager
Signature				
Date	26.08.2022	26.08.2022	26.08.2022	26.08.2022

न्यूक्लियर पॉवर कॉर्पोरेशन ऑफ इंडिया लिमिटेड
NUCLEAR POWER CORPORATION OF INDIA LIMITED
(भारत सरकार का उद्यम A Govt. of India Enterprise)
कुडनकुलम न्यूक्लियर पॉवर प्रोजेक्ट KUDANKULAM NUCLEAR POWER PROJECT- 3&4

दस्तावेज स्वीकृति सूचना DOCUMENT ACCEPTANCE NOTE

Document No	I 46	KK 34	0	0	QA	QP	WD 039
दस्तावेज शीर्षक Document Title	Quality Plan for Fabrication and erection of Stainless Steel Piping.						
संविदाकार Contractor	M/S BHARAT HEAVY ELECTRICALS LIMITED						
कार्य आदेश सं. Work Order No.	400442 dated 05.08.2019						
कार्य का नाम Name of Work	Erection work of Turbine, Generator, Condenser, Secondary cycle & Sea Water System Equipment's and piping including Painting, Insulation, Anti Corrosive Coating and structural steel works in turbine building and sea water structure of KKNPP 3&4						

उपर्युक्त दस्तावेज की समीक्षा की गई है और लागू डब्लूडी, कोड और विनिर्देशों की आवश्यकताओं की पुष्टि पाई गई है।
Above document has been reviewed and found conforming to the requirements of applicable WDs, codes and specifications.

गतिविधि Activity	अनुभाग Section	नाम एवं पदनाम Name & Designation	हस्ताक्षर एवं दिनांक Signature & Date
समीक्षित Reviewed by	Mechanical	SUNIL KUMAR SAHAT, SO-E	27/08/2022
		Levin Mathew SO/F	29/08
सहमत Concurred by	QA	Vasant Bhat SO/E	01.09.2022
	FE	Ravindra Bennetta SO/E	P. Ravindra, 02.09.22
स्वीकृत Accepted by	QA	G. Bipin Head QA	12 SEP 2022

Revision Status

Rev. No.	Date of 1st Issue/ Rev.	Description
00	04.07.2022	Initial submission
00	26.08.2022	NPCIL comments incorporated

	Prepared by	Reviewed by	Approved by	Issued by
Name	R. Arun	SHASHIKANT	Sanjiba Nanda Naik	M.Chandramouli
Designation	Engineer-QA	Head-QA	Site Incharge	Manager
Signature				
Date	26.08.2022	26.08.2022	26.08.2022	26.08.2022

Table of Contents

	Prepared by	Reviewed by	Approved by	Issued by
Name	R. Arun	SHASHIKANT	Sanjiba Nanda Naik	M.Chandramouli
Designation	Engineer-QA	Head-QA	Site Incharge	Manager
Signature				
Date	26.08.2022	26.08.2022	26.08.2022	26.08.2022

1. SCOPE:

This Document provides Quality plan for Fabrication and Erection of Stainless Steel Piping at TSS Package of KKNPP-3&4 excluding Hydro test, restoration of the system, hook-up and CCC requirement.

2. PURPOSE:

This Quality plan explains the sequence of activities for Fabrication, Welding, Erection, Alignment, and Testing Characteristics of Inspection & statement of Witness and Hold points, for Fabrication and Erection of Stainless Steel Piping at TSS Package of KKNPP-3&4.

3. APPLICABILITY:

This Quality Plan is applicable for Fabrication and Erection of Stainless Steel Piping at TSS Package of KKNPP-3&4. Applicable WDs are as per Annexure III

4. REFERENCES:

(a) Technical specification of NPCIL/ KK-3&4/ CONST/ MECH/ PT/ 2018/ 56.
(b) Relevant working Drawings, Codes and Standards applicable.
(c) BHEL/ KKNPP-3&4/ TSS/ WP/ 015. Work procedure for SS Piping Erection.
(d) Approved Procedures, Drawings, Documents and formats as applicable.
(e) PNAEG-7-003-87-Certification of rules for welders of Nuclear Power Plant Equipment and Pipelines
(f) PNAEG-7-008-89- Safe operation in equipment's and Pipelines
(g) PNAEG-7-009-89- Welding and Weld Surfacing of equipment's and applications
(h) PNAEG-7-010-89- Welding joint and weld surfacing of Inspection regulations
(i) SNIP 3.05.05-84- Technological Equipment and Pipelines
(j) RD 34.10.030.89
(k) SN 527-80
(l) Procedure for Incoming Material Storage and Inspection - I46/KK34/0/0/QA/QFS/WD005
(m) Procedure for Visual Inspection - I46/KK34/0/0/QA/QFS/WD004
(n) Procedure for De-preservation - I46/KK34/0/0/QA/QFS/WD006
(o) Procedure for Radiographic Testing - I46/KK34/0/0/QA/QFS/WD007
(p) Procedure for Dye Penetrant Test - I46/KK34/0/0/QA/QFS/WD003
(q) Procedure for Welder Performance Certification Testing - I46/KK34/0/0/QA/QFS/WD001
(r) Procedure for Electrode Storage, Verification, Issue and Control - I46/KK34/0/0/CC/WPR/WD006

	Prepared by	Reviewed by	Approved by	Issued by
Name	R. Arun	SHASHIKANT	Sanjiba Nanda Naik	M.Chandramouli
Designation	Engineer-QA	Head-QA	Site Incharge	Manager
Signature				
Date	26.08.2022	26.08.2022	26.08.2022	26.08.2022

5. RESPONSIBILITY:

It is the responsibility of BHEL TSS package Site-In-Charge and Head-QA to implement this procedure.

6. STATEMENT OF CHECKS

- For checks where log sheets are not called for, suitable records should be maintained in the form of log book/ protocols.
- Abbreviations used in the column "Responsible Agency" are: -

P: Performer of the Activity (Bhel sub agency).

W: Witness Points are critical steps in erection /inspection/ testing where BHEL is obliged to notify NPCIL in advance of the start of operation/test so that it may be witnessed. BHEL may proceed with the work past a Witness Point if the NPCIL is not available at the appointed time.

H: Hold Points are critical steps in erection/ inspection/testing where BHEL is obliged to notify NPCIL in advance of the start of operation/test so that it may be witnessed. BHEL Will not proceed with the work past a Hold Point except by written waiver/agreement by NPCIL.

S: Surveillance (minimum 10 %)

2:— 9.

List of Formats: QP for fabrication & erection of stainless steel piping

Sl. no.	Description	Format no.
1	IMIR	BHEL/KKNPP/3&4/TSS/006/F-001
2	Identification of welding consumables	BHEL/KKNPP-3&4/TSS/WP/013/F-03
3	Calibration of Welding Equipment's & IMTE	BHEL/KKNPP-3&4/TSS/FQP/003/F-003
4	De preservation	BHEL/ KKNPP/3&4/TSS/WP/008 /F001
5	FME check	BHEL/KKNPP-3&4/TSS/WP/014/F-001
6	WPS & PQR	BHEL/KKNPP-3&4/TSS/WP/002/F-004 & 005
7	Welder qualification and Welder ID	BHEL/ KKNPP 3&4/ TSS/ WP/ 002/ F-02 & F-03
8	Piping erection report	BHEL/KKNPP-3&4/TSS/Piping/18/A
9	Visual and measuring inspection report	BHEL/KKNPP-3&4/TSS/WP/001/F-001
10	Front inspection report	BHEL/KKNPP-3&4/TSS/FQP/008/F001
11	Support fit up and welding inspection report	BHEL/KKNPP-3&4/TSS/QAP/008/F -007
12	Support erection report	BHEL/KKNPP-3&4/TSS/Piping/18/B
13	Support fit up and welding inspection report	BHEL/KKNPP-3&4/TSS/QAP/008/F -005
14	Valve erection report	BHEL/KKNPP-3&4/TSS/FQP/008/F009
15	Spring hanger inspection report	BHEL/KKNPP-3&4/TSS/QAP/008/F -006
16	Dye penetrant test report	BHEL/KKNPP-3&4/ TSS/ WP/ 004/ F-01
17	Torque tightening report	BHEL/KKNPP-3&4/TSS/FQP/008/F -003
18	RT test report	BHEL/ KKNPP-3&4/ TSS/ WP/ 005/ F-02
19	UT test report	BHEL/KKNPP-3&4/TSS/WP/029,F-001
20	Re preservation	BHEL KKNPP/3&4/TSS/WP/008 /F002

	Prepared by	Reviewed by	Approved by	Issued by
Name	R. Arun	SHASHIKANT	Sanjiba Nanda Naik	M.Chandramouli
Designation	Engineer-QA	Head-QA	Site Incharge	Manager
Signature				
Date	26.08.2022	26.08.2022	26.08.2022	26.08.2022

	Quality Plan for Fabrication and Erection of Stainless stee' ing	Doc. No.	BHEL/KKNPP-3&4/TSS/FQP/019
	Kudankulam Nuclear power Project, Units 3 & 4	Rev. no.	0 Page No of
	Nuclear Power Corporation of India Ltd.	Type of Document	Permanent
	BHARAT HEAVY ELECTRICALS LTD. TSS PACKAGE I46-KK34-0-0-QA-QP-WD039	QA Category	QA-III
		Date	26.08.2022

Sl. No	Compoments & Operation	Characteristic	Category of attribute	Type of check	Quantum of Check	Reference doccument	Acceptance Norms	Format of Record	Performer (P)	Responsible Agencies				Remarks
										BHEL		NPCIL		
										EXE	QA	EXE	QA	
1	**Incoming material inspection**													
1.1	Identification of Pipes, Fittings, Valves, Support materials and other components	Verification of packing slip description, Tag, Quantity, Inspection clearance, Test Certificates, and damage (if any)	Critical	Visual & documents verification	100%	Working Drawings, Packing slip, Passport documents. Test Certificates; Work procedure for IMIR: I46.KK34.0.0.QA.QFS.WD005	Applicable WDs, NPCIL specification	IMIR: BHEL/KKNPP/3&4/TSS/006/F-001	2	W	H	W	H	
1.2	Identification of welding consumables	Verification of Specification, Size, Quantity, damage, Test certificate, calcination requirement etc.	Critical	Visual & documents verification	100%	Work procedure for IMIR: I46.KK34.0.0.QA.QFS.WD005	Applicable WDs, NPCIL specification	Format No: BHEL/KKNPP-3&4/TSS/WP/013/F-03	2	W	H	W	H	
2	**TESTING/MEASURING OF EQUIPMENTS**													
2.1	Calibration of Welding Equipment's & IMTE'	Checking of healthiness / verification of Test Certificate	Critical	Visual & documents verification	100%	Calibration certificates	Calibration agency shall be accredited by NABL	Format no: BHEL/KKNPP-3&4/TSS/FQP/003/F-003	2	W	H	W	H	
3	**DEPRESERVATION**													
3.1	De-preservation of Pipes, Fittings, Valves, Support materials and other components	Removal of preservatives	Minor	Visual	100%	work procedure Depreservation and Represervation : I46.KK34.0.0QA.QFS.WD006	As per manufacturer instruction	Format no: BHEL/ KKNPP/3&4/TSS/WP/008/F001	2	H	H	W	S	
4	**CLEANLINESS OF PIPES**													
4.1	Ensuring FME check	Absence of Foreign Materials, dust, mud.	Minor	Visual	100%	Work procedure for FME: I46.KK34.0.0.CC.WPR.WD005	No Foreign Material shall be found	Format no: BHEL/KKNPP-3&4/TSS/WP/014/F-001	2	W	H	W	S	
5	**QUALIFICATION**													
5.1	Welding Procedure Specification and procedure Qualification Record	Welding Parameters,Essential and Non Essential Variables	Critical	Verification of Records, NDT & Mechanical testing	100%	Work procedure for WPS certification :I46.KK34.0.0QA.WPR.WD001, PNAE-G-7-009-89	PNAE-G-07-010-89; PNAE-G-07-016-89	Format No: BHEL/KKNPP-3&4/TSS/WP/002/F-004 & 005	2	-	H	-	H	
5.2	Welder Qualification Test	Verification of previous experience, Welder performance and qualification Test	Critical	Visual , Measurement, & NDT	100%	Procedure of certification for welder performance Qualification : I46.KK34.0.0.QA.QFS.WD001, PNAE-G-07-09-089	PNAE-G-07-010-89 ; PNAE-G-07-003-87	Format No: BHEL/ KKNPP 3&4/ TSS/ WP/ 002/ F-02 & F-03	2	-	H	-	H	
6	**PRE-FABRICATION AND ERECTION OF PIPES ACTIVITIES**													
6.1	Marking, cutting, grinding and edge preparation of pipes for pre-fabrication & check pipes internal coatingf for any damage during transit (if applicable)	Check for length and edge groove configuration.	Minor	Visual & measurement	100%	Applicable Working documents and manufacture documents, and OST standard for edge preparation.	As per WD	BHEL/KKNPP-3&4/TSS/Piping/18/A	2	H	H	W	S	
6.2	Pre-Fabrication Fit- up	Checking of dimensions, slope, orientation, direction, etc. as per isometric/ GAD/ layout/ PID Clean room condition/ cleaning of fabrication area	Minor	Visual & measurement	100%	Applicable Working documents and manufacture documents, cl. No. 10.4 Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	As per WD	BHEL/KKNPP-3&4/TSS/WP/001/F-001	2	H	H	W	S	
6.3	Taking over of wrok front	check the elevation & flatness of pedestals, bolt holes sizes and depth	Minor	Visual & measurement	100%	Applicable Working documents and manufacture documents,Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	As per WD	BHEL/KKNPP-3&4/TSS/FQP/008/F001	2	W	H	W	S	

	Quality Plan for Fabrication and Erection of Stainless steel piping			Doc. No.	BHEL/KKNPP-3&4/TSS/FQP/019
				Rev. no.	0 Page No of
	Kudankulam Nuclear power Project, Units 3 & 4			Type of Document	Permanent
	Nuclear Power Corporation of India Ltd.			QA Category	QA-III
	BHARAT HEAVY ELECTRICALS LTD. TSS PACKAGE	I46-KK34-0-0-QA-QP-WD039		Date	26.08.2022

Sl. No	Compoments & Operation	Characteristic	Category of attribute	Type of check	Quantum of Check	Reference doccument	Acceptance Norms	Format of Record	Performer (P)	Responsible Agencies				Remarks
										BHEL		NPCIL		
										EXE	QA	EXE	QA	
6.4	Installation of pipe spools,fittings and valves	Terminal points,availability of erection scheme,Ensure elevation,coordinate,slope,orientation and flow direction as per WD Valve tag no., class	Minor	Visual & measurement	100%	Applicable Working documents and manufacture documents, Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	As per WD	BHEL/KKNPP-3&4/TSS/Piping/018 /A & BHEL/KKNPP-3&4/TSS/FQP/008/F-009	2	W	H	W	S	
6.5	Valve testing	Leak test at Hydro test pressure	critical	hydro test	100%	Valve testing procedure: I46-KK34-0-0-QA-QFS-WD031	no leak shall be observed	hydro test report	2	W	H	W	H	
6.6	Weld Joint fit up & Welding	Ensuring root gap & joint configuration as in WD.Ensuring required process,consumable,Welders and Welding Parameters	Minor	Visual & measurement	100%	Applicable Working documents and manufacture documents,Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	Applicable WD as per Annexure E & G , applicable OST	BHEL/KKNPP-3&4/TSS/WP/001/F-001	2	W	H	-	S	
7	**Welding**													
7.1	Weld Joint Fit-up	Checking of Groove Angle, Root Gap, Root face dimension	Major	Visual & measurement	100%	Applicable WD,WPS,Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	Applicable WD,WPS and as per cl. 11 of Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	BHEL/KKNPP-3&4/TSS/WP/001/ F-001	2	W	H	-	W	
7.2	Welding control	Ensure required process,consumables,Qualified welders,purity of argon gas,DAM placement	Critical	Visual & measurement	100%	Applicable WD,WPS,Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	PNAE-G-07-009-89,PNAE-G-07-010-89,Applicable OST Standard	Site register, DAM register	2	W	H	-	H	
7.3	Final Weld Inspection	Checking of weld size, cleanliness & any other visual weld defects.	Major	verification of record	100%	Work procedure for Visual and measuring:I46.KK3&4.0.0.QA.QFS.WD004	PNEAG-07-10-89, applicable OST standard	BHEL/KKNPP-3&4/TSS/WP/001/F-001	2	W	H	S	W	
8	**PRE-FABRICATION AND ERECTION OF SUPPORT ACTIVITIES**													
8.1	Support Pre-fabrication (if Applicable)	Marking,cutting and checking the type of material,Dimension of supports	Major	Visual & measurement	100%	Applicable Working documents and manufacture documents,Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	As per WD	BHEL/KKNPP-3&4/TSS/QAP/008/F -007	2	W	W	W	W	
8.2	Support pre-fabrication fitup and welding	Ensuring root gap & joint configuration as in WD.Ensuring required process,consumable,Welders and Welding Parameters	Major	Visual & measurement	100%	Applicable Working documents and manufacture documents,Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	As per WD	BHEL/KKNPP-3&4/TSS/QAP/008/F -007	2	W	H	W	W	
8.3	Support Erection	Identification of EPs for support,erection of Hilti anchors and coordinate as per corresponding WD,Ensuring proper type of support with erction clearance,Torque tightening of bolts,Identification of specified Hilti anchorbolts,torque tightening of Hilti Bolts & the sliding surface shall be cleaned and rubbed with graphite	Major	Visual & measurement	100%	Applicable Working documents and manufacture documents,Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	As per WD	BHEL/KKNPP-3&4/TSS/Piping/18/B	2	W	W	W	W	

	Quality Plan for Fabrication and Erection of Stainless steel piping			Doc. No.	BHEL/KKNPP-3&4/TSS/FQP/019
	Kudankulam Nuclear power Project, Units 3 & 4			Rev. no.	0 Page No of
	Nuclear Power Corporation of India Ltd.			Type of Document	Permanent
	BHARAT HEAVY ELECTRICALS LTD. TSS PACKAGE	I46-KK34-0-0-QA-QP-WD039		QA Category	QA-III
				Date	26.08.2022

Sl. No	Compoments & Operation	Characteristic	Category of attribute	Type of check	Quantum of Check	Reference doccument	Acceptance Norms	Format of Record	Performer (P)	Responsible Agencies				Remarks
										BHEL		NPCIL		
										EXE	QA	EXE	QA	
11.4	Ultrasonic Testing (If applicable)	Checking of Weld discontinuities	Major	Visual & Measurement	100%	I46.KK34-0-0-QA-QFS-WD016	PNAE G-07-10-89	BHEL/KKNPP-3&4/TSS/WP/029,F-001	2	-	H	-	W	
12	**REPAIR OF WELDS**													
12.1	Weld Repair	Repair of weld joints defects after NDT	Major	Visual & Measurement	100%	As per Clause No.14 of Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	As per Clause No.14 of Work Procedure No. I46-KK34-0-0-CC-WPR-WD007 & PNAE G 7-10-89	As applicable as per sl no. 7 & 10	2	-	H	-	W	
13	**RE PRESERVATION**													
13.1	Re Preservation	Visual cleaning of weld surface and Touch up paint for all Weld area	Minor	Visual and Dimensional verification	100%	work procedure Depreservation and Represervation : I46.KK34.0.0QA.QFS.WD006	Approved WDS and Passpoort copies , work procedure Depreservation and Represervation : I46.KK34.0.0QA.QFS.WD006	BHEL KKNPP/3&4/TSS/WP/008 /F002	2	W	H	W	S	

For checks where log sheets are not called for, suitable records should be maintained in the form of log book / protocols.
Abbreviations used in the column "Responsible Agency" are: -
P: Performer of the Activity.
H : Hold(Advanced intimation shall be given to "HOLD" agency when commencing to that stage & can proceed further only after obtaining clearance).
W : Witness (Prior intimation shall be given to witness agency, wait for representative to witness the activity till prefix time & proceed to next stage depending on confidence level, NPCIL may decide to reduce the percentage or waive off witness).
S:Serveillance(Act of monitoring or observing to verify whether an item or activity is conforming to specific requirements.)
2 : BHEL sub agency

	Prepared By	Reviewed By	Approved by				Issued by
Name	ARUN R	SHASHIKANT	S N NAIK				M Chandramouli
Designation	Engineer QA	Head-QA	Site In-charge				Document Controller
Signature							
Date	26.08.2022	26.08.2022	26.08.2022				26.08.2022

Sl. No	Compoments & Operation	Characteristic	Category of attribute	Type of check	Quantum of Check	Reference doccument	Acceptance Norms	Format of Record	Performer (P)	Responsible Agencies				Remarks
										BHEL		NPCIL		
										EXE	QA	EXE	QA	
8.4	Support erection fit-up and welding	Ensuring root gap & joint configuration as in WD.Ensuring required process,consumable,Welders and Welding Parameters, Ensuring inside coating after support weld (if applicable)	Major	Visual & measurement	100%	Applicable Working documents and manufacture documents,Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	As per WD	BHEL/KKNPP-3&4/TSS/QAP/008/F -005	2	W	H	W	W	
8.5	Spring hanger (If applicable)	Welding of Lug with Embedded plate/structural member Welding of Stopper on pipe for Vertical spring hanger Springs free length need to be checked before erection, Ensure compressed length as per drawing and check the relaesed length after unlocking.	Major	Visual and Dimensional verification	100%	Applicable Working documents and manufacture documents,Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	As per WD	BHEL/KKNPP-3&4/TSS/QAP/008/F -006	2	W	W	W	W	
8.6	NDT of supports	Checking of weld discontinuities	Major	as per WD	as per WD	Applicable WD, OST & PNAE G-07-10-89	PNAE G-07-10-89	Format No: BHEL/KKNPP-3&4/ TSS/ WP/ 004/ F-01 & BHEL/KKNPP-3&4/TSS/WP/001/F-001	2	-	W	-	W	
8.7	Torque tightening of supports bolts	calibrated Torque wrench	Major	Visual	100%	Applicable Working documents and manufacture documents, cl. No. 12.5 of Work Procedure No:I46-KK34-0-0-CC-WPR-WD007	These values will be finalised and issued before torque tightening	BHEL/KKNPP-3&4/TSS/FQP/008/F -003	2	W	W	W	W	
9	**Painting of supports**													
9.1	Painting of supports shall be done as per clause no. 5 of QP no. I46-KK34-0-0-QA-QP-WD033													
10	**O-let, Thermowell lugs**													
10.1	Location, orientation,size of instrumentaion lug, o-let	Verification of location of the lug, o-let	Major	Visual & measurement	100%	I46.KK3&4.0.0.CC.WPR.WD009; cl. 12.4 of work procedure no: I46-KK34-0-0-CC-WPR-WD007	As per WD	Site register	2	W	W	W	-	
10.2	Welding of instrumentation lugs, O-lets	Checking of weld discontinuities	Major	Visual inspection , Dye penetrant test	100%	I46.KK3&4.0.0.CC.WPR.WD009	Applicable WD, OST & PNAEG-07-10-89	Format No: BHEL/KKNPP-3&4/ TSS/ WP/ 004/ F-01 & BHEL/KKNPP-3&4/TSS/WP/001/F-001	2	-	W	-	W	
11	**NDT**													
11.1	Weld visual	weld surface discontinuities	Major	Visual & Measurement	100%	Work procedure for Visual and measuring:I46.KK3&4.0.0.QA.QFS.WD004	Applicable OST, PNAE G-07-10-89	BHEL/KKNPP-3&4/TSS/WP/001 /F001	2	-	H	-	W	
11.2	Liquid Penetration Test	weld surface discontinuities Ferritic Phase	Major	Visual & Measurement	as per WD	Applicable WD, Work procedure for Dye penetrant testing:I46.KK3&4.0.0.QA.QFS.WD003	PNAE G-07-10-89	Format No: BHEL/KKNPP-3&4/ TSS/ WP/ 004/ F-01	2	-	H	-	W	
11.3	Radiographic Testing	Checking of Weld discontinuities	Major	Film interpretation	as per WD	Applicable WD, Work procedure for Radiography testing:I46.KK3&4.0.0.QA.QFS.WD007	PNAE G-07-10-89	Format No: BHEL/ KKNPP-3&4/ TSS/ WP/ 005/ F-02	2	-	H	-	W	

	INCOMING MATERIAL INSPECTION REPORT (FOR M/S NPCIL SUPPLY ITEMS)							
	WORK ORDER No.					FORMAT No.	BHEL/KKNPP-3&4/TSS/WP/006/F-001	
	WORK PROCEDURE No.					REV No.	0	
	QAP No.					REPORT No.		
	SSIR No.					DATE		
Sl.No.	WD No.	Material description / Specification	CIV No & Date	UOM	Qty. as per SSIR	Identification Heat/Batch No.	M/s BHEL Identification Details	Remarks
Storage location :								
Attachments (if any):-								

Name				
Designation				
Signature				
Date				
	BHEL EXE	BHEL QA	NPCIL EXE	Verified by NPCIL QA

DECLARATIONS

UNDERTAKING

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,
GM & PD
BHEL Site Office
Kudankulam Nuclear Power Project
KKNPP, Unit-3 & 4
Kudankulam Post, Radhapuram Taluk
Tirunelveli District-627 106 Tamil Nadu

Dear Sir/Madam,
(प्रिय महोदय/महोदया)

SUBJECT- DECLARATION REGARDING INSOLVENCY/ LIQUIDATION/ BANKRUPTCY PROCEEDINGS-reg
(विषय - दिवालियापन/परिसमापन/दिवालियापन कार्यवाही के संबंध में घोषणा)

Ref: NIT/Tender Specification No: **BHEL :PSSR :KKNPP : TSS: SCT-063**

I/We, _____
_____ declare that, I/We am/are not under insolvency resolution process or Liquidation or Bankruptcy Code Proceedings (IBC / Insolvency And Bankruptcy Code- 2016) as on date, by NCLT (National Company Law Tribunal) or any adjudicating authority/ authorities, which will render us ineligible for participation in this tender.

Sign. of the AUTHORISED SIGNATORY
(With Name, Designation and Company seal)

Place:

Date:

CAPACITY EVALUATION OF BIDDERS FOR CURRENT TENDER

==========

BHEL KKNPP Tender Reference: -BHEL/PSSR/KKNPP/TSS/SCT-063

Work Description- Small Bore Piping works at KKNPP TSS Package Unit-3.

Sl. No	DESCRIPTION OF WORK (Similar to Tendered Scope)	WORK ORDER REF & DATE	CONTRACT VALUE **(Rs. LACS)**	CUSTOMER NAME & ADDRESS	CURRENT STATUS OF THE JOB ALONG WITH LATEST MILE STONE COMPLETED	% AGE OF WORK COMPLETED	VALUE OF BALANCE WORK **(Rs. Lacs)**
1							
2							
3							
4							
5							
6							
7							

NOTES:

1. BIDDERS ARE REQUIRED TO FURNISH ALL THE JOBS OF SIMILAR NATURE WHICH THEY ARE EXECUTING (IN PROGRESS) AT THE TIME OF SUBMISSION OF TENDER, AS PER ABOVE FORMAT.

2. BIDDERS HEREBY UNDERTAKE THAT THEY HAVE FURNISHED THE DETAILS SOUGHT AS PER POINT NO. 1 IN TOTALITY AND THAT THE DETAILS FURNISHED IS COMPLETE IN ALL RESPECT.

3. BHEL WILL TAKE APPROPRIATE ACTION AS DEEMED FIT, IN CASE, IT IS FOUND AT A LATER DATE THAT THE CONTRACTOR HAD SUPPRESSED THE FACTS AND HAVE NOT FURNISHED THE CORRECT & COMPLETE INFORMATIONS.

DATE:

PLACE:

Signature
Name, Designation & Seal of Bidder

CONFLICT OF INTEREST DECLARATION

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,
GM & PD
BHEL Site Office
Kudankulam Nuclear Power Project
KKNPP, Unit-3 & 4
Kudankulam Post, Radhapuram Taluk
Tirunelveli District-627 106 Tamil Nadu

Dear Sir/Madam,
(प्रिय महोदय/महोदया)

SUBJECT- CONFLICT OF INTEREST DECLARATION-reg
(विषय - हितों के टकराव की घोषणा)

Ref: NIT/Tender Specification No: **BHEL :PSSR :KKNPP : TSS: SCT-063**

I/We……..(Name of Bidder/Company) understand / declare my role as a contractor/bidder of above-mentioned reference/Tender and I /We make this declaration in good faith.

NO CONFLICT OF INTEREST

I/We have no actual, potential or perceived conflict of interest in relation to this Tender process and my role as a Contractor/Bidder and I/We undertake to carry out my duties with the highest degree of objectivity and integrity.

Authorized Signature with Seal

Date-

Place-

NO DEVIATION CERTIFICATE

(To be submitted in the Bidder's Letter Head)

To

GM & PD
BHEL Site Office
Kudankulam Nuclear Power Project
KKNPP, Unit-3 & 4
Kudankulam Post, Radhapuram Taluk
Tirunelveli District-627 106 Tamil Nadu

Date-

Sub: No Deviation Certificate.

Job: Small Bore Piping Works TSS Package at BHEL KKNPP Site-reg

Ref: 1. BHEL KKNPP Site Tender Notice No.: - BHEL/PSSR/KKNPP/TSS/SCT-063

Dear Sir,

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/emailed 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 tender notice. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to Technical Specification (TCC/GCC/HSE Norms), Integrity Pact (if applicable).

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/uploaded offer/documents in accordance with tender instructions with acceptance of the terms & conditions of the tender by us and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, Date & Seal of Authorized Representative of the Bidder)

Reverse Auction Process Compliance Form
(The bidders are required to print this on their company's letterhead and sign, stamp before RA)

To

M/s. {*Service provider*

Postal address}

Sub: Agreement to the Process related Terms and Conditions

Dear Sir,

This has reference to the Terms & Conditions for the Reverse Auction mentioned in the RFQ document for {Items} against BHEL enquiry/ RFQ no.{……..…} dt. {…….}

This letter is to confirm that:

1) The undersigned is authorized official/ representative of the company to participate in RA and to sign the related documents.
2) We have studied the Reverse Auction guidelines (Guidelines for Reverse Auction – 2021) as available in Volume-ID, "Forms and Procedures" of this tender), and the Business rules governing the Reverse Auction as mentioned in your letter and confirm our agreement to them.
3) We also confirm that we have taken the training on the auction tool and have understood the functionality of the same thoroughly.
4) We also confirm that, in case we become L1 bidder, we will FAX/ email the price confirmation & break up of our quoted price as per *Annexure - 6* within **two** working days (of BHEL) after completion of RA event, besides sending the same by registered post/ courier both to M/s. BHEL and M/s. {*Service provider.}*

We, hereby confirm that we will honor the Bids placed by us during the auction process.

With regards

Signature with company seal

Name:

Company / Organization:

Designation within Company / Organization:

Address of Company / Organization:

Sign this document and FAX/ email it to M/s *{Service provider}* at *{……..}* prior to start of the Event.

Authorization of representative who will participate in the online Reverse Auction Process:

1	NAME OF THE BIDDER	
2	NAME & DESIGNATION OF OFFICIAL	
3	POSTAL ADDRESS (COMPLETE)	
4	TELEPHONE NOS. (LAND LINE & MOBILE BOTH)	
5	E-MAIL ADDRESS	
6	NAME OF PLACE/ STATE/ COUNTRY, WHEREFROM S/HE WILL PARTICIPATE IN THE REVERSE AUCTION	

RA price confirmation and breakup
(To be submitted by L1 bidder after completion of RA)

To

M/s. *Service provider*

Postal address

CC: M/s BHEL

{Unit-

Address-}

Sub: **Final price quoted during Reverse Auction and price breakup**

Dear Sir,

We confirm that we have quoted.

Rs.{____in value & in words_____} for item(s) covered under tender enquiry No. {...} dt.{…}

Total price of the items covered under above cited Tender Specification as our final landed prices as quoted during the Reverse Auction conducted today _____{date} which will be valid as per tender Specification.

Total

- Rs. **in value & in words**

Yours sincerely,

For _____

Name:

Company:

Date:

Seal:

DECLARATION

Date: _____

To: _____

Address: BHEL, _____

_____

_____

_____

email: _____

Sub: **Details of related firms and their area of activities**

Dear Sir/ Madam,

Please find below details of firms owned by our family members ("Family" shall mean: (a). parent, (b). husband/wife, (c). sons/daughters (including adopted children) and their spouse, (d). full blood siblings (brothers & sisters from common parents) and their spouse**)**

that are doing business/ registered for same item with BHEL, _____ (NA, *if not applicable*)

1	Material Category/ Work Description	
	Name of Firm	
	Address of Firm	
	Nature of Business	
	Name of Family Member	
	Relationship	
2	Material Category/ Work Description	
	Name of Firm	
	Address of Firm	
	Nature of Business	
	Name of Family Member	
	Relationship	
…		

Note: I certify that the above information is true and I agree for penal action from BHEL in case any of the above information furnished is found to be false.

Regards,

(_____)

From: M/s _____

Supplier Code: _____

Address: _____

DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH

REVISED PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA), ORDER 2017 DATED 04TH JUNE, 2020) AND SUBSEQUENT ORDER(S)

(To be typed and submitted in the Letter Head of the Entity/Firm providing certificate as applicable)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration reg. minimum local content in line with Public Procurement (Preference to Make in India), Order 2017-Revision, dated 04th June, 2020 and subsequent Order(s)

Ref: 1) NIT/Tender Specification No: ……..

2) All other pertinent issues till date

We hereby certify that the items/works/services offered by_____ (*specify name of the organization here*) has a local content of _____ % and this meets the local content requirement for **'Class-I local supplier' / 'Class II local supplier' **** as defined in Public Procurement (Preference to Make in India), Order 2017-Revision dated 04.06.2020 issued by DPIIT and subsequent order(s).

The details of the location(s) at which the local value addition is made are as follows:

1. _____ 2. _____

3. _____ 4. _____

…

Thanking you,

Yours faithfully,

(Signature, Date & Seal of

Authorized Signatory of the Bidder)

****** - *Strike out whichever is not applicable.*

Note:

1. Bidders to note that above format Duly filled & signed by authorized signatory, shall be submitted along with the techno-commercial offer.
2. In case the bidder's quoted value is in excess of Rs. 10 crores, the authorized signatory for this declaration shall necessarily be the statutory auditor or cost auditor of the company (in the case of companies) or a practising cost accountant or practicing chartered accountant (in respect of suppliers other than companies).
3. In the event of false declaration, actions as per the above order and as per BHEL Guidelines shall be initiated against the bidder.

DECLARATION REGARDING COMPLIANCE TO

RESTRICTIONS UNDER RULE 144 (xi) OF GFR 2017

(To be typed and submitted in the Letter Head of the Entity/Firm providing certificate as applicable)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub: Declaration regarding compliance to Restrictions under Rule 144 (xi) of GFR 2017

Ref: 1) NIT/Tender Specification No: ……..

2) All other pertinent issues till date

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries. I certify that _____ (specify the name of the organization here), is not from such a country / has been registered with the Competent Authority (attach valid registration by the Competent Authority, i.e., the Registration Committee constituted by the Dept. for Promotion of Industry and Internal Trade (DPIIT)); and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. (attach relevant valid registration, if applicable).

I hereby certify that we fulfil all requirements in this regard and is eligible to be considered.

Thanking you,

Yours faithfully,

(Signature, Date & Seal of

Authorized Signatory of the Bidder)

Note: Bidders to note that in case above certification given by a bidder, whose bid is accepted, is found to be false, then this would be a ground for immediate termination and for taking further action in accordance with law and as per BHEL guidelines.

DECLARATION

(To be typed and submitted in the Letter Head of the Company/ Firm of Bidder)

To

Bharat Heavy Electricals Limited

Power Sector Southern Region

BHEL Integrated Office Building

TNEB Road, Pallikaranai,

Chennai 600 100, Tamil Nadu

Dear Sir / Ma'am,

Sub: Declaration for status of MSMEs

Ref:

1) Tender No: ……..

I/ We, _____ hereby submit documentary evidence/ Govt. Certificate etc. in support of the MSMEs Status with following details:

MSME Certificate No	Type under MSME	Women Owned	SC/ST Owned	OBC Owned	General Owned	Remarks
	Micro					
	Small					
	Medium					

Note: If the bidder does not furnish the above in the tender, offer shall be processed construing that the bidder is not falling under MSME category.

Yours faithfully

Sign. of the AUTHORISED SIGNATORY

(With Name, Designation and Company seal)

Date:

Place:

VOLUME-IA PART-I CHAPTER-X
GENERAL

(All the works mentioned hereunder shall be carried out within the accepted rate unless otherwise specified.)

1.10 **The scope of the work will comprise of but not limited to the following:**

1.10.1 Contractors are requested to furnish the following documents at PSSR-HQ, Chennai immediately after release of Letter of Intent (LOI).

i) Security Deposit and additional Security Deposit.
ii) Unqualified Acceptance for Detailed LOI / Work Order.
iii) Rs.100/- Stamp Paper for preparation of Contract Agreement.

1.10.2 Contractors are requested to furnish the proof of documents for the following at PSSR- Site

i) Provident Fund Registration Number.
ii) Labour License Number.
iii) Workmen Insurance Policy Number.

1.10.1 **In addition to the clause 2.8 of General Conditions of Contract (Volume-1C of Book-II) the contractor shall comply with the following.**

1.10.1.1 **BOCW Act & BOCW Welfare Cess Act**

1.10.1.1.1 The Contractor Should Register their Establishment under BOCW Act 1996 read with rules 1998 by submitting Form I (Application for Registration of Establishment) and Form IV (Notice of Commencement / Completion of Building Other Construction Work) to the respective Labour Authorities i.e.,

a) Assistant Labour Commissioner (Central) in respect of the project premises which is under the purview of Central Govt.–NTPC, NTPL etc.
b) Appropriate State authorities in respect of the project premises which is under the purview of State Govt.

1.10.1.1.2 The Contractor should comply with the provisions of BOCW Welfare Cess Act 1996 in respect of the work awarded to them by BHEL.

1.10.1.1.3 The contractor should ensure compliance regarding Registration of Building Workers as Beneficiaries, Hours of work, welfare measures and other conditions of service with particular reference to Safety and Health measures like Safety Officers, safety committee, issue of Personal protective equipments, canteen, rest room, drinking water, Toilets, ambulance, first aid centre etc.

1.10.1.1.4 The contractor irrespective of their nature of work and manpower (Civil, Mechanical, Electrical works etc) should register their establishment under

BOCW Act 1996 and comply with BOCW Welfare Cess Act 1996.

1.10.1.1.5 Contractor shall make remittance of the BOCW cess as per the Act **in consultation with BHEL** as per the rates in force (presently 1%). BHEL shall reimburse the same upon production of documentary evidence. However, BHEL shall not reimburse the fee paid towards the registration of establishment, fees paid towards registration of Beneficiaries and contribution of Beneficiaries remitted.

1.10.1.1.6 Non-compliance to Provisions of the BOCW Act & BOCW Welfare Cess Act is not acceptable. In case of any non-compliance, BHEL reserves the right to withhold any sum as it deems fit. Only upon total compliance to the BOCW Act and also discharge of total payment of Cess under the BOCW Cess Act by the Contractor, BHEL shall consider refund of the Amounts

1.10.1.2 **PROVIDENT FUND**

1.10.1.2.1 The contractor is required to extent the benefit of Provident Fund to the labour employed by you in connection with this contract as per the Employees Provident Fund and Miscellaneous Provisions Act 1952. For due implementation of the same, you are hereby required to get yourself registered with the Provident Fund authorities for the purpose of reconciliation of PF dues and furnish to us the code number allotted to you by the Provident Fund authorities within one month from the date of issue of this letter of intent. In case you are exempted from such remittance an attested copy of authority for such exemption is to be furnished. Please note that in the event of your failure to comply with the provisions of said Act, if recoveries therefore are enforced from payments due to us by the customer or paid to statutory authorities by us, such amount will be recovered from payments due to you.

1.10.1.2.2 The final bill amount would be released only on production of clearance certificate from PF / ESI and labour authorities as applicable.

1.10.1.3 **OTHER STATUTORY REQUIREMENTS**

1.10.1.3.1 The Contractor shall submit a copy of Labour License obtained from the Licensing Officer (Form VI) u/r25 read with u/s 12 of Contract Labour (R&A) Act 1970 & rules and Valid WC Insurance copy or ESI Code (if applicable) and PF code no. along with the first running bill.

1.10.1.3.2 The contactor shall submit monthly running bills along with the copies of monthly wages (of the preceding month) u/r78(1)(a)(1) of Contract Labour Rules, copies of monthly return of PF contribution with remittance Challans under Employees Provident Fund Act 1952 and copy of renewed WC Insurance policy or copies of monthly return of ESI contribution with Challans under ESI Act 1948 (if applicable) in respect of the workmen engaged by them.

1.10.1.3.3 The Contractor should ensure compliance of Sec 21 of Contract Labour (R&A) Act 1970 regarding responsibility for payment of Wages. In case of "Non-compliance of Sec 21 or non-payment of wages" to the workmen before the expiry of wage period by the contactor, BHEL will reserve its right to pay the workmen under the orders of Appropriate authority at the risk and cost of the Contractor.

1.10.1.3.4 The Contractor shall submit copies of Final Settlement statement of disbursal of retrenchment benefits on retrenchment of each workmen under I D Act 1948, copies of Form 6-A (Annual Return of PF Contribution) along with copies of PF Contribution Card of each member under PF Act and copies of monthly return on ESI Contribution – Form 6 under ESI Act 1948 (if applicable) to BHEL along with the Final Bill.

1.10.1.3.5 In case of any dispute pending before the appropriate authority under ID act 1948, WC Act 1923 or ESI Act 1948 and PF Act 1952, BHEL reserve the right to hold such amounts from the final bills of the Contractor which will be released on submission of proof of settlement of issues from the appropriate authority under the act.

1.10.1.3.6 In case of any dispute prolonged / pending before the authority for the reasons not attributable to the contractor, BHEL reserves the right to release the final bill of the contractor on submission of Indemnity bond by the contractor indemnifying BHEL against any claims that may arise at a later date without prejudice to the rights of BHEL.

1.10.1.4 DEPLOYMENT OF SKILLED / SEMI-SKILLED TRADESMEN

The following clause is applicable in case the contract value / contract price is Rs. Five crores and above.

The contractor shall, at all stages of work deploy skilled / semi-skilled tradesmen who are qualified and possess certificate in particular trade from CPWD Training Institute / Industrial Training. Institute / National Institute of Construction Management and Research (NICMAR), National Academy of Construction, CIDC or any similar reputed and recognized Institute managed / certified by State / Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled / semi-skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer-in-Charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Engineer-in-Charge. Failure on the part of contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the

rate of Rs. 100 per such tradesman per day. Decision of Engineer-in-Charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding.

1.10.2 **GENERAL**

1.10.2.1 **Site Visit by the Bidder**

The bidder shall, prior to submitting his tender for the work, visit, examine and acquire full knowledge & information and necessary conditions prevailing at the site and its surroundings of the plant premises together with all statutory, obligatory, mandatory requirements of various authorities about the site of works at his own expense, and obtain and ascertain for himself on his own responsibility that may be for preparing his tender and entering into a contract, and take the same into account in the quoted contract price for the work.

1.10.2.2 The bidder shall satisfy themselves about the following factors:

i). Site conditions including access to the site, existing and required roads and other means of transport/communication for use by him in connection with the work including diverting and re-routing of services.

ii). Requirement and availability of land and other facilities of his enabling works, establishment of his nursery, office, stores etc.

iii). Ground conditions including those bearing upon transportation, disposal, handling and storage of materials required for the work or obtained there-from.

iv). Source and extent of availability of suitable materials, including water etc., and labour (skilled and unskilled) required for work, and laws and regulations governing their use and employment.

v). Geological, meteorological, topographical and other general features of the site and its surroundings as are pertaining to and needed for the performance of the work.

vi). The limit and extent of surface and subsurface water to be encountered during the performance of the work, and the requirement of drainage and pumping.

vii). The type of equipment and facilities needed, for and in the performance of the work;

viii). The extent of lead and lift required for the work in complete form over the entire duration of the contract, and

ix). All other information pertaining to and needed for the work including information as to the risks, contingencies and other circumstances which may influence or affect the work or the cost thereof under this contract.

1.10.2.3 The bidder should note that information, if any, in regard to the local conditions, as contained in these tender documents, has been given to tenderer merely for guidance and is not warranted to be complete.

1.10.2.4 A bidder shall be deemed to have full knowledge of the site, whether he inspects it or not, and no extra charges consequent on any misunderstanding or otherwise shall be allowed.

1.10.2.5 The bidder and any of his personnel or agents will be granted permission by the Site-In-Charge or his authorized nominee, on receipt of formal application in respect thereof a week in advance of the proposed date of inspection of site, to enter upon his premises and lands for purpose of such inspection, but only on the express condition that the tenderer (and his personnel and agents) will relieve and indemnify the Employer (and his personnel and agents) from and against all liability in respect thereof and will be responsible for personal injury (whether fatal or otherwise), loss of or damage to property and any other loss, damage, costs and expenses however caused which, but for the exercise of such permission, would not have arisen.

1.10.2.6 The work covered under this specification is of highly sophisticated nature, requiring the best quality workmanship, engineering and construction management. The contractor must have adequate quantity of tools, construction aids, equipments etc., in his possession. He must also have on his rolls adequate trained, qualified and experienced supervisory staff and skilled personnel.

1.10.2.7 It is not the intent to specify herein all details of all material. Any item related this work not covered by this but necessary to complete the system will be deemed to have been included in the scope of the work.

1.10.2.8 All the necessary certificates and licenses required to carry out this scope of work are to be arranged by the contractor then and there at no extra cost.

1.10.2.9 Site testing wherever required shall be carried out for all items / materials installed by the contractor to ensure proper installation and functioning in accordance with drawings, specifications and manufacturer's recommendations.

1.10.2.10 The contractor shall carry out additional tests, if any, which the Engineer feels necessary because of site conditions and also to meet system specification.

1.10.2.11 The work shall be executed under the usual conditions without affecting power plant construction / operation and in conjunction with other operations and contracting agencies at site. The contractor and his personnel shall co-operate with the personnel of other agencies, co-ordinate his work with others

and proceed in a manner that shall not delay or hinder the progress of work as a whole.

1.10.2.12 All the work shall be carried out as per instructions of BHEL engineer. BHEL engineer's decision regarding the correctness of the work and method of working shall be final and binding on the contractor.

1.10.2.13 Wherever Construction sequences are furnished by BHEL, the contractor shall follow the same sequence. Contractor shall execute the supply and works as per sequence prescribed by BHEL at site engineer. No claims for extra payment from the contractor will be entertained on the grounds of deviation from the methods of execution of similar job in any other site or for any reasons whatsoever.

1.10.2.14 If required by BHEL, the contractor shall change the sequence of his operation so that work on priority sectors can be completed within the projects schedule. The contractor shall afford maximum assistance to BHEL in this connection without causing delay to agreed completion date.

1.10.2.15 Contractor shall, transport all materials to site and unload at site / working area for inspection and checking. All material handling equipment required shall be arranged by the contractor.

1.10.2.16 Contractor shall retain all T&P / Testing instrument / Material handling equipment’s etc. at site as per advice of BHEL engineer and same shall be taken out from site only after getting the clearances from engineer in charge.

1.10.2.17 The contractor at his cost shall arrange necessary security measures for adequate protection of his machinery, equipment, tools, materials etc. BHEL shall not be responsible for any loss or damage to the contractor’s construction equipment and materials. The contractor may consult the Engineer-in-Charge on the arrangements made for general site security for protection of his machinery equipment tools etc.

1.10.2.18 The Contractor may have to execute work in such a place and condition where other agencies also will be under such circumstances. However, completion time for construction, agreed will be subject to the condition that contractor’s work is not hampered by the agencies.

1.10.2.19 Contractor has to work in close co-ordination with other agency at site. BHEL engineer will co-ordinate area clearance. In a project of such magnitude, it is possible that the area clearance may be less / more at a particular given time. Activities and Construction program have to be planned in such a way that the milestones are achieved as per schedule/ plans. Contractor shall arrange & augment the resources accordingly.

1.10.2.20 The contractor must obtain the signature and permission of the security personnel of the customer / BHEL for bringing any of their materials inside the site premises. Without the Entry Gate Pass these materials will not be allowed to be taken outside. Surplus materials including steel item brought at site by the contractors with proper documentation and Gate pass, shall be allowed to taken out of the project premises after completion of relevant works, on certification by BHEL in charge.

1.10.2.21 Contractor shall remove all scrap materials periodically generated from his working area and collect the same at one place earmarked for the same. Load of scraps is to be shifted to a place earmarked by BHEL. Failure to collect the scrap is likely to lead to accidents and as such BHEL reserves the right to collect and remove the scrap at contractor's risk and cost if there is any failure on the part of contractor in this respect.

1.10.2.22 The contractor shall ensure that his premises are always kept clean and tidy to the extent possible. Any untidiness noted on the part of the contractor shall be brought to the attention of the contractor's site representative who shall take immediate action to clean the surroundings to the satisfaction of the Engineer-in-Charge.

1.10.2.23 The contractor is strictly prohibited from using BHEL's regular components like angles, channels, beams, plates, pipe / tubes, and handrails etc. for any temporary supporting or scaffolding works. Contractor shall arrange himself all such materials. In case of such misuse of BHEL materials, a sum as determined by BHEL engineer will be recovered from the contractor's bill. The decision of BHEL engineer is final and binding on the contractor.

1.10.2.24 No member of the already erected structure / buildings, other component and auxiliaries should be removed / modified without specific approval of BHEL engineer.

1.10.2.25 Contractors shall ensure that all their Staff / Employees are exposed to periodical training programme conducted by qualified agencies/ personnel on latest ISO 9001 Standards.

1.10.2.26 Sometimes, it may be required to re-schedule the activities to enable other agencies to commence/ continue the work so as to keep the overall project schedule.

1.10.2.27 The terminal points decided by BHEL are final and binding on the contractor for deciding the scope of work and effecting the payment for the work done up to the terminals.

1.10.2.28 Crane operators deployed by the contractor shall be tested by BHEL before he is allowed to operate the cranes.

1.10.2.29 On Completion of work, all the temporary buildings, structures, pipe lines, cable etc. shall be dismantled and leveled and debris shall be removed as per instruction of BHEL by the contractor at his cost. In the event of his failure to do so, the expenditure towards clearance of the same will be recovered from the contractor. The decision of BHEL Engineer in this regard is final.

1.10.2.30 It is the responsibility of the contractor to do the checking, testing etc. if necessary, repeatedly to satisfy BHEL Engineer with all the necessary tools and tackles, manpower etc. without any extra cost. The testing will be completed only when jointly certified so, by the BHEL Engineer.

1.10.2.31 If any item not covered but requires being executed, same shall be carried out by the contractor. Equivalent or proportional unit rate shall be considered wherever possible from the BOQ. The rates quoted by the contractor shall be uniform as far as possible for similar items appearing in rate schedule.

1.10.2.32 The contractor's work shall not hinder other work, either underground or over ground, such as electrical, phone lines, water or sewage lines, etc. In areas of overlap, the contractor shall work in coordination with other related contractors. Any damage by the landscape contractor's team to such utilities will be penalized and contractor shall be responsible for cost for such damages.

1.10.2.33 The contractor will be responsible for the safe custody and proper accounting of all materials in connection with the work. If the contractor has drawn materials in excess of design requirements, recoveries will be effected for such excess drawls at the rate prescribed by manufacturing units.

1.10.2.34 Contractor has to clear the front, expeditiously and promptly as instructed by BHEL Engineer for other agencies, like Boiler, piping, Turbine, Generator erection, Cabling, instrumentation, insulation etc., to commence their work from / on the equipments coming under this scope.

1.10.2.35 For the purpose of planning, contractor shall furnish the estimated requirement of power (month wise) for execution of work in terms of maximum KW demand.

1.10.2.36 RECORDS TO BE MAINTAINED AT SITE:

Record of Quantity of FREE/Chargeable items issued by BHEL must be maintained during contract execution. Also reconciliation statement to be prepared at regular intervals.

The under mentioned Records/ Log-books/ Registers applicable to be maintained.

(i) Hindrance Register

(ii) Site Order Book.

(iii) Test Check of measurements.
(iv) Cement Supply and Consumption Daily Register
(v) Records of Test reports of Field tests.
(vi) Records of manufacture's test certificates.
(vii) Records of disposal of scraps generated during and after the work completion.
(viii) List of T&Ps and MMEs

1.10.2.37 SITE INSPECTION

1.10.2.37.1 The Owner or his authorized agents may inspect various stages of work during the currency of the contract awarded to him. The contractor shall make necessary arrangements for such inspection and carry out the rectification pointed out by the Owner or his authorized agents without any extra cost to the Owner or his authorized agents. No cost whatsoever such duplication of inspection of work be entertained.

1.10.2.37.2 BHEL / Owner will have full power and authority to inspect the works at any time, either on the site or at the contractor's premises. The contractor shall arrange every facility and assistance to carry out such inspection. On no account will the contractor be allowed to proceed with work of any type unless such work has been inspected and entries are made in the site inspection register by Owner / BHEL.

1.10.2.37.3 The contractor shall maintain at site a joint protocol for recording actual measurement of work carried out at site, inspection and witnessing of various tests conducted by the contractor.

1.10.2.37.4 Field Quality Assurance (FQA) Formats: -

It is the responsibility of the contractor to collect and fill up the relevant FQA log sheets of BHEL and present the same to BHEL after carrying out the necessary checks as per the log sheets and obtaining the signature of BHEL and Owner as token of their acceptance. Payment to the contractor will be inked with the submission of these FQA log sheets.

1.10.2.37.5 Site testing wherever required shall be carried out for all items / materials installed by the contractor to ensure proper installation and functioning in accordance with drawings, specifications and manufacturer's recommendations.

Contractor shall, transport all materials to site and unload at site / working area for inspection and checking. All material handling equipment required shall be arranged by the contractor

VOLUME-IA PART – I CHAPTER-VIII
TAXES AND DUTIES

1.8.1 All taxes and duty other than GST & Cess and BOCW Cess

The contractor shall pay all (**except the specific exclusion viz GST & Cess and BOCW Cess, both of which are dealt separately**) taxes, fees, license charges, deposits, duties, tools, royalty/ seigniorage, commissions, Stamp Duties, or other charges / levies, which may be levied on the input goods (including construction material viz. sand, coarse aggregates, moorum, borrowed earth, etc.) & services consumed and output goods & services delivered in course of his operations in executing the contract **and the same shall not be reimbursed by BHEL**. In case BHEL is forced to pay any of such taxes, BHEL shall have the right to recover the same from his bills or otherwise as deemed fit.

1.8.2 Goods and service Tax (GST) -

For GST Registered bidder:

1.8.2.1 The successful bidder shall furnish proof of GST registration under GST Law, covering the supply and services under this contract. Registration should also bear endorsement for the premises from where the billing shall be done by the successful bidder on BHEL for this project/ work. The bidder to specify in their offer the category of registration under GST i.e. Regular dealer or composite dealer**.**

1.8.2.2 Bidder's price/rates shall be exclusive of GST & GST Compensation Cess (herein after termed as GST).

1.8.2.3 Vendor / Contractor require to ensure that all Input Tax benefits as per existing laws have been considered.

1.8.2.4 Price quoted by the composite dealer shall be considered as inclusive of GST. In the event of any change in the status of vendor / Contractor from composite to regular dealer after the submission of the bid but before completion of supply of services or goods, Contract value shall be amended to remove the embedded GST and any ITC benefit arising due to change of status, which shall be passed on to BHEL. GST paid on the amended contract value shall be reimbursed at actuals against the Tax invoice if BHEL is able to take input tax credit. However, no reimbursement of GST shall be made if BHEL is not able to take input tax credit. The decision of BHEL in this regard will be final and binding on the vendor/contractor.

1.8.2.5 It is the responsibility of the vendor / contractor to adhere to all the provisions of E- Invoicing under GST Act (if applicable). As per the E-Invoicing provisions vendor / Contractor has to generate IRN and QR Code from the E-Invoicing system and the same need to be printed in the invoice submitted to their customer. Invoices that do not comply to the above requirements, will not be accepted by BHEL. If the successful Bidder is not falling under the preview of E-Invoicing, then he has to submit a declaration in that respect along with relevant financial statements. However, applicability of E-invoicing, shall be verified from the E-Invoicing portal on submission of vendor / Contractor GSTN. BHEL shall reimburse GST only if all the provisions of E-invoicing are complied with.

1.8.2.6 It is the responsibility of the vendor/ Contractor to issue the Tax Invoice strictly as per the format prescribed under the GST Act within the prescribed time period in order to enable BHEL to avail input tax credit within the due date. Invoices shall be submitted on time to the concerned BHEL Engineer In Charge. Tax invoice should also contain below details

a. Contractor Name and Contact details.
b. GST No of Contractor
c. PAN No of Contractor
d. Document Type: Tax Invoice/ Debit Note/ Credit Note
e. Category: B2B / B2C (B2B is only applicable w.r.t BHEL)
f. Customer Name and Contact details / Bill To Details (as mentioned below)
g. Unique Tax Invoice Number
h. Invoice Date
i. IRN No, QR Code, Acknowledgment No and Acknowledgment Date generated from E-Invoice Portal as per E-invoicing provisions under GST Act (If applicable)
j. Place of Supply (as mentioned below)
k. Description of service provided
l. 8 Digit SAC code
m. GST Rate
n. Gross value of Invoice
o. Taxable Value
p. Tax / GST Amount
q. Total Invoice value including GST.

Above are inclusive and not exhaustive list of requirements.

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1.8.2.7 Bidder should mention the "Bill To "and "Place of supply" as below in the Tax Invoice

Bill To: Location of BHEL Site office

---,

State: ---
GSTN of BHEL: ---

Place of Supply: Location of BHEL Site office

---,

State: ---
GSTN of BHEL: ---

(Above details will be given later, contractors may contact BHEL, PSSR before billing)

1.8.2.8 In case of supply of goods contract, the successful bidder must promptly provide details of the dispatched items on the same day they are removed for shipment to the BHEL site. This intimation must include all relevant information and documents about the goods and a scanned copy of the tax invoice. If any financial liabilities arise for BHEL due to non-compliance with GST laws resulting from the bidder's delay in providing this information, the bidder will be held liable, unless the delay is directly attributable to BHEL.

1.8.2.9 BHEL will reimburse the GST amount claimed by the Vendor/Contractor against a tax invoice along with the amount due to the contractor in the RAB. However, If the Vendor/Contractor fails to fulfill the GST compliance requirements detailed below for any preceding invoice, BHEL reserves the right to recover an amount equivalent to the reimbursed GST from the subsequent bills as a measure against statutory non-compliance. Additionally, an amount equivalent to the GST claimed in subsequent bills will be withheld until statutory compliance for the prior invoice is ensured.

In the case of one-time vendors/contractors or the Vendor/Contractor's final bill, BHEL will withhold an amount equivalent to the GST claimed from the same bill towards pending statutory compliance. This withheld amount will only be released once the following GST compliance requirements are fully satisfied.

GST Compliance Requirements:

a. Vendor / Contractor must provide the original copy of Tax invoice /debit note as per the prescribed format under the GST act within the prescribed time period in order to enable BHEL to avail input tax credit within the due date.

b. The details of the invoice or debit note referred to in clause (a) must be furnished/filed by the Vendor/ Contractor in the statement of outward supplies (presently in GSTR1 or IFF) and such details should get reflected in the BHEL GST login (both in GSTR 2A and GSTR 2B) in the manner specified under GST Act.

c. Details of vendor/contractor invoice reflected in BHEL GST login should match with the details in the tax invoice submitted by the vendor/contractor, including the invoice number, invoice date, GSTIN, and place of supply. Additionally, the status of GSTR-1 and GSTR-3B filings must be "Yes."

d. The tax charged in the invoice /debit note referred to in clause (a) must be paid to the Government by the Vendor/Contractor, either in cash or through the utilization of input tax credit.

1.8.2.10 In case, any GST credit is delayed/denied to BHEL or BHEL has to incur any liability (like interest / penalty) due to non/delayed receipt of goods or submission of tax invoice after the expiry of timeline prescribed in the relevant GST Act for availing ITC, or any other reasons not attributable to BHEL, Then the same shall be recovered from the vendor/contractor along with interest levied/ leviable on BHEL.

1.8.2.11 GST shall be levied on recoveries, wherever applicable and same shall be recovered from payments. BHEL shall issue / raise Tax invoice on contractor/vendors for such recoveries.

1.8.2.12 E-way bills / Transit passes / Road Permits, if required for materials / T&P etc., bought into the project site is to be arranged by the Vendor / Contractor themselves. BHEL shall not issue or raise any Road Permit/ E- Way Bill for this purpose. Any claim or demand raised by the GST department for non-generation / non-submission of E-way bill shall be to the contractor/ vendor account

1.8.2.13 BHEL shall not reimburse any expenditure incurred by the contractor towards demand, additional liability or interest / penalty etc., raised by the GST

department due to issues such as wrong rates / wrong classification of services or goods.

1.8.2.14 Where GST is payable by BHEL under reverse charge basis, any demand raised or any interest or penalty levied / leviable by the GST department due to non-submission or delayed submission of invoice by the contractor or for any other reason not attributable to BHEL, the same shall be recovered from the vendor/contractor.

1.8.2.15 Tax Deduction at Source (TDS) as per Sec 51 of the CGST Act shall be deducted (if applicable). GST TDS certificate in Form GSTR -7A shall be issued to be contractor. However, GST TDS certificate can be generated only if the contractor accepts the TDS details uploaded by BHEL and files his return. If any specific exemption from GST TDS is applicable to any contractor/vendor, then a declaration to that effect along with relevant documents as may be required by BHEL, substantiating such exemption in line with GST law provisions or notification, shall be submitted by the vendor/contractor.

For GST Unregistered bidder:

1.8.2.16 In case, bidder is not required to register under Goods and service Tax (GST) & Cess, the same is to be specified in the offer.

1.8.2.17 Successful bidder to furnish a Self-declaration that registration under GST is not required or not applicable as per the provisions of GST Law along with relevant document and provisions in the GST law.

1.8.2.18 In case BHEL has to incur any liability (like interest / penalty etc.) due to non-compliance of GST law in respect of the invoice submitted by the contractor, for the reasons attributable to the contractor, the same shall be recovered from the contractor.

1.8.2.19 TDS under GST (as & when applicable) shall be deducted at prevailing rates on gross invoice value.

1.8.2.20 If RCM is made applicable at a later date, GST will be paid by BHEL to the department at applicable rate treating the quoted the price as inclusive of GST if BHEL is not able to take Input tax credit.

1.8.2.21 In the event of any change in the status of bidder from unregistered to registered under the GST law after the submission of bid but before the completion of supply of services or goods, the same need to be intimated and all the clauses applicable for Registered bidder need to be followed. The vendor/ contractor is required to pass on the ITC benefit arising due to change of status, to BHEL. Contract value shall be amended accordingly. GST paid on the amended contract value shall be reimbursed at actuals against the Tax invoice only if BHEL is able to take input tax credit.

1.8.3 Statutory Variations

1.8.3.1 BHEL shall pay statutory variation only for GST, and no other variations shall be payable

1.8.3.2 In general, Statutory variation for GST is payable to the Vendor/Contractor during the contract period including extension thereof. Beyond the contract period, BHEL will reimburse the actual applicable tax only if BHEL is able to take the input tax credit. However, the decision of BHEL in this regard will be final and binding on the vendor/contractor

1.8.4 New Taxes/Levies –

In case Government imposes any new levy / tax after submission of bid during the tenure of the contract, BHEL shall reimburse the same at actual on submission of documentary proof of payment subject to the satisfaction of BHEL that such new levy / tax is applicable to this contract. However, Contractor/ Vendor shall obtain prior consent from BHEL before depositing new taxes and duties.

Any benefits arise out of new tax levies and/or abolition of existing taxes must be passed on to BHEL.

The decision of BHEL in this regard will be final and binding on the vendor/contractor.

1.8.5 Direct Tax

1.8.5.1 Vendor/ Contractor is required to update himself on its own and comply with provisions of Indian Income Tax Act as notified from time to time. Purchaser shall not be liable towards liability of income tax accruing to the vendor/contractor of whatever nature including variations thereof, arising out of this Order/ Contract, as well as tax liability of the vendor/ Contractor and his personnel

10.8.5.2 Deductions of Tax at source as per Income Tax Act, at the prevailing rates shall be effected by the Purchaser before release of payment, as a statutory obligation, if applicable. TDS certificate will be issued by the Purchaser as per the statutory provisions. The Vendor/Contractor has to mention their Permanent Account Number (PAN) and GSTIN in all invoices.

1.8.6 BOCW Act & BOCW Welfare Cess Act

1.8.6.1 Contractor's price/rates shall be exclusive of BOCW Cess .

1.8.6.2 The Contractor should Register their Establishment under BOCW Act 1996 read with rules 1998 by submitting Form I (Application for Registration of Establishment) and Form IV (Notice Of Commencement / Completion of Building other Construction Work) to the respective Labour Authorities i.e.,

a. Assistant Labour Commissioner (Central) in respect of the project premises which is under the purview of Central Govt.–NTPC, NTPL etc.
b. Appropriate State authorities in respect of the project premises which is under the purview of State Govt.

1.8.6.3 The Contractor should comply with the provisions of BOCW Welfare Cess Act 1996 in respect of the work awarded to them by BHEL.

1.8.6.4 The contractor should ensure compliance regarding Registration of Building Workers as Beneficiaries, Hours of work, welfare measures and other conditions of service with particular reference to Safety and Health measures like Safety Officers, safety committee, issue of Personal protective equipments, canteen, rest room, drinking water, Toilets, ambulance, first aid centre etc.

1.8.6.5 The contractor irrespective of their nature of work and manpower (Civil, Mechanical, Electrical works etc) should register their establishment under BOCW Act 1996 and comply with BOCW Welfare Cess Act 1996.

1.8.6.6 Contractor shall make remittance of the BOCW Cess as per the Act in consultation with BHEL as per the rates in force (presently 1%). BOCW remittance should be made only after obtaining prior consent from BHEL. BHEL shall reimburse the same upon production of documentary evidence. However, BHEL shall not reimburse the fee paid towards the registration of establishment, fees paid towards registration of Beneficiaries and Contribution of Beneficiaries remitted.

1.8.6.7 Non-compliance to Provisions of the BOCW Act & BOCW Welfare Cess Act is not acceptable. In case of any non-compliance, BHEL reserves the right to withhold any sum as it deems fit. Only upon total compliance with the BOCW Act and the discharge of total payment of Cess (in consultation with BHEL) under the BOCW Cess Act by the Contractor, BHEL shall consider refund of the amounts.

Annexure

C1

Date: 29/08/2025

REVISED RATES OF T&P HIRE CHARGES FOR CRANES & TRAILERS ETC. FOR
SUB-CONTRACTORS WORKING FOR BHEL FOR DOING BHEL JOBS

SL NO.	ITEM DESCRIPTION	USEFUL LIFE (IN YRS)	Revised rates (Rs./Hour) valid from 01/09/2025 to 31/8/2027 (WITHIN USEFUL LIFE)	Revised rates (Rs./Hour) valid from 01/09/2025 to 31/8/2027 (BEYOND USEFUL LIFE)
I.	**CRANES : –**			
1	Portal Gantry Crane 500T	15	26040.00	26020.00
2	100MT Crawler Crane ZOOMLION CRANE-QUY-100	10	11470.00	11460.00
3	Heavy Lift Crawler Crane 600MT Class DEMAG Model CC2800	15	56920.00	56880.00
4	PORTAL CRANE, 360T	15	14230.00	14220.00
5	600MT Class Crawler Crane- Manitowoc Model 18000-UPGRADED	15	56070.00	56030.00
6	600MT Class Crawler Crane- Liebherr Model LR1600-2 (Upgraded	15	69370.00	69320.00
7	CRAWLER CRANE FMC/LINKBELT 718, 250T (WITH RINGER)	15	33880.00	33850.00
8	CRAWLER CRANE FMC/LINKBELT 718, 250T (WITH-OUT RINGER)	15	21170.00	21160.00
9	MANITOWOC M-250T TRUCK CRANE	15	30490.00	30470.00
10	270 MT Class Crawler Crane- Manitowoc Model 2250	15	32010.00	31990.00
11	300MT Crane Crawler Crane LIEBHERR Model LR-1350/1	15	26680.00	26660.00
11.A	300MT Crane Crawler Crane LIEBHERR Model LR-1350/1 (UPGRADED)	15	36740.00	36710.00
12	250MT Class Mid range Crawler Crane- Kobelco Model CKE2500-2	15	15290.00	15280.00
12.A	250MT Class Mid range Crawler Crane- Kobelco Model CKE2500-2	15	19180.00	19170.00
13	LINKBELT LS- 248H CRAWLER CRANE (180T)	15	16940.00	16920.00
14	MANITOWAC MODEL 888 CRAWLER CRANE (200 MT)	15	22020.00	22000.00
15	CRAWLER CRANE SUMITOMO, 150T	15	11010.00	11000.00
16	All Terrain Crane, 150MT- Liebherr Model LTM1150	15	13550.00	13540.00
17	CRAWLER CRANE, 120 T Fushun Model QUY120	10	10920.00	10920.00
18.A	CRAWLER CRANE 135MT Kobelco Model CK1350- 1F	15	10840.00	10830.00
18.B	CRAWLER CRANE 135MT Kobelco Model CK1350	15	8970.00	8970.00
19	CRAWLER CRANE 120MT - Tata-Sumitomo Model SCX1200-2	15	10160.00	10150.00
20	CRAWLER CRANE 100 T (KH 500)	15	10160.00	10150.00
21	Hydraulic Crawler Crane 80MT, Fushun Model QUY 80B	10	5460.00	5460.00
22	ROUGH TERRAIN CRANE 75T (RT880)	12	6200.00	6200.00
23	CRAWLER CRANE, 75T -Tata Model 955ALC/TFC280	12	5430.00	5420.00
24	Mobile Crane, 55MT (TIL)	12	4460.00	4450.00
25	CRAWLER CRANE, 25T -Tata Model TFC75	10	3050.00	3050.00
26	MOBILE CRANE, 20MT (TIL)	10	2290.00	2290.00
27	MOBILE CRANE, 20MT (ESCORTS)	10	2290.00	2290.00
28	MOBILE CRANE ESCORTS- 14MT	10	720.00	720.00
29	HYDAULIC PICK & CARRY CRANE, 8/9/10/11/12 MT	10	390.00	390.00

Annexure

C1

Date: 29/08/2025

REVISED RATES OF T&P HIRE CHARGES FOR CRANES & TRAILERS ETC. FOR
SUB-CONTRACTORS WORKING FOR BHEL FOR DOING BHEL JOBS

SL NO.	ITEM DESCRIPTION	USEFUL LIFE (IN YRS)	Revised rates (Rs./Hour) valid from 01/09/2025 to 31/8/2027 (WITHIN USEFUL LIFE)	Revised rates (Rs./Hour) valid from 01/09/2025 to 31/8/2027 (BEYOND USEFUL LIFE)
30	FORK LIFT 5T	5	650.00	650.00
31	FORK LIFT 3T	5	540.00	540.00

Annexure C2 Date: 29/08/2025

REVISED RATES OF T&P HIRE CHARGES FOR CRANES & TRAILERS ETC. FOR OUTSIDE AGENCIES

SL NO.	ITEM DESCRIPTION	USEFUL LIFE (IN YRS)	Revised rates (Rs./Hour) valid from 01/09/2025 to 31/8/2027 (WITHIN USEFUL LIFE)	Revised rates (Rs./Hour) valid from 01/09/2025 to 31/8/2027 (BEYOND USEFUL LIFE)
I.	CRANES : -			
1	Portal Gantry Crane 500T	15	28930.00	28910.00
2	100MT Crawler Crane ZOOMLION CRANE-QUY-100	10	12740.00	12730.00
3	Heavy Lift Crawler Crane 600MT Class DEMAG Model CC2800	15	63240.00	63200.00
4	PORTAL CRANE, 360T	15	15810.00	15800.00
5	600MT Class Crawler Crane- Manitowoc Model 18000-UPGRADED	15	62300.00	62260.00
6	600MT Class Crawler Crane- Liebherr Model LR1600-2 (Upgraded version)	15	77080.00	77020.00
7	CRAWLER CRANE FMC/LINKBELT 718, 250T (WITH RINGER)	15	37640.00	37610.00
8	CRAWLER CRANE FMC/LINKBELT 718, 250T (WITH-OUT RINGER)	15	23520.00	23510.00
9	MANITOWOC M-250T TRUCK CRANE	15	33880.00	33850.00
10	270 MT Class Crawler Crane- Manitowoc Model 2250	15	35570.00	35550.00
11	300MT Crane Crawler Crane LIEBHERR Model LR-1350/1	15	29640.00	29620.00
11.A	300MT Crane Crawler Crane LIEBHERR Model LR-1350/1 (UPGRADED)	15	40820.00	40790.00
12	250MT Class Mid range Crawler Crane- Kobelco Model CKE2500-2	15	16990.00	16980.00
12.A	250MT Class Mid range Crawler Crane- Kobelco Model CKE2500-2 (UPGRADED)	15	21310.00	21300.00
13	LINKBELT LS- 248H CRAWLER CRANE (180T)	15	18820.00	18800.00
14	MANITOWAC MODEL 888 CRAWLER CRANE (200 MT)	15	24470.00	24450.00
15	CRAWLER CRANE SUMITOMO, 150T	15	12230.00	12220.00
16	All Terrain Crane, 150MT- Liebherr Model LTM1150	15	15050.00	15040.00
17	CRAWLER CRANE, 120 T Fushun Model QUY120	10	12130.00	12130.00
18.A	CRAWLER CRANE 135MT Kobelco Model CK1350- 1F	15	12040.00	12030.00
18.B	CRAWLER CRANE 135MT Kobelco Model CK1350	15	9970.00	9960.00
19	CRAWLER CRANE 120MT - Tata-Sumitomo Model SCX1200-2	15	11290.00	11280.00
20	CRAWLER CRANE 100 T (KH 500)	15	11290.00	11280.00
21	Hydraulic Crawler Crane 80MT, Fushun Model QUY 80B	10	6060.00	6060.00
22	ROUGH TERRAIN CRANE 75T (RT880)	12	6890.00	6890.00
23	CRAWLER CRANE, 75T -Tata Model 955ALC/TFC280	12	6030.00	6030.00
24	Mobile Crane, 55MT (TIL)	12	4950.00	4950.00
25	CRAWLER CRANE, 25T -Tata Model TFC75	10	3390.00	3390.00
26	MOBILE CRANE, 20MT (TIL)	10	2540.00	2540.00
27	MOBILE CRANE, 20MT (ESCORTS)	10	2540.00	2540.00

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Annexure C2 Date: 29/08/2025

REVISED RATES OF T&P HIRE CHARGES FOR CRANES & TRAILERS ETC. FOR OUTSIDE AGENCIES

SL NO.	ITEM DESCRIPTION	USEFUL LIFE (IN YRS)	Revised rates (Rs./Hour) valid from 01/09/2025 to 31/8/2027 (WITHIN USEFUL LIFE)	Revised rates (Rs./Hour) valid from 01/09/2025 to 31/8/2027 (BEYOND USEFUL LIFE)
28	MOBILE CRANE ESCORTS- 14MT	10	800.00	800.00
29	HYDAULIC PICK & CARRY CRANE, 8/9/10/11/12 MT	10	430.00	430.00
30	FORK LIFT 5T	5	730.00	730.00
31	FORK LIFT 3T	5	600.00	600.00

ANNEXURE-T I
DT: 29/08/2025

RATES OF T&P HIRE CHARGES FOR ITEMS OTHER THAN CRANES & TRAILERS ETC. FOR SUB-CONTRACTORS WORKING FOR BHEL FOR DOING BHEL JOBS

SL NO.	ITEM DESCRIPTION	Revised rates (Rs./Day) valid from 01/09/2025 to 31/8/2027
I.	LIFTING EQUIPMENTS	
1	Strand Jack System for Boiler Drum Lifting	21030
2	MULTI SHEAVE PULLEY BLOCK 40/50T/60T	310
3	MULTI SHEAVE PULLEY BLOCK 100T	630
4	MULTI SHEAVE PULLEY BLOCK 150T	1270
5	ELCTRIC WINCH 5T	1280
6	ELCTRIC WINCH 10T	2370
7	ELECTRIC WINCH 15 T	2170
8	PASSENGER CUM GOODS HOIST 1T	2290
9	FURNACE MAINTENANCE PLATFORM	5060
10	Gang Operated Hydraulic Jack (Set of 4 Jacks - 175 MT each)	2100
II	WELDING & HEAT TREATMENT EQUIPMENT	
1	125KW, 3KHZ, AIR-COOLED INDUCTION HEATING EQUIPMENT	16460
2	75KW, 10 KHZ, COMPACT INDUCTION HEATING EQUIPMENT	8230
3	WELDING GENERATOR 320/300 A	300
4	WELDING RECTIFIER 400A/300A	300
5	WELDING RECTIFIER 600A	400
6	DIESEL WELDING GENERATOR 400A/300A	400
7	TRANSFORMER,600A	300
8	TRANSFORMER 300/400A	200
III	SERVICE PLANTS & ALLIED EQUIPT.	0
1	500KVA DIESEL GENERATOR	3830
2	TRANSFORMER OIL FILTERATION EQUIPMENT 6000LPH CAPACITY WITHOUT STORAGE TANK	6400
3	-DO- , WITH STORAGE TANK	7310
4	OIL FILTERATION M/C, 250/500 LPH (OTHER THAN SILICON OIL)	910
5	OIL FILTERATION M/C, 250GPH/1000LPH (OTHER THAN SILICON OIL)	1370
6	OIL FILTERATION M/C, 500GPH/2500LPH (OTHER THAN SILICON OIL)	1820
7	OIL FILTERATION M/C, 1000GPH/5000LPH (OTHER THAN SILICON OIL)	3650
8	Portable Lube Oil Purification Unit (Centrifuge M/c) Capacity: 750 LPH	1280
9	Low Vacuum de-hydration unit	640
10	DIESEL GENERATING SET,250 KVA	1780
11	DIESEL GENERATING SET,25 KVA	510

ANNEXURE-T I
DT: 29/08/2025

RATES OF T&P HIRE CHARGES FOR ITEMS OTHER THAN CRANES & TRAILERS ETC. FOR SUB-CONTRACTORS WORKING FOR BHEL FOR DOING BHEL JOBS

SL NO.	ITEM DESCRIPTION	Revised rates (Rs./Day) valid from 01/09/2025 to 31/8/2027
12	VACUUM PUMP(ABSOLUTE V.C.)	540
13	ACID CIRCULATING PUMP WITH MOTOR 120M HEAD, 150T/HR	1090
14	ACID TRANSFER PUMP 20/50 T/HR	540
15	DEWATERING PUMP (Kirloskar make,11KW/15HP)	80
16	HP Air compressor (32 Kg/Sq. Cm, 150 CFM)	4260
17	AIR COMPRESSORS 250/300/330/360/350 CFM	2740
18	AIR COMPRESSORS 140/150/190/210 CFM	910
19	ACID CIRCULATING PUMP WITH MOTOR & STARTER, 200T/HR, 150M, 220 HP	1820
20	Industrial Blower 2000CFM	1280
21	Air Leak Test Blower (Flow: 40000 m^3/Hr)	1160
22	Air Blower (Flow: 20000 m^3/Hr)	940
IV	METAL FORMING /CUTTING EQUIPMENT	
1	TUBE EXPANDING M/C PNEUMATIC 60-100 MM	640
2	ELECTRO HYDRAULIC PIPE BENDING M/C 4"	1640
3	BOLTING MACHINE (ALCOA/AVLOCK/ HUCK)	1810
4	-do- Gun with nose Assembly only	540
V	TESTING/INSPECTION EQUIPMENT	
1	DATA LOGGER for PG TESTING	37110
2	MOTORISED HYDRAULIC TEST PUMP 250kg/cmsq	800
3	MOTORISED HYDRAULIC TEST PUMP 400-450kg/cmsq	1090
4	MOTORISED HYDRAULIC TEST PUMP 600 KG/CMSQ	1280
5	HYDRAULIC TEST PUMP 800 KG/CMSQ	1340
6	HYDRAULIC TEST PUMP 1000 KG/CMSQ	2250
7	BOLT STRETCHING DEVICE	910
8	BOROSCOPE/FIBROSCOPE FLEXIBLE TYPE (FLEXUX) IMPORTED	3650
9	ULTRASONIC FLAW DETECTOR	2740
10	MPI TEST KIT	360
11	GAS LEAK DETECTOR	270
12	VIBRATION/SOUND LEVEL METER IRD-306	360
13	VIBRATION/SOUND LEVEL METER IRD-308	360
14	VIBRATION ANALYSER/DYNAMIC BALANCING M/C IRD 350	1460
15	VIBRATION ANALYSER/DYNAMIC BALANCING M/C IRD 360	2560
16	SHOCK PULSE METER	640
17	HV.DC TEST KIT UPTO 50 KV	540
18	HV.DC TEST KIT ABOVE 50 KV	1000
19	HV.AC TEST KIT UPTO 50KV	820
20	HV.AC TEST KIT ABOVE 50KV	2920
21	MOTORISED MEGGER 2.5KV	400
22	MOTORISED MEGGAR 5KV	450
23	OSCILLOSCOPE-DUAL BEAM INDIGENOUS	450
24	OSCILLOSCOPE-DUAL BEAM IMPORTED	1090
25	WAVEFORM ANALYSER	910
26	OSCILLOGRAPH/UV RECORDER 24 CHANNEL	1640
27	OSCILLOGRAPH/UV RECORDER 12 CHANNEL	1090
28	OSCILLOGRAPH/UV RECORDER 6 CHANNEL	910

ANNEXURE-T I
DT: 29/08/2025

RATES OF T&P HIRE CHARGES FOR ITEMS OTHER THAN CRANES & TRAILERS ETC. FOR SUB-CONTRACTORS WORKING FOR BHEL FOR DOING BHEL JOBS

SL NO.	ITEM DESCRIPTION	Revised rates (Rs./Day) valid from 01/09/2025 to 31/8/2027
29	DIGITAL LOW RESISTANCE METER	640
30	DC POTENTIOMETER	180
31	PRECISION DEAD WEIGHT TESTER	1000
32	OPTICAL ALIGNMENT KIT	1370
33	BOROSCOPE/FIBROSCOPE(NON FLEXIBLE)	1200
34	VERNIER THEODOLITE,PRECISION	1200
35	VERNIER THEODOLITE,ORDINARY	200
36	ENGINEERS PRECISION LEVEL/DUMPY LEVEL	120
37	ISKAMATIC 'A'	3210
38	CALIBRATOR '03'	1000
39	48 POLE EXTENDER CARD	200
40	MULTIJET NPM	400
41	OSCILLOMETER	10240
42	VOC EQUIPMENT	1400
43	BINARY SIGNAL GENERATOR	290
44	ELECTRIC COUNTER	690
45	FREQUENCY GENERATOR	1000
46	DBF 3 VIBRATION RECORDER/ANALYSER	3290
47	L&T GOULD OSCILLOGRAPH 2-CHANNEL	490
48	L&T GOULD OSCILLOGRAPH 6-CHANNEL	1180
49	VIBROPORT 41/FFT ANALYSER	5480
50	ELCID kit	10060
51	UNIVERSAL CALIBRATION SYSTEM	2740
52	NATURAL FREQUENCY TESTER	2920
53	DIGITAL HARDNESS TESTER	360
54	ADRE 208 VIBRATION ANALYSER	7310
55	PCB DIAGONISTIC REPAIR KIT	2010
56	SECONDARY INJECTION RELAY TEST KIT	5300
57	MICRO OHM METER	1460
58	DIGITAL MICRO OHM METER MEASURING RANGE: 200 µΩ TO 20KΩ	3250
59	PMI Machine OLYMPUS make	3370
60	Mobile Lighting Mast - 9 metres (4X400 W)	870
61	10KVA RESISTANCE BRAZING MACHINE	140
62	RECURRENT SURGE OSCILLOGRAPH (RSO) TEST KIT WITH PORTABLE HANDHELD OSCILLOSCOPE.	460
63	HYDROGEN GAS LEAK DETECTOR	60
64	STATOR WEDGE ANALYZER KIT WITH COMPLETE ACCESSORIES	5020
65	WEDGE DEFLECTION KIT	80
66	TILE PRESSING MACHINE FOR GAS TURBINE	270
67	INDUCTION BRAZING MACHINE	4910
68	MAGNETIC COHESIVE FORCE (MCF) EQUIPMENT	3650
69	ULTRASONIC FLOW METER	180
70	PORTABLE VIBRATION ANALYSER (MODEL 811T)	40
71	CENTRIFUGAL PUMP SET FOR ACID CLEANING (WITH MOTOR AND PANEL) : PRESSURE -14KG/SQ CM. ; FLOW 60 M3/HR	470
72	CENTRIFUGAL PUMP SET FOR ACID CLEANING (WITH MOTOR AND PANEL) : PRESSURE -30KG/SQ CM. ; FLOW 15 M3/HR	430

ANNEXURE-T I
DT: 29/08/2025

RATES OF T&P HIRE CHARGES FOR ITEMS OTHER THAN CRANES & TRAILERS ETC. FOR SUB-CONTRACTORS WORKING FOR BHEL FOR DOING BHEL JOBS

SL NO.	ITEM DESCRIPTION	Revised rates (Rs./Day) valid from 01/09/2025 to 31/8/2027
73	HI SPEED MEMORY RECORDER, MAKE -YOKOGAWA, MODEL DL850E-Q-HE/B5/HD1	1820
74	TROLLEY MOUNTED HYDRAULIC JACK (100 MT)	1260
75	5KV Insulation Tester	450
76	4 Channel Digital Oscilloscope /Fast Recorder	1720
77	4 Channel Oscillographic Recorder	590
78	Sound Level Meter	230
79	Thermal Imaging Camera	780
80	Videoscope (Video Boroscope)	1530
81	DO (Dissolve Oxygen) Meter (0 to 1500 ppb)	1320
82	Conductivity Meter	80
83	Core Flux Test Kit	7340
84	Primary Current Injection Kit (2000A)	870
85	3 Phase Secondary Injection Kit (Relay Test)	3790
86	FRF Filtration Kit	1340
87	FFT Analyser	2310
88	Flue Gas Analyser	1030
89	Oil Test Kit (Mineral Oil)-Transformer	1020
90	Winding Resistance kit (R L C Load)	880
91	SFRA test Kit	1200
92	Tan Delta test Kit	4090
93	PF Meter	330
94	Ultrasonic Flow Meter	840
95	Oil Particle Counter	360
96	Plasma Cutting Machine (With complete accessories)	320
97	JCB make DG Set 80 KVA	690
98	Diesel Generating Set 82.5 KVA	640
99	Portable Jacking Oil Pump	1110
100	Alloy Analyser	1820

ANNEXURE-T II

DT: 29/08/2025

RATES OF T & P HIRE CHARGES FOR ITEMS OTHER THAN CRANES & TRAILLERS ETC. FOR OUTSIDE AGENCIES

SL NO.	ITEM DESCRIPTION	Revised rates (Rs./Day) valid from 01/09/2025 to 31/8/2027
I.	LIFTING EQUIPMENTS	
1	Strand Jack System for Boiler Drum Lifting	23370
2	MULTI SHEAVE PULLEY BLOCK 40/50T/60T	350
3	MULTI SHEAVE PULLEY BLOCK 100T	700
4	MULTI SHEAVE PULLEY BLOCK 150T	1410
5	ELCTRIC WINCH 5T	1420
6	ELCTRIC WINCH 10T	2640
7	ELECTRIC WINCH 15 T	2410
8	PASSENGER CUM GOODS HOIST 1T	2540
9	FURNACE MAINTENANCE PLATFORM	5620
10	Gang Operated Hydraulic Jack (Set of 4 Jacks - 175 MT each)	2340
II	WELDING & HEAT TREATMENT EQUIPMENT	
1	125KW, 3KHZ, AIR-COOLED INDUCTION HEATING EQUIPMENT	18290
2	75KW, 10 KHZ, COMPACT INDUCTION HEATING EQUIPMENT	9140
3	WELDING GENERATOR 320/300 A	330
4	WELDING RECTIFIER 400A/300A	330
5	WELDING RECTIFIER 600A	440
6	DIESEL WELDING GENERATOR 400A/300A	440
7	TRANSFORMER,600A	330
8	TRANSFORMER 300/400A	220
III	SERVICE PLANTS & ALLIED EQUIPT.	
1	500KVA DIESEL GENERATOR	4250
2	TRANSFORMER OIL FILTERATION EQUIPMENT 6000LPH CAPACITY WITHOUT STORAGE TANK	7110
3	-DO- , WITH STORAGE TANK	8130
4	OIL FILTERATION M/C, 250/500 LPH (OTHER THAN SILICON OIL)	1010
5	OIL FILTERATION M/C, 250GPH/1000LPH (OTHER THAN SILICON OIL)	1520
6	OIL FILTERATION M/C, 500GPH/2500LPH (OTHER THAN SILICON OIL)	2030
7	OIL FILTERATION M/C, 1000GPH/5000LPH (OTHER THAN SILICON OIL)	4060
8	Portable Lube Oil Purification Unit (Centrifuge M/c) Capacity: 750 LPH	1420
9	Low Vacuum de-hydration unit	710
10	DIESEL GENERATING SET,250 KVA	1980
11	DIESEL GENERATING SET,25 KVA	560
12	VACUUM PUMP(ABSOLUTE V.C.)	600
13	ACID CIRCULATING PUMP WITH MOTOR 120M HEAD, 150T/HR	1210
14	ACID TRANSFER PUMP 20/50 T/HR	600
15	DEWATERING PUMP (Kirloskar make,11KW/15HP)	90
16	HP Air compressor (32 Kg/Sq. Cm, 150 CFM)	4730
17	AIR COMPRESSORS 250/300/330/360/350 CFM	3040
18	AIR COMPRESSORS 140/150/190/210 CFM	1010

ANNEXURE-T II

DT: 29/08/2025

RATES OF T & P HIRE CHARGES FOR ITEMS OTHER THAN CRANES & TRAILLERS ETC. FOR OUTSIDE AGENCIES

SL NO.	ITEM DESCRIPTION	Revised rates (Rs./Day) valid from 01/09/2025 to 31/8/2027
19	ACID CIRCULATING PUMP WITH MOTOR & STARTER, 200T/HR, 150M, 220 HP	2030
20	Industrial Blower 2000CFM	1420
21	Air Leak Test Blower (Flow: 40000 m³/Hr)	1290
22	Air Blower (Flow: 20000 m³/Hr)	1050
IV	METAL FORMING /CUTTING EQUIPMENT	
1	TUBE EXPANDING M/C PNEUMATIC 60-100 MM	710
2	ELECTRO HYDRAULIC PIPE BENDING M/C 4"	1820
3	BOLTING MACHINE (ALCOA/AVLOCK/ HUCK)	2010
4	-do- Gun with nose Assembly only	600
V	TESTING/INSPECTION EQUIPMENT	
1	DATA LOGGER for PG TESTING	41230
2	MOTORISED HYDRAULIC TEST PUMP 250kg/cmsq	890
3	MOTORISED HYDRAULIC TEST PUMP 400-450kg/cmsq	1210
4	MOTORISED HYDRAULIC TEST PUMP 600 KG/CMSQ	1420
5	HYDRAULIC TEST PUMP 800 KG/CMSQ	1490
6	HYDRAULIC TEST PUMP 1000 KG/CMSQ	2490
7	BOLT STRETCHING DEVICE	1010
8	BOROSCOPE/FIBROSCOPE FLEXIBLE TYPE (FLEXUX) IMPORTED	4060
9	ULTRASONIC FLAW DETECTOR	3040
10	MPI TEST KIT	400
11	GAS LEAK DETECTOR	300
12	VIBRATION/SOUND LEVEL METER IRD-306	400
13	VIBRATION/SOUND LEVEL METER IRD-308	400
14	VIBRATION ANALYSER/DYNAMIC BALANCING M/C IRD 350	1620
15	VIBRATION ANALYSER/DYNAMIC BALANCING M/C IRD 360	2840
16	SHOCK PULSE METER	710
17	HV.DC TEST KIT UPTO 50 KV	600
18	HV.DC TEST KIT ABOVE 50 KV	1110
19	HV.AC TEST KIT UPTO 50KV	910
20	HV.AC TEST KIT ABOVE 50KV	3250
21	MOTORISED MEGGER 2.5KV	440
22	MOTORISED MEGGAR 5KV	500
23	OSCILLOSCOPE-DUAL BEAM INDIGENOUS	500
24	OSCILLOSCOPE-DUAL BEAM IMPORTED	1210
25	WAVEFORM ANALYSER	1010
26	OSCILLOGRAPH/UV RECORDER 24 CHANNEL	1820
27	OSCILLOGRAPH/UV RECORDER 12 CHANNEL	1210
28	OSCILLOGRAPH/UV RECORDER 6 CHANNEL	1010
29	DIGITAL LOW RESISTANCE METER	710
30	DC POTENTIOMETER	200
31	PRECISION DEAD WEIGHT TESTER	1110
32	OPTICAL ALIGNMENT KIT	1520
33	BOROSCOPE/FIBROSCOPE(NON FLEXIBLE)	1340
34	VERNIER THEODOLITE,PRECISION	1340
35	VERNIER THEODOLITE,ORDINARY	220

ANNEXURE-T II

DT: 29/08/2025

RATES OF T & P HIRE CHARGES FOR ITEMS OTHER THAN CRANES & TRAILLERS ETC. FOR OUTSIDE AGENCIES

SL NO.	ITEM DESCRIPTION	Revised rates (Rs./Day) valid from 01/09/2025 to 31/8/2027
36	ENGINEERS PRECISION LEVEL/DUMPY LEVEL	130
37	ISKAMATIC 'A'	3570
38	CALIBRATOR '03'	1110
39	48 POLE EXTENDER CARD	220
40	MULTIJET NPM	440
41	OSCILLOMETER	11380
42	VOC EQUIPMENT	1560
43	BINARY SIGNAL GENERATOR	320
44	ELECTRIC COUNTER	770
45	FREQUENCY GENERATOR	1110
46	DBF 3 VIBRATION RECORDER/ANALYSER	3650
47	L&T GOULD OSCILLOGRAPH 2-CHANNEL	540
48	L&T GOULD OSCILLOGRAPH 6-CHANNEL	1320
49	VIBROPORT 41/FFT ANALYSER	6090
50	ELCID kit	11170
51	UNIVERSAL CALIBRATION SYSTEM	3040
52	NATURAL FREQUENCY TESTER	3250
53	DIGITAL HARDNESS TESTER	400
54	ADRE 208 VIBRATION ANALYSER	8130
55	PCB DIAGONISTIC REPAIR KIT	2230
56	SECONDARY INJECTION RELAY TEST KIT	5890
57	MICRO OHM METER	1620
58	DIGITAL MICRO OHM METER MEASURING RANGE: 200 µΩ TO 20KΩ	3610
59	PMI Machine OLYMPUS make	3740
60	Mobile Lighting Mast - 9 metres (4X400 W)	970
61	10KVA RESISTANCE BRAZING MACHINE	160
62	RECURRENT SURGE OSCILLOGRAPH (RSO) TEST KIT WITH PORTABLE HANDHELD OSCILLOSCOPE.	520
63	HYDROGEN GAS LEAK DETECTOR	60
64	STATOR WEDGE ANALYZER KIT WITH COMPLETE ACCESSORIES	5580
65	WEDGE DEFLECTION KIT	90
66	TILE PRESSING MACHINE FOR GAS TURBINE	300
67	INDUCTION BRAZING MACHINE	5460
68	MAGNETIC COHESIVE FORCE (MCF) EQUIPMENT	4060
69	ULTRASONIC FLOW METER	200
70	PORTABLE VIBRATION ANALYSER (MODEL 811T)	50
71	CENTRIFUGAL PUMP SET FOR ACID CLEANING (WITH MOTOR AND PANEL) : PRESSURE -14KG/SQ CM. ; FLOW 60 M3/HR	520
72	CENTRIFUGAL PUMP SET FOR ACID CLEANING (WITH MOTOR AND PANEL) : PRESSURE -30KG/SQ CM. ; FLOW 15 M3/HR	480
73	HI SPEED MEMORY RECORDER, MAKE -YOKOGAWA, MODEL DL850E-Q-HE/B5/HD1	2020
74	TROLLEY MOUNTED HYDRAULIC JACK (100 MT)	1400
75	5KV Insulation Tester	500
76	4 Channel Digital Oscilloscope /Fast Recorder	1910
77	4 Channel Oscillographic Recorder	650

ANNEXURE-T II

DT: 29/08/2025

RATES OF T & P HIRE CHARGES FOR ITEMS OTHER THAN CRANES & TRAILLERS ETC. FOR OUTSIDE AGENCIES

SL NO.	ITEM DESCRIPTION	Revised rates (Rs./Day) valid from 01/09/2025 to 31/8/2027
78	Sound Level Meter	260
79	Thermal Imaging Camera	870
80	Videoscope (Video Boroscope)	1700
81	DO (Dissolve Oxygen) Meter (0 to 1500 ppb)	1470
82	Conductivity Meter	90
83	Core Flux Test Kit	8160
84	Primary Current Injection Kit (2000A)	970
85	3 Phase Secondary Injection Kit (Relay Test)	4210
86	FRF Filtration Kit	1490
87	FFT Analyser	2570
88	Flue Gas Analyser	1150
89	Oil Test Kit (Mineral Oil)-Transformer	1130
90	Winding Resistance kit (R L C Load)	980
91	SFRA test Kit	1330
92	Tan Delta test Kit	4550
93	PF Meter	370
94	Ultrasonic Flow Meter	930
95	Oil Particle Counter	400
96	Plasma Cutting Machine (With complete accessories)	350
97	JCB make DG Set 80 KVA	770
98	Diesel Generating Set 82.5 KVA	710
99	Portable Jacking Oil Pump	1230
100	Alloy Analyser	2030

VOLUME-IA PART-II CHAPTER-1
CORRECTIONS / REVISIONS IN SPECIAL CONDITIONS OF CONTRACT, GENERAL CONDITIONS OF CONTRACT AND FORMS & PROCEDURES

Sl. No.: 01

Following Clauses in General Conditions of Contract (GCC) are modified/ revised/ added:

S. No	**GCC Clause Reference**	**Modification / Revision / Addition in GCC Clause**
1.	GCC Clause 1.9.1, Sl. No (ii)	The following mode of deposit, Sl. No. (e) is added: e) Insurance Surety Bonds
2.	GCC Clause 1.10.3, Sl. No. (vi)	**The following Clause, Sl. No. (vi) is deleted**: Security deposit can also be recovered at the rate of 10% of the gross amount progressively from each of the running bills of the contractor till the total amount of the required security deposit is collected. However, in such cases at least 50% of the required Security Deposit, including the EMD, should be deposited in any form as prescribed before start of the work and the balance 50% may be recovered from the running bills as described above
3.	GCC Clause 1.10.3, Sl. No (vii)	The following mode of deposit, Sl. No. (vii) is **added**: e) Insurance Surety Bonds
4.	Note mentioned under the GCC Clause 1.10.3	Note mentioned under GCC Clause 1.10.3 is revised as below: Note: **(1)** BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith. **(2)** In case of delay in submission of security deposit, enhanced security deposit which would include interest (Repo rate +4%) for the delayed period, shall be submitted by the bidder.
5.	GCC Clause 1.10.8	**GCC Clause 1.10.8 is revised as below:** Bidder agrees to submit security deposit required for execution of the contract within the time period mentioned. In case of delay in submission of security deposit, enhanced security deposit which would include interest (Repo rate+4%) for the delayed period, shall be submitted by the bidder. Further, if security deposit is not submitted till such time the first bill becomes due, the amount of security deposit due shall be recovered as per terms defined in NIT / contract, from the bills along with due interest
6.	GCC Clause 2.22.1	**GCC Clause 2.22.1 is revised as:** Retention Amount shall be 5% of the Contract Value and shall be furnished through BG in line with clause 1.12 of GCC before payment of first RA Bill. The validity of the said BG shall be initially for the contract period & shall be extended, if so required, up to acceptance of final bill. In case of increase in

S. No	GCC Clause Reference	Modification / Revision / Addition in GCC Clause
		contract value, additional BG for 5% of differential amount shall be submitted by Contractor before payment of next RA Bill due. Retention Amount can also be recovered at the rate of 10% of the gross amount progressively from each of the running bills of the contractor till the total amount of the required retention amount is collected. In case, contractor opts cash deduction from RA bills in the beginning & subsequently offers to submit BG later on, then refund of deducted retention amount may be permitted against submission of BG for 5% of the Contract Value.
7.	New Clause for "Breach of Contract, Remedies and Termination" is added in place of existing clause of Risk & Cost (i.e. 2.7.2.1 to 2.7.3)	**1. Clause 2.7.2 and 2.7.3 are revised as:** **2.7.2 <u>Breach of Contract, Remedies and Termination</u>** **2.7.2.1** BHEL shall terminate the contract after due notice of a period of 14 days in any of the following cases, which if not rectified/ improved within the time period mentioned in the notice, then, 'Breach of Contract' will be considered to have been established: i). Contractor's poor progress of the work vis-à-vis execution timeline as stipulated in the Contract, backlog attributable to contractor including unexecuted portion of work does not appear to be executable within balance available period considering its performance of execution. ii). Withdrawal from or abandonment of the work by contractor before completion of the work as per contract. iii). Non-completion of work by the Contractor within scheduled completion period as per Contract or as extended from time to time, for the reasons attributable to the contractor. iv). Repeated failure of contractor in deploying the required resources, to comply the statutory requirements etc. even after given by BHEL is writing. v). Strike or Lockout declared is not settled within a period of one month. vi). Termination of Contract on account of any other reason (s) attributable to Contractor. vii). Assignment, transfer, subletting of Contract without BHEL's written permission. viii). Non-compliance to any contractual condition or any other default attributable to Contractor.

S. No	GCC Clause Reference	Modification / Revision / Addition in GCC Clause
		2.7.2.2 <u>Remedies in case of Breach of Contract is established</u> In case 'Breach of Contract' is established, Security Deposit and Retention Amount shall be encashed/ forfeited. This is without prejudice to BHEL's right to levy of liquidated damages, debarment etc. which shall be applied as per the provisions of the contract. Sequence of recovery to be made in case of breach of contract is established, is as below: a) In case the value of Security Deposit & Retention Amount, available for the Contract, is less than 10% of the Contract Value, the balance amount shall be recovered from dues available in the form of Bills payable to contractor, BGs against the same contract etc. b) Demand notice for deposit of balance recovery amount shall be sent to contractor, if funds are insufficient to effect complete recovery against dues indicated in (a) above. c) If contractor fails to deposit the balance amount to be recovered within the period as prescribed in demand notice, following action shall be taken for balance recovery: i) Dues payable to contractor against other contracts in the same Region shall be considered for recovery. ii) If recovery cannot be made out of dues payable to the contractor as above, balance amount to be recovered, shall be informed to other Regions/Units for making recovery from the Unpaid Bills/Running Bills/SD/BGs/Final Bills of contractor. iii) In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against contractor. Note: 1) In addition to above, levy of liquidated damages, debarment, termination, short-closure etc. shall be applied as per provisions of the contract. 2) If tendering is done for the balance work, the defaulted contractor (including all the members/partners in case of JV/ partnership firm) shall not be eligible for either executing the balance work or to participate in the tender(s) for executing the balance work. **2.7.3** In case Contractor fails to deploy the resources as per requirement informed by BHEL in writing to expedite the work, BHEL can deploy own/hired/otherwise arranged resources and

S. No	**GCC Clause Reference**	**Modification / Revision / Addition in GCC Clause**
		recover the expenses incurred from the dues payable to contractor. Recoveries shall be actual expenses incurred plus 5% overheads or as defined in TCC.
8.	GCC Clause 2.7.7	**GCC Clause 2.7.7 is revised as:** 1. BHEL may permit or direct contractor to demobilize and remobilize at a future date as intimated by BHEL in case of following situations for reasons other than Force majeure conditions and not attributable to contractor: i) suspension of work(s) at a Project either by BHEL or Customer, or ii) where work comes to a complete halt or reaches a stage wherein worthwhile works cannot be executed and there is no possibility of commencement of work for a period of not less than three months 2. In such cases, charges towards demobilization and remobilization shall be as decided by BHEL after successful remobilization by contractor at site, and decision of BHEL shall be final and binding on the contractor. After remobilization, all conditions as per contract shall become applicable. In case Contractor does not remobilize with adequate resources or does not start the work within the period as intimated, then BHEL reserves the right to terminate the contract and effect remedies under Clause 2.7.2.2. Duration of the contract/time extension shall be revised suitably. In case of any conflict, BHEL decision in this regard shall be final and binding on the contractor.
9.	GCC Clause 2.11.3	**GCC Clause 2.11.3 is revised as:** However, if any 'Time extension' is granted to the contractor to facilitate continuation of work and completion of contract, due to backlog attributable to the contractor alone, then it shall be without prejudice to the rights of BHEL to impose penalty/LD for the delays attributable to the contractor, in addition to any other actions BHEL may wish to take under clause 2.7.2 of GCC i.e. "Breach of Contract, Remedies and Termination".
10.	GCC Clause 2.19.1	**GCC Clause 2.19.1 is revised as:** The contractor will be fully responsible for all disputes and other issues connected with his labour. In the event of the contractor's labour resorting to strike or the Contractor resorting to lockout and if the strike or lockout declared is not settled within a period of one month, it may be considered as

S. No	GCC Clause Reference	Modification / Revision / Addition in GCC Clause
		'Breach of Contract' under Clause 2.7 and the remedies under Clause 2.7.2.2 may be executed, at the discretion of BHEL.
11.	GCC Clause 2.24.1	**GCC Clause 2.24.1 is revised as:** Even though the work will be carried out under the supervision of BHEL Engineers the Contractor will be responsible for the quality of the workmanship and shall guarantee the work done for a period of Twelve months from the date of commencement of guarantee period as defined in Technical Conditions of Contract, for good workmanship and shall rectify free of cost all defects due to faulty erection detected during the guarantee period. In the event of the Contractor failing to repair the defective works within the time specified by the Engineer, BHEL may proceed to undertake the repairs of such defective works, by itself, without prejudice to any other rights and recover the cost incurred for the same along with 5% overheads from the Security Deposit.

Sl. No.: 02

In addition to The EARNEST MONEY DEPOSIT (EMD) clause 1.9 and The SECURITY DEPOSIT (SD) clause 1.10 published in General Conditions of Contract (Volume I Book II) following is added for FDR

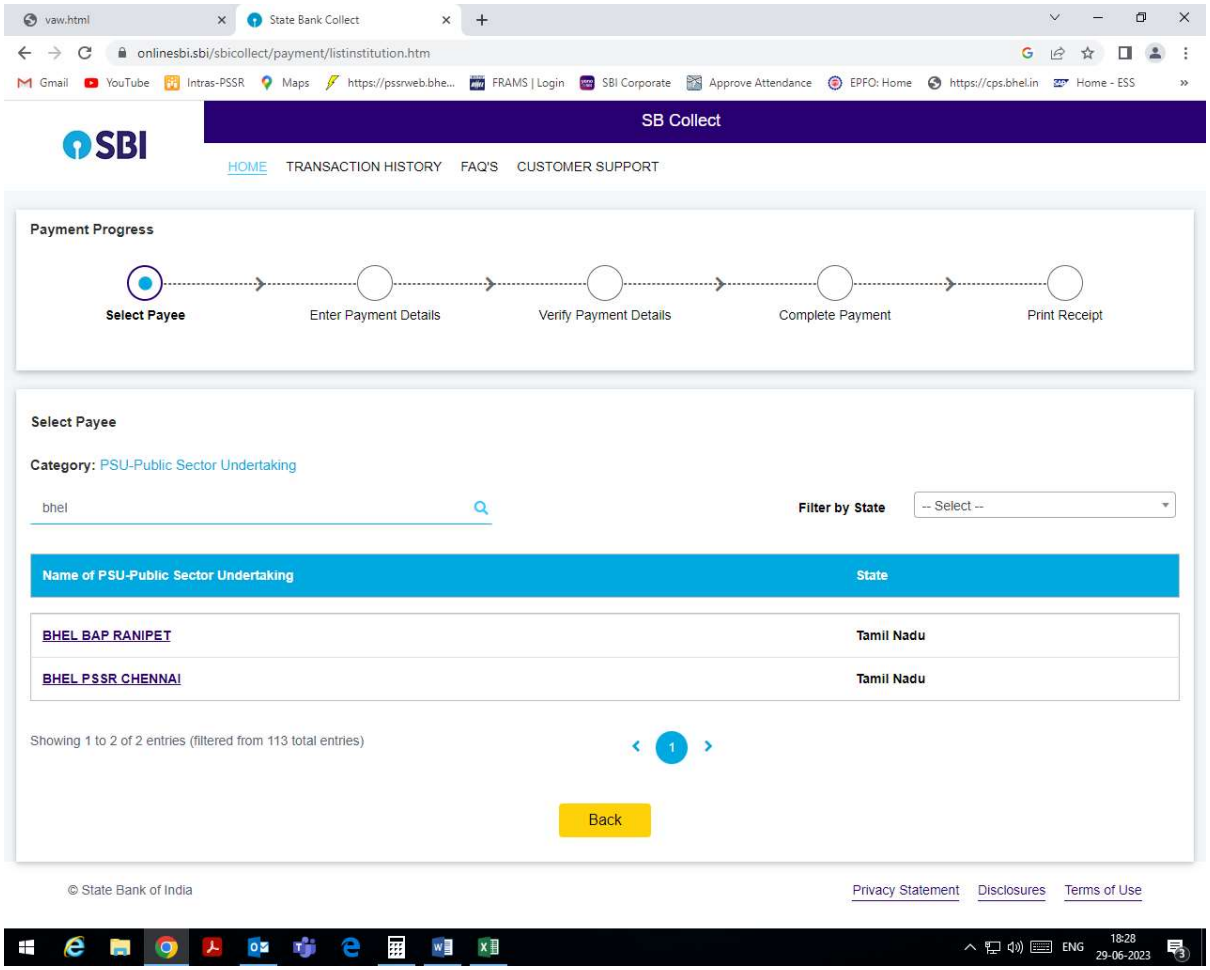
1. FDR should be Lien marked in favour of M/s BHEL.
2. Bank issuing FDR should agree to the following conditions and submit duly signed letter addressed to BHEL, confirming the following points:
   a) There is no Lock in Period for Encashment of the Said FDR
   b) The amount under the Said FDR would be paid to BHEL-PSSR on Demand, at any point of Time before, or upon Maturity, without any reference to the ……. (Contactor Name).
   c) Encashment whether premature or otherwise would not require any clearance from any other authority /Person.
   d) FDR will be auto renewed for such period/s initially mentioned in the FDR and the intimation of Such renewal shall be sent to BHEL, PSSR and …… (Contractor), immediately after the renewal.
   e) FDR will not be closed, Encashed, Changed or Discharged without the Written permission/Confirmation from M/s BHEL PSSR.
   f) Bank to acknowledge and agree that the Lien created on the FDR shall be in Force until M/s BHEL PSSR, gives a Discharge Letter in this regard.

Sl. No.: 03

Detailed Instruction for EMD / Security deposits through SBI e-collect:

Step 1: Vendors may visit SBI collect website, the URL of which is https://www.onlinesbi.sbi/sbicollect where they get the home page with various categories of institutions.

Step 2: Select PSU - Public Sector Undertakings – leading to a page with list of PSUs
Step 3: Type BHEL and search, they get to see all BHEL divisions wherein they shall select BHEL PSSR Chennai. The screen shot of the same is given below.



Step 4: Select EMD receipts. Having selected the Payee in the Payment Progress, it will lead to the payment details – a drop down list of values. From that list, vendors shall select EMD receipts. Upon clicking the entry EMD receipts, a form will open asking for the remitters details and the details of the tender.
Step 5: Confirm details and pay
Fill in all the details correctly, verify the details, and complete the payment as it is leading to the payment gateway.
Step 6: Take a printout on completing the payment and enclose the copy of the same along with the bid submission. Store the copy of receipt for future reference.

Sl. No.: 07
GCC Clause 2.12 Over Run Compensation (ORC) - NOT APPLICABLE

Sl. no 08.
GCC Clause 2.17 Price Variation Compensation (PVC) - NOT APPLICABLE

Sl. no 09.
GCC Clause 2.13 Secured Recoverable Advances: NOT APPLICABLE

Following Clauses are modified in the Special Conditions of Contract (SCC)

- **Clause No. 10.5 on RA Bill Payments, in Special Conditions of Contract (SCC), Volume- IB, Book- II, is revised as under:**

  "The payment for running bills will normally be released within 30 days of submission of running bill complete in all respects with all documents. It is the responsibility of the contractor to make his own arrangements for making timely payments towards labour wages, statutory payments, outstanding dues etc., and other dues in the meanwhile."

- Chapter VI: Material Handling, Storage & Preservation of SCC- Civil & Structural is not applicable

Sl. No.: 09

SCCCl. No.	Existing Clause	Modified Clause
4.2.1.7	In the event of contractor failing to arrange the required tools, plants, machinery, equipment, material or non-availability of the same owing to breakdown, **BHEL will make alternative arrangement at the risk and cost of the contractor.....**	In the event of contractor failing to arrange the required tools, plants, machinery, equipment, material or non-availability of the same owing to breakdown, **BHEL can deploy own /hired / otherwise arrange resources and recover the expenses incurred from the dues payable to contractor. Recoveries shall be actual expenses incurred plus 5% overheads or as defined in TCC.....**
4.2.2.5	..... In case of any lapses on the part of the contractor, BHEL at its own discretion shall get the servicing / repair of equipment done **at the risk and cost of the contractor along with BHEL overheads.....**	.....In case of any lapses on the part of the contractor, BHEL at its own discretion shall get the servicing / repair of equipment done **and recover the expenses incurred from the dues payable to contractor. Recoveries shall be actual expenses incurred plus 5% overheads or as defined in TCC.....**.....
5.14	.....If at any time, it is found that the contractor is not in a position to deploy the required engineers/ supervisors/ workmen due to any reason, BHEL shall have the option to make alternate arrangements **at the contractor's risk and cost. The expenditure incurred along with BHEL overheads thereon shall be recovered from the contractor.**	.....If at any time, it is found that the contractor is not in a position to deploy the required engineers / supervisors / workmen due to any reason, BHEL shall have the option to make alternate arrangements **and recover the expenses incurred from the dues payable to contractor. Recoveries shall be actual expenses incurred plus 5% overheads or as defined in TCC.**
6.1.11	If the material belonging to the contractor are stored in area other than those earmarked for his operation the engineer will have the right to get it moved to the area earmarked for the contractor **at the contractor's risk and cost**	If the material belonging to the contractor are stored in area other than those earmarked for his operation the engineer will have the right to get it moved to the area earmarked for the contractor **and recover the expenses incurred from the dues payable to contractor. Recoveries shall be actual expenses incurred plus 5% overheads or as defined in TCC.**

GUIDELINES FOR REVERSE AUCTION - 2024

(AA:SSP:RA:00 dated 05.12.2024)

BHEL, New Delhi

Guidelines for Reverse Auction – 2024

Doc. No. AA:SSP:RA:00
Dated: 05.12.2024

1.0 Scope

This document describes the guidelines to be followed by BHEL for conducting Reverse Auction (RA) for procurement of material/ works/ services. The RA shall follow the philosophy of English Reverse (No ties).

English Reverse (No ties) is a type of auction where the starting price and bid decrement are announced before start of online reverse auction. The interested bidders can thereupon start bidding in an iterative process wherein the lowest bidder at any given moment can be displaced by an even lower bid of a competing bidder, within a given time frame. The bidding is with reference to the current lowest bid in the reverse auction. All bidders will see the current lowest quoted price and their rank. The term 'No ties' is used since more than one bidder cannot give an identical price, at a given instant, during the reverse auction. In other words, there shall never be a tie in the bids.

3.0 Upfront declaration in NIT

Decision to go for RA would be taken before floating of the tender. In case it is decided to go for RA, same shall be declared upfront in NIT by inserting the following **clause:**

"BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among the techno-commercially qualified bidders.

Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed price bid along with applicable loading, if any, shall be considered for ranking."

6.0 Business rules for RA

Model Annexure-I is attached.

7.0 Role of Service Provider

(1) Acknowledge the receipt of mandate from BHEL.
(2) Contact the bidders, provide business rules and train them, as required.
(3) Get the process compliance form (annexure III) signed by all the

participating bidders before RA event.

(4) Conduct the event as per the contract and business rules.

(5) Submit the Login Reports, Results, History sheet and authorized final bid from the bidders.

(6) To obtain price breakup from successful bidder and submit the same to BHEL.

10.0 Reverse Auction Process

10.1. Reverse Auction will be conducted if two or more bidders are techno-commercially qualified.

10.2. Wherever RA is opted in a tender, the techno-commercially qualified H1 will not be allowed to participate in RA. In case more than one H1 bidder quote the same rate, the Price Offer received last, as per the time log of the Portal, shall be removed first, on the principle of last in, first out by the system.

10.3. However, H1 will be allowed to participate in RA in the following cases:

a) If number of techno-commercially qualified bidders are only 2 or 3.

b) In case Primary product of only one OEM is left in contention for participation in RA on elimination of H1.

c) For cases where there are more than 3 techno-commercially qualified bidders, if lowest bidder in sealed price bid is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE lowest bidder.

d) For cases where there are more than 3 techno-commercially qualified bidders, if lowest bidder in sealed price bid is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII lowest bidder.

10.4. Only those bidders who submit the online sealed bid within the scheduled time shall be eligible to participate further in the RA process.

10.7. During RA, all bidders will see their rank and current L1 price on the screen. Once the RA is done, the ranking status would be based on the last quoted price of the bidder(s) irrespective of the quote received in RA or sealed price bid.

10.8 No bidder shall be allowed to lower its bid below the current L1 by more than 5 decrements at one go.

13.0 Others

13.2 In case of enquiry through e-Procurement, the sealed electronic price bid (e-bid) is to be treated as sealed price bid.

13.3 BHEL will inform bidders the details of service provider who will provide business rules, all necessary training and assistance before commencement of online bidding.

13.4 Bidders will be advised to read the 'Business Rules' indicating details of RA event carefully, before reverse auction event.

---XXX---

Guidelines for Reverse Auction – 2024

Doc. No. AA:SSP:RA:00
Dated: 05.12.2024

Business Rules for Reverse Auction

Annexure – I

This has reference to tender no ***{tender number….date…}***. BHEL shall finalise the Rates for the supply of *{item name}* through Reverse Auction mode. BHEL has made arrangement with M/s. *{Service provider},* who shall be BHEL's authorized service provider for the same. Bidders should go through the instructions given below and submit acceptance of the same.

The technical & commercial terms are as per (a) BHEL Tender Enq. No. {…} dated {...}, (b) Bidders' technical & commercial bid (in case of two part bid) and (c) subsequent correspondences between BHEL and the bidders, if any.

1. Procedure of Reverse Auctioning

i. Price bids of all techno-commercially qualified bidders shall be opened.

ii. **Reverse Auction**: The 'bid decrement' will be decided by BHEL.

iii. The lowest bidder in sealed price bid shall be shown as current L1 automatically by the system and no acceptance of that price is required. System shall have the provision to indicate this bid as current L1.

iv. Bidders by offering a minimum bid decrement or the multiples thereof can displace a standing lowest bid and become "L1" and this continues as an iterative process. However, no bidder shall be allowed to lower its bid below the current L1 by more than 5 decrements at one go.

v. After the completion of the reverse auction, the Closing Price shall be available for further processing.

vi. Wherever the evaluation is done on total cost basis, after Reverse Auction, prices of individual line items shall be reduced on pro-rata basis.

2. Schedule for reverse auction: The Reverse Auction is tentatively scheduled on *{date}: ;{start time}: ;{Close Time: }*.

3. Auction extension time: If a bidder places a bid in the last {…} minutes of closing of the Reverse Auction and if that bid gets accepted, then the auction's duration shall get extended automatically for another {…} minutes,