

Clarification No.1 to purchase specifiaiton

BHEL replies **(in red font)** are provided below for vendor queries

VENDOR Query : Request you to provide calibration ranges for below tags.

UPPUR 2X800MW

SL NO	KKS_TAG	SENSR_TYPE	OP_PRES S	UNIT PRESS	Medium	RANGE	UNIT RANGE	REMARKS	SOURCE	Unit-1 qty	Unit-2 qty
388	10HCB01CF001	FT	30	kg/cm ₂	STEAM		T/Hr	DP=0-50000mmWC	EDN	1	1

						0-3					
389	10HCB02CF001	FT	30	kg/cm ₂	STEAM	0-10	T/Hr	DP=0-40000mmWC	EDN	1	1
390	10HCB03CP001	PT	30	kg/cm ₂	STEAM	0-60	Kg/cm ₂		EDN	1	1
391	10HCB05CF001	FT	30	kg/cm ₂	STEAM	0-10	T/Hr	DP=0-40000mmWC	EDN	1	1
392	10HCB04CF001	FT	30	kg/cm ₂	STEAM	0-4	T/Hr	DP=0-18000mmWC	EDN	1	1
393	10HCB06CF001	FT	30	kg/cm ₂	STEAM	0-4	T/Hr	DP=0-18000mmWC	EDN	1	1
416	10HJP95CP001	PT	5	kg/cm ₂	WATER	0-10	Kg/cm ₂		EDN	1	1

NORTH CHENNAI 1X800MW

SL NO	KKS_TAG	SENSR_TYPE	OP_PRESS	UNIT PRESS	Medium	RANGE	UNIT RANGE	REMARKS	SOURCE	Unit-1 qty	Unit-2 qty
388	10HCB01CF001	FT	30	kg/cm²	STEAM	T/Hr		DP=0-50000mmWC	EDN	1	1

						0-3					
389	10HCB02CF001	FT	30	kg/cm ²	STEAM	0-10	T/Hr	DP=0-40000mmWC	EDN	1	1
390	10HCB03CP001	PT	30	kg/cm ²	STEAM	0-60	Kg/cm2		EDN	1	1
391	10HCB05CF001	FT	30	kg/cm ²	STEAM	0-10	T/Hr	DP=0-40000mmWC	EDN	1	1
392	10HCB04CF001	FT	30	kg/cm ²	STEAM	0-4	T/Hr	DP=0-18000mmWC	EDN	1	1
393	10HCB06CF001	FT	30	kg/cm ²	STEAM	0-4	T/Hr	DP=0-18000mmWC	EDN	1	1

416	10HJP95CP001	PT	5	kg/cm ²	WATER	0-10	Kg/cm2		EDN	1	1
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2. Subjected RFQ technical specification mentioned as clause no 3.3 Accuracy :

(a) $\pm 0.04\%$ of calibration span or better(BTG)

(b) $\pm 0.065\%$ of calibration span or better(BOP)

VENDOR Query: There is no BOM breakup for BTG package and BOP package.

BHEL reply : With reference to "SOURCE" column in the spec. BOM, "EDN" tags refer to BTG package & others("PEM" and "AUX BOILER") refer to BOP package. Accordingly, transmitter model selection to be done as per specification.

Note : Due to latest revision of inputs recd recently,some changes in UPPUR 2X800MW BOM are listed and attached.Same may please be communicated to all the vendors whom enquiry has been sent for the subject RFQ.

Changes in BOM of electronic transmitters for Uppur 2X800MW project

TAGS WITH QUANTITIES TO BE MODIFIED												
BOM SL NO	KKS_TAG	SENSR_TY PE	DESC	Medium	OP_PRESS	UNIT PRESS	RANGE	UNIT RANGE	SOURCE	Unit-1 qty	Unit-2 qty	Remarks
394	10HJ10CP001	PT	PRESSURE AT HSD PUMP HOUSE INLET	HSD	0	kg/cm²	(-1) to 2	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
395	10HJ11CP001	DPT	DIFF. PRESSURE ACROSS STRAINER AT HSD PUMP INLET	HSD	0	kg/cm²	0-1	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
396	10HJ12CP001	DPT	DIFF. PRESSURE ACROSS STRAINER AT HSD PUMP INLET	HSD	0	kg/cm²	0-1	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
397	10HJ11CP002	PT	PRESSURE AT HSD PUMP INLET	HSD	0	kg/cm²	(-1) to 2	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
398	10HJ12CP002	PT	PRESSURE AT HSD PUMP INLET	HSD	0	kg/cm²	(-1) to 2	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
399	10HJF13CP001	PT	PRESSURE AT HSD PUMP OUTLET COMMON LINE	HSD	25	kg/cm²	0-40	kg/cm²	EDN	1	1	Tag to be changed as 90HJF18CP001. Also, qty for unit-1 is 1 and qty for unit-2 is nil
400	10HJF13CP002	PT	PRESSURE AT HSD PUMP OUTLET COMMON LINE	HSD	25	kg/cm²	0-40	kg/cm²	EDN	1	1	Tag to be changed as 90HJF18CP002. Also, qty for unit-1 is 1 and qty for unit-2 is nil
401	10HJF13CP003	PT	PRESSURE AT HSD PUMP OUTLET COMMON LINE	HSD	25	kg/cm²	0-40	kg/cm²	EDN	1	1	Tag to be changed as 90HJF18CP003. Also, qty for unit-1 is 1 and qty for unit-2 is nil
402	10HJF28CP001	DPT	DIFF. PRESSURE ACROSS STRAINER AT DRAIN OIL PUMP INLET (PUMP HOUSE)	HFO	0	kg/cm²	0-1	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
403	10HJF40CP001	PT	PRESSURE AT HFO PUMP HOUSE INLET	HFO	0	kg/cm²	(-1) to 2	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
404	10HJF40CP002	PT	PRESSURE AT HFO PUMP HOUSE INLET	HFO	0	kg/cm²	(-1) to 2	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
405	10HJF41CP001	DPT	DIFF. PRESSURE ACROSS STRAINER AT HFO PUMP INLET	HFO	0	kg/cm²	0-1	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
406	10HJF42CP001	DPT	DIFF. PRESSURE ACROSS STRAINER AT HFO PUMP INLET	HFO	0	kg/cm²	0-1	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
407	10HJF41CP002	PT	PRESSURE AT HFO PUMP INLET	HFO	0	kg/cm²	(-1) to 2	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
408	10HJF42CP002	PT	PRESSURE AT HFO PUMP INLET	HFO	0	kg/cm²	(-1) to 2	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
409	10HJF50CP001	PT	PRESSURE AT HFO PUMP OUTLET COMMON LINE	HFO	30	kg/cm²	0-50	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
410	10HJF50CP002	PT	PRESSURE AT HFO PUMP OUTLET COMMON LINE	HFO	30	kg/cm²	0-50	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
413	10HJF60CP001	PT	PRESSURE AT HFO HEATER COMMON OUTLET	HFO	28	kg/cm²	0-50	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
414	10HJF60CP002	PT	PRESSURE AT HFO HEATER COMMON OUTLET	HFO	28	kg/cm²	0-50	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
415	10HJF60CP003	PT	PRESSURE AT HFO HEATER COMMON OUTLET	HFO	28	kg/cm²	0-50	kg/cm²	EDN	1	1	Tag prefix to be changed as 90. Also, qty for unit-1 is 1 and qty for unit-2 is nil
60	HBK10CP004	PT	FURNACE PRESS - L	FLUE GAS	-5	mmWC	6-125 to 25	mmWC	PEM	1	1	Range to be corrected as (-1250 to 250mmWC, instead of (-125 to 25mmWC.
374	10HBK10CP001	DPT	FURNACE TO WINDBOX DIFF. PRESS. - LEFT	SEC. AIR / FLUE GAS	-5/ 102	mmWC	0-250	mmWC	EDN	1	1	Tag to be changed as 10HBK10CP002.

TAGS TO BE DELETED												
SL_NO	TAG_1	TYPE_OF_INST	DESCRIPTION	MEDIUM	OP_PRESS	UNIT_OF_PRESS	RANGE_OF_PY_INST	UNIT_OF_PY_INST	SCOPE	Unit-1 qty	Unit-2 qty	Remarks
411	10HJF51CP001	DPT	DIFF. PRESS ACROSS STRAINER AT HFO HEATER-A OUTLET	HFO	0	kg/cm²	0-1	kg/cm²	EDN	1	1	To be deleted.
412	10HJF52CP001	DPT	DIFF. PRESS ACROSS STRAINER AT HFO HEATER-B OUTLET	HFO	0	kg/cm²	0-1	kg/cm²	EDN	1	1	To be deleted.

TAGS(NEW) TO BE ADDED												
SL_NO	TAG_1	TYPE_OF_INST	DESCRIPTION	MEDIUM	OP_PRESS	UNIT_OF_PRESS	RANGE_OF_PY_INST	UNIT_OF_PY_INST	SCOPE	Unit-1 qty	Unit-2 qty	Remarks
	10HFW20CP002	PDT	SEAL AIR FAN DISCHARGE/ CPA HEADER DIFF. PRESSURE	SEAL AIR	964/744	mmWC	0-600	mmWC	PEM	1	1	Newly added
	10HFW21CP001	PDT	SEAL AIR TO UNDER BOWL DIFF. PRESSURE MILL A	SEAL AIR	964/725	mmWC	0-500	mmWC	PEM	1	1	Newly added
	10HFW22CP001	PDT	SEAL AIR TO UNDER BOWL DIFF. PRESSURE MILL B	SEAL AIR	964/725	mmWC	0-500	mmWC	PEM	1	1	Newly added
	10HFW23CP001	PDT	SEAL AIR TO UNDER BOWL DIFF. PRESSURE MILL C	SEAL AIR	964/725	mmWC	0-500	mmWC	PEM	1	1	Newly added
	10HFW24CP001	PDT	SEAL AIR TO UNDER BOWL DIFF. PRESSURE MILL D	SEAL AIR	964/725	mmWC	0-500	mmWC	PEM	1	1	Newly added
	10HFW25CP001	PDT	SEAL AIR TO UNDER BOWL DIFF. PRESSURE MILL E	SEAL AIR	964/725	mmWC	0-500	mmWC	PEM	1	1	Newly added
	10HFW26CP001	PDT	SEAL AIR TO UNDER BOWL DIFF. PRESSURE MILL F	SEAL AIR	964/725	mmWC	0-500	mmWC	PEM	1	1	Newly added
	10HFW27CP001	PDT	SEAL AIR TO UNDER BOWL DIFF. PRESSURE MILL G	SEAL AIR	964/725	mmWC	0-500	mmWC	PEM	1	1	Newly added
	10HFW28CP001	PDT	SEAL AIR TO UNDER BOWL DIFF. PRESSURE MILL H	SEAL AIR	964/725	mmWC	0-500	mmWC	PEM	1	1	Newly added
	10HFW29CP001	PDT	SEAL AIR TO UNDER BOWL DIFF. PRESSURE MILL I	SEAL AIR	964/725	mmWC	0-500	mmWC	PEM	1	1	Newly added
	10LAE70CP001	PT	SH DSH-1 SPRAY WATER PRESSURE - AFTER COMMON BLOCK VALVE	WATER	332.49	kg/cm²	0-450	kg/cm²	PEM	1	1	Newly added
	10LAE90CP001	PT	SH DeSH-2 SPRAY WATER PRESSURE - AFTER COMMON BLOCK VALVE	WATER	332.22	kg/cm²	0-450	kg/cm²	PEM	1	1	Newly added
	10LAE20CP001	PT	RH/DSH SPRAY WATER PRESSURE - AFTER COMMON BLOCK VALVE	WATER	113.87	kg/cm²	0-150	kg/cm²	PEM	1	1	Newly added
	10HC800CP001	PT	SB STEAM PRESSURE BEFORE SBPVR	STEAM	291.4	kg/cm²	0-500	kg/cm²	EDN	1	1	Newly added
	10HLA20CP002	PDT	DP ACROSS APH A - SECONDARY AIR LINE	SEC. AIR	284 / 186	mmWC	0-250	mmWC	PEM	1	1	Newly added
	10HLA25CP002	PDT	DP ACROSS APH B - SECONDARY AIR LINE	SEC. AIR	284 / 186	mmWC	0-250	mmWC	PEM	1	1	Newly added
	10HFE30CP002	PDT	DP ACROSS APH A - PRIMARY AIR LINE	PY. AIR	914/ 886	mmWC	0 - 75	mmWC	PEM	1	1	Newly added
	10HFE35CP002	PDT	DP ACROSS APH B - PRIMARY AIR LINE	PY. AIR	914/ 886	mmWC	0 - 75	mmWC	PEM	1	1	Newly added
	10HNA10CP002	PDT	DP ACROSS APH A - FLUE GAS LINE	FLUE GAS	-150/ -275	mmWC	0 - 250	mmWC	PEM	1	1	Newly added
	10HNA20CP002	PDT	DP ACROSS APH B - FLUE GAS LINE	FLUE GAS	-150/ -275	mmWC	0 - 250	mmWC	PEM	1	1	Newly added
	90HJF13CP001	DPT	DIFF. PRESSURE ACROSS STRAINER AT HSD PUMP INLET	HSD	0	kg/cm²	0-1	kg/cm²	EDN	1	0	Newly added
	90HJF13CP002	PT	PRESSURE AT HSD PUMP INLET	HSD	0	kg/cm²	(-1) to 2	kg/cm²	EDN	1	0	Newly added
	90HJF43CP001	DPT	DIFF. PRESSURE ACROSS STRAINER AT HFO PUMP INLET	HFO	0	kg/cm²	0-1	kg/cm²	EDN	1	0	Newly added
	90HJF43CP002	PT	PRESSURE AT HFO PUMP INLET	HFO	0	kg/cm²	(-1) to 2	kg/cm²	EDN	1	0	Newly added

Clarification-2

Bidders to note the following clarification on purchase specification for offer submission:

Please note that accuracy shall be

(a) $\pm 0.2\%$ for remote seal, $\pm 0.04\%$ for BTG package (tags with Scope as EDN in spec BOM), & $\pm 0.065\%$ for other tags of spec BOM, in general.

(b) For very low pressure applications (i.e for ranges $\leq$ or equal to 500mmWC) & for capillary type remote seal applications where above requirement indicated in (a) is not met by vendor, vendor to quote transmitter models with best option available with them meeting the specification requirement to the extent possible.

Also,

(1) If vendor has quoted transmitter model nearest to the specification requirement and at later stage if it is found that vendor is having better model meeting the specification requirement other than quoted model then quoted transmitter models shall be replaced with available better model without any financial implication to BHEL.

(2) 5-point calibration is mandatory for all transmitters.

All other parameters shall be as per original purchase sections.