



MAIN SUPPLIER BHEL-PIPING CENTRE 	MANUFACTURER'S NAME AND ADDRESS	TENDER QUALITY PLAN							
		ITEM : COMBINED AUX. PRDS CONTROL VALVE		QP NO. PC- PRDS CV-QP00 REV.NO.:00		PROJECT : NEW NEYVELI (1X500 MW)			
						CUSTOMER :			
				DATE: 30/05/2016		PAGE: 1 OF 2			

SL No	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT #	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY		REMARKS
1	2	3	4	5	6	7	8	9	*	**	
								D	M	C	

1.0 MATERIAL												
1.1	BODY, BONNET – CASTING / FORGING, STEM, DISC, SEAT	CHEMICAL & MECHANICAL PROPERTIES		REVIEW OF MTC	100 %	APPROVED DRAWING / DATASHEET / MATERIAL SPECIFICATION		MTC	√	P	V	
		SOUNDNESS		RT/UT FOR BODY, UT FOR BONNET	100 %	ASME B 16.34		IR	√	P	V	ONLY FOR RATING 900 & ABOVE
				UT FOR DIA ≥ 50 mm	100 %	ASME B 16.34			√	P	V	
		SURFACE EXAMINATION AFTER MACHINING		MT	100 %	ASME B 16.34		IR	√	P	V	
		DIMENSION		MEASUREMENT	100 %	APPROVED DRAWING / DATASHEET		IR				
1.2	FASTENERS	CHEMICAL & MECHANICAL PROPERTIES		CHEMICAL & MECHANICAL		APPROVED DRAWING / DATASHEET / MATERIAL SPECIFICATION		MTC	√	P	V	
1.3	ACCESSORIES	VERIFICATION OF TC		TC REVIEW	100 %	APPROVED DRAWING / DATASHEET		TC	√	P	V	
2.0 INPROCESS INSPECTION												
2.1	MACHINING OF BODY INTERNALS	DIMENSION		MEASUREMENT	100 %	APPROVED DRAWING		IR	-	P	-	
		SURFACE DEFECTS		MT/PT ON MACHINED SURFACES	100% @	ASME SEC V	ASME SEC VIII – DIVISION 1	IR	√	P	-	@ ALL ACCESSIBLE AREAS
		HARDFACING (IF APPLICABLE)		HARDNESS MEASUREMENT		MANUFACTURER STANDARD		IR	√	P	V	
2.2	WELDING	a) WELDING PARAMETER - WPS, PQR		REVIEW OF RECORDS	100 %	ASME SEC IX	ASME SEC IX	WPS, PQR	√	P	V	
		b) WELDER PERFROMANCE - WPQ		REVIEW OF RECORDS	100 %	IBR	IBR	WPQ	√	P	V	
		c) NDT – RT ON BUTT WELD		NDE	100 %	ASME SEC V / VIII	ASME SEC VIII – DIVISION 1	IR	√	P	V	
		d) LPI ON FILLET WELD		NDE	100 %	ASME SEC V / VIII	ASME SEC VIII – DIVISION 1	IR	√	P	V	
2.3	PWHT	TIME & TEMP CONTROL		REVIEW OF HT CHART	100 %	HT PROCEDURE		RECORD	√	P	V	
3.0 FINAL INSPECTION												
3.1	BODY MOUNT LEAKAGE TEST	LEAKAGE TEST		HYDRO TEST	100 %	ASME B 16.34 / APPROVED DATA SHEET		TC	√	P	W	IBR FORM III C TO BE PROVIDED

		LEGEND: * RECORDS, INDENTIFIED WITH “TICK” (√) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION. CLASS : A – CRITICAL, B- MAJOR, C-MINOR ** M: MANUFACTURER/SUB-SUPPLIER C: MAIN SUPPLIER(BHEL/BHEL AIA)	DOC. NO.:		REV..... CAT.....	
MANUFACTURER/ SUB-SUPPLIER	MAIN-SUPPLIER					
SIGNATURE		P: PERFORM W: WITNESS V: VERIFICATION. AS APPROPRIATE		REVIEWED BY	APPROVED BY	APPROVAL SEAL


MAIN SUPPLIER BHEL-PIPING CENTRE 	MANUFACTURER'S NAME AND ADDRESS	TENDER QUALITY PLAN		
		ITEM : COMBINED AUX. PRDS CONTROL VALVE	QP NO. PC- PRDS CV-QP00 REV.NO.:00	PROJECT : NEW NEYVELI (1X500 MW)
				CUSTOMER :
		DATE: 30/05/2016		
		PAGE: 2 OF 2		

SL No	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT #	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY		REMARKS
								D	M	C		
1	2	3	4	5	6	7	8	9	*	**		
3.2	SEAT LEAKAGE TEST	LEAKAGE TEST	A	HYDRO TEST	100 %	FCI 70.2 / APPROVED DATA SHEET	TC	√	P	W		
3.3	FUNCTIONAL / PERFORMANCE TEST	STROKE TIME (OPEN / CLOSE), VALVE TRAVEL, HYSTERISIS, LINEARITY, REPEATABILITY	A	MEASUREMENT	100 %	APPROVED DRAWING / DATASHEET, MANUFACTURER STANDARD	TC	√	P	W		
3.4	CV TEST	VALVE CHARACTERISTICS	A	TYPE TEST	ONE / TYPE	APPROVED DRAWING / DATASHEET / ISA 75.02	TC	√	P	W/V	NOTE 1	
3.5	ACTUATOR	MAKE, MODEL, TAG AIR LEAKAGE TEST	A	VISUAL, PNEUMATIC TEST	100 %	APPROVED DATASHEET / MANUFACTURER STANDARD	TC	√	P	W		
3.6	FINAL INSPECTION	COMPLETENESS	B	VISUAL	100 %	APPROVED DRAWING / DATASHEET	IR	√	P	V		
		OVERALL DIMENSION	B	MEASUREMENT	100 %	APPROVED DRAWING / DATASHEET	IR					
4.0	PAINTING											
	PAINTING	SURFACE PREPARATION, APPEARANCE & DFT & SHADE	B	VISUAL & MEASUREMENT	100 %	APPROVED PAINTING SCHEME	IR	√	P	V		
5.0	PACKING & PRESERVATION											
	PACKING & MARKING	SURFACE CONDITION, CLEANLINESS, MARKING, END CAP	B	VISUAL	100 %	MANUFACTURER'S STANDARD / PURCHASE SPECIFICATION/ PURCHASE ORDER	IR	-	P	V		

NOTE :


1. CV TEST CERTIFICATE WILL BE SUBJECTED TO BHEL REVIEW. INCASE, VALID CERTIFICATE NOT AVAILABLE, TYPE TEST TO BE PERFORMED IN FCRI / ANY GOVT / NABL APPROVED LAB / BHEL APPROVED LAB.

		LEGEND: * RECORDS, INDENTIFIED WITH "TICK" (√) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION. CLASS : A - CRITICAL, B- MAJOR, C-MINOR ** M: MANUFACTURER/SUB-SUPPLIER C: MAIN SUPPLIER(BHEL/BHEL AIA) P: PERFORM W: WITNESS V: VERIFICATION. AS APPROPRIATE	DOC. NO.:		REV..... CAT.....	
MANUFACTURER/ SUB-SUPPLIER	MAIN-SUPPLIER					
SIGNATURE				REVIEWED BY	APPROVED BY	APPROVAL SEAL

MAIN SUPPLIER BHEL-PIPING CENTRE 	MANUFACTURER'S NAME AND ADDRESS	TENDER QUALITY PLAN							
		ITEM : SPRAY CONTROL VALVE & PRESSURE CONTROL VALVE		QP NO. PC-CV-QP00 REV.NO.:00		PROJECT : NEW NEYVELI (1X500 MW)			
						CUSTOMER :			
				DATE: 04/09/2015		PAGE: 1 OF 2			

SL No	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT #	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY		REMARKS
									*	**		
1	2	3	4	5	6	7	8	9	D	M	C	
1.0 MATERIAL												
1.1	BODY, BONNET – CASTING / FORGING, STEM, DISC, SEAT	CHEMICAL & MECHANICAL PROPERTIES		REVIEW OF MTC	100 %	APPROVED DRAWING / DATASHEET / MATERIAL SPECIFICATION		MTC	√	P	V	
		SOUNDNESS		RT/UT FOR BODY, UT FOR BONNET	100 %	ASME B 16.34		IR	√	P	V	ONLY FOR RATING 900 & ABOVE
				UT FOR DIA ≥ 50 mm	100 %	ASME B 16.34			√	P	V	
		SURFACE EXAMINATION AFTER MACHINING		MT	100 %	ASME B 16.34		IR	√	P	V	
		DIMENSION		MEASUREMENT	100 %	APPROVED DRAWING / DATASHEET		IR				
1.2	FASTENERS	CHEMICAL & MECHANICAL PROPERTIES		CHEMICAL & MECHANICAL		APPROVED DRAWING / DATASHEET / MATERIAL SPECIFICATION		MTC	√	P	V	
1.3	ACCESSORIES	VERIFICATION OF TC		TC REVIEW	100 %	APPROVED DRAWING / DATASHEET		TC	√	P	V	
2.0 INPROCESS INSPECTION												
2.1	MACHINING OF BODY INTERNALS	DIMENSION		MEASUREMENT	100 %	APPROVED DRAWING		IR	-	P	-	
		SURFACE DEFECTS		MT/PT ON MACHINED SURFACES	100% @	ASME SEC V	ASME SEC VIII – DIVISION 1	IR	√	P	-	@ ALL ACCESSIBLE AREAS
2.2	WELDING	a) WELDING PARAMETER - WPS, PQR		REVIEW OF RECORDS	100 %	ASME SEC IX	ASME SEC IX	WPS, PQR	√	P	V	
		b) WELDER PERFORMANCE - WPQ		REVIEW OF RECORDS	100 %	IBR	IBR	WPQ	√	P	V	
		c) NDT – RT ON BUTT WELD		NDE	100 %	ASME SEC V / VIII	ASME SEC VIII – DIVISION 1	IR	√	P	V	
		d) LPI ON FILLET WELD		NDE	100 %	ASME SEC V / VIII	ASME SEC VIII – DIVISION 1	IR	√	P	V	
2.3	PWHT	TIME & TEMP CONTROL		REVIEW OF HT CHART	100 %	HT PROCEDURE		RECORD	√	P	V	
3.0 FINAL INSPECTION												
3.1	BODY MOUNT LEAKAGE TEST	LEAKAGE TEST		HYDRO TEST	100 %	ASME B 16.34 / APPROVED DATA SHEET		TC	√	P	W	IBR FORM III C TO BE PROVIDED

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MANUFACTURER/ SUB-SUPPLIER	MAIN-SUPPLIER		REVIEWED BY		APPROVED BY	APPROVAL SEAL
SIGNATURE						


MAIN SUPPLIER BHEL-PIPING CENTRE 	MANUFACTURER'S NAME AND ADDRESS	TENDER QUALITY PLAN		
		ITEM : SPRAY CONTROL VALVE & PRESSURE CONTROL VALVE	QP NO. PC-CV-QP00 REV.NO.:00	PROJECT : NEW NEYVELI (1X500 MW)
		DATE: 04/09/2015	CUSTOMER :	PAGE: 2 OF 2

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1	2	3	4	5	6	7	8	9	*	**
									D	M C
3.2	SEAT LEAKAGE TEST	LEAKAGE TEST	A	HYDRO TEST	100 %	FCI 70.2 / APPROVED DATA SHEET		TC	√	P W
3.3	FUNCTIONAL / PERFORMANCE TEST	STROKE TIME (OPEN / CLOSE), VALVE TRAVEL, HYSTERISIS, LINEARITY, REPEATABILITY	A	MEASUREMENT	100 %	APPROVED DRAWING / DATASHEET, MANUFACTURER STANDARD		TC	√	P W
3.4	CV TEST	VALVE CHARACTERISTICS	A	TYPE TEST	ONE / TYPE	APPROVED DRAWING / DATASHEET / ISA 75.02		TC	√	P W/V NOTE 1
3.5	ACTUATOR	MAKE, MODEL, TAG AIR LEAKAGE TEST	A	VISUAL, PNEUMATIC TEST	100 %	APPROVED DATASHEET / MANUFACTURER STANDARD		TC	√	P W
3.6	FINAL INSPECTION	COMPLETENESS	B	VISUAL	100 %	APPROVED DRAWING / DATASHEET		IR	√	P V
		OVERALL DIMENSION	B	MEASUREMENT	100 %	APPROVED DRAWING / DATASHEET		IR		
4.0	PAINTING									
	PAINTING	SURFACE PREPARATION, APPEARANCE & DFT & SHADE	B	VISUAL & MEASUREMENT	100 %	MANUFACTURER'S STANDARD / PURCHASE SPECIFICATION/ PURCHASE ORDER		IR	√	P V
5.0	PACKING & PRESERVATION									
	PACKING & MARKING	SURFACE CONDITION, CLEANLINESS, MARKING, END CAP	B	VISUAL	100 %	MANUFACTURER'S STANDARD / PURCHASE SPECIFICATION/ PURCHASE ORDER		IR	-	P V

NOTE :

1. CV TEST CERTIFICATE WILL BE SUBJECTED TO BHEL REVIEW. INCASE, VALID CERTIFICATE NOT AVAILABLE, TYPE TEST TO BE PERFORMED IN FCRI / ANY GOVT / NABL APPROVED LAB / BHEL APPROVED LAB.

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MANUFACTURER/ SUB-SUPPLIER	MAIN-SUPPLIER		REVIEWED BY	APPROVED BY	APPROVAL SEAL	
SIGNATURE						

MAIN SUPPLIER BHEL-PIPING CENTRE 	MANUFACTURER'S NAME AND ADDRESS	TENDER QUALITY PLAN							
		ITEM : AUX. PRDS - LT DESUPERHEATER		QP NO. PC-DSH-QP00		PROJECT : NEW NEYVELI (1X500 MW)			
				REV.NO.:00		CUSTOMER :			
				DATE: 30/05//2016		PAGE: 1 OF 2			

SL No	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT #	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY		REMARKS
1	2	3	4	5	6	7	8	9	*	**		
									D	M	C	

1.0 MATERIAL

1.1	PIPE	CHEMICAL & MECHANICAL PROPERTIES SOUNDNESS – UT DIMENSION & VISUAL CHECK	B	REVIEW OF MTC & DIMENSIONAL REPORT	100 %	APPROVED DRAWING / DATASHEET / MATERIAL SPECIFICATION AND ASME B 16.34	MTC, IBR FORM III D / III A, AS APPLICABLE	√	P	V		
		PMI FOR ALLOY STEEL	A	PMI	100 %	MATERIAL SPECIFICATION	IR	√	P	W@		
1.2	NOZZLE (FORGING)	CHEMICAL & MECHANICAL PROPERTIES -HARDNESS	B	REVIEW OF MTC	100 %	APPROVED DRAWING / DATASHEET / MATERIAL SPECIFICATION	MTC	√	P	V		
		SOUNDNESS	B	UT	100 %	ASME B 16.34	IR	√	P	V		

2.0 INPROCESS INSPECTION

2.1	MACHINING OF BODY INTERNALS	DIMENSION	B	MEASUREMENT	100 %	APPROVED DRAWING	IR	√	P	-		
		SURFACE DEFECTS	B	LPI ON MACHINED SURFACES	100%	ASME SEC V	ASME SEC VIII – DIVISION 1	√	P	-		
2.2	WELDING	WPS , PQR & WPQ	A	REVIEW OF RECORDS	100 %	ASME SEC IX / IBR	ASME SEC IX / IBR	√	P	V		
		c) NDT-RT ON BUTTWELD	B	RT	100 %	ASME SEC V	ASME SEC VIII – DIV 1	√	P	V		
		d) LPI ON FILLET WELD	B	LPI	100 %	ASME SEC V	ASME SEC VIII – DIV 1	√	P	V		
2.3	PWHT	TIME & TEMP CONTROL	B	REVIEW OF HT CHART	100 %	HT PROCEDURE	RECORD	√	P	V		
		MPI, UT, HARDNESS	B	NDE	100 %	ASME SEC V / VIII	ASME SEC VIII – DIV 1	√	P	V		

3.0 FINAL INSPECTION

3.1	ASSEMBLY LEAK TIGHTNESS TEST	HYDRO PRESSURE TEST	A	LEAKAGE TEST	100 %	ASME B 16.34 / APPROVED DATA SHEET	IR	√	P	W	IBR FORM III C TO BE PROVIDED	
3.2	FINAL INSPECTION	COMPLETENESS	B	VISUAL	100 %	APPROVED DRAWING / DATASHEET		√	P	W		
		DIMENSION	B	MEASUREMENT	100 %	APPROVED DRAWING / DATASHEET						

4.0 PAINTING

	PAINTING	SURFACE PREPARATION, APPEARANCE & DFT & SHADE	B	VISUAL & MEASUREMENT	100 %	MANUFACTURER'S STANDARD / PURCHASE SPECIFICATION / PURCHASE ORDER	IR	√	P	V		
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5.0 PACKING & PRESERVATION

	PACKING & MARKING	SURFACE CONDITION, CLEANLINESS, MARKING, END CAP	B	VISUAL	100 %	MANUFACTURER'S STANDARD / PURCHASE SPECIFICATION / PURCHASE ORDER	IR	-	P	V		
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		LEGEND: * RECORDS, IDENTIFIED WITH “TICK” (√) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION. CLASS : A-CRITICAL B-MAJOR C-MINOR ** M: MANUFACTURER/SUB-SUPPLIER C: MAIN SUPPLIER(BHEL/BHEL AIA) P: PERFORM W: WITNESS V: VERIFICATION. AS APPROPRIATE	DOC. NO.:		REV..... CAT.....	
MANUFACTURER/ SUB-SUPPLIER	MAIN-SUPPLIER					
SIGNATURE			REVIEWED BY	APPROVED BY	APPROVAL SEAL	