

PROJECT:	NSPCL ROURKELA PP-II Expansion Project (1x250 MW)						
DOC. TITLE	BOQ FOR FIRE PROTECTIONSYSTEM						
Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
12	WBFPS	PACKAGE	SPRAY	Orifice plate			
12.01	WBFPS	PACKAGE	SPRAY	Orifice plate : 150 NB	BHEL approved sources	Cat-III	
12.02	WBFPS	PACKAGE	SPRAY	Orifice plate : 100 NB	BHEL approved sources	Cat-III	
12.03	WBFPS	PACKAGE	SPRAY	Orifice plate : 80 NB	BHEL approved sources	Cat-III	
13	WBFPS	PACKAGE	SPRAY	15NB Ball Valve	BHEL approved sources	Cat-III	
16				Cabling Accessories			
16.1	WBFPS	PACKAGE	SPRAY	Gland (2 Nos for each cable)	BHEL approved sources	Cat-III	
16.2	WBFPS	PACKAGE	SPRAY	Lugs (4 Nos for each cable)	BHEL approved sources	Cat-III	
29				G.I SOCKET (ONE SIDE THREADED & ONE SIDE WELDABLE)			
29.01	WBFPS	PACKAGE	SPRAY	50NB G.I SOCKET	BHEL approved sources	Cat-III	
29.02	WBFPS	PACKAGE	SPRAY	40NB G.I SOCKET	BHEL approved sources	Cat-III	

SI. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
29.03	WBFPS	PACKAGE	SPRAY	32NB G.I SOCKET	BHEL approved sources	Cat-III	
29.04	WBFPS	PACKAGE	SPRAY	25NB G.I SOCKET	BHEL approved sources	Cat-III	
29.05	WBFPS	PACKAGE	SPRAY	20NB G.I SOCKET	BHEL approved sources	Cat-III	
29.06	WBFPS	PACKAGE	SPRAY	15NB G.I SOCKET	BHEL approved sources	Cat-III	
31				MS UNION			
31.1	WBFPS	PACKAGE	SPRAY	25NB MS UNION	BHEL approved sources	Cat-III	
33				G.I FLANGE			
33.01	WBFPS	PACKAGE	SPRAY	150NB for GI Flange	BHEL approved sources	Cat-III	
33.02	WBFPS	PACKAGE	SPRAY	100NB for GI Flange	BHEL approved sources	Cat-III	
33.03	WBFPS	PACKAGE	SPRAY	80NB for GI Flange	BHEL approved sources	Cat-III	
33.04	WBFPS	PACKAGE	SPRAY	65NB for GI Flange	BHEL approved sources	Cat-III	
33.05	WBFPS	PACKAGE	SPRAY	50NB for GI Flange	BHEL approved sources	Cat-III	
33.06	WBFPS	PACKAGE	SPRAY	40NB for GI Flange	BHEL approved sources	Cat-III	
33.07	WBFPS	PACKAGE	SPRAY	32NB for GI Flange	BHEL approved sources	Cat-III	
33.08	WBFPS	PACKAGE	SPRAY	25NB for GI Flange	BHEL approved sources	Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
34				M.S. FLANGE			
34.01	WBFPS	PACKAGE	SPRAY	150 NB M.S. FLANGE	BHEL approved sources	Cat-III	
34.02	WBFPS	PACKAGE	SPRAY	100 NB M.S. FLANGE	BHEL approved sources	Cat-III	
34.03	WBFPS	PACKAGE	SPRAY	80 NB M.S. FLANGE	BHEL approved sources	Cat-III	
34.04	WBFPS	PACKAGE	SPRAY	25 NB M.S. FLANGE	BHEL approved sources	Cat-III	
35				GASKET			
35.01	WBFPS	PACKAGE	SPRAY	150 NB GASKET	BHEL approved sources	Cat-III	
35.02	WBFPS	PACKAGE	SPRAY	100 NB GASKET	BHEL approved sources	Cat-III	
35.03	WBFPS	PACKAGE	SPRAY	80 NB GASKET	BHEL approved sources	Cat-III	
35.04	WBFPS	PACKAGE	SPRAY	65 NB GASKET	BHEL approved sources	Cat-III	
35.05	WBFPS	PACKAGE	SPRAY	50 NB GASKET	BHEL approved sources	Cat-III	
35.06	WBFPS	PACKAGE	SPRAY	40 NB GASKET	BHEL approved sources	Cat-III	
35.07	WBFPS	PACKAGE	SPRAY	32 NB GASKET	BHEL approved sources	Cat-III	
35.08	WBFPS	PACKAGE	SPRAY	25 NB GASKET	BHEL approved sources	Cat-III	
36				NUTS & BOLTS WITH WASHER			
36.01	WBFPS	PACKAGE	SPRAY	M20 X 90 Long (150NB PIPE) (8 HOLES)	BHEL approved sources	Cat-III	
36.02	WBFPS	PACKAGE	SPRAY	M16 X 90 Long (100NB PIPE) (8 HOLES)	BHEL approved sources	Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
36.03	WBFPS	PACKAGE	SPRAY	M16 X 85 Long (80NB PIPE) (4 HOLES)	BHEL approved sources	Cat-III	
36.04	WBFPS	PACKAGE	SPRAY	M16 X 75 Long (65NB PIPE) (4 HOLES)	BHEL approved sources	Cat-III	
36.05	WBFPS	PACKAGE	SPRAY	M16 X 70 Long (50NB PIPE) (4 HOLES)	BHEL approved sources	Cat-III	
36.06	WBFPS	PACKAGE	SPRAY	M12 X 65 Long (40NB PIPE) (4 HOLES)	BHEL approved sources	Cat-III	
36.07	WBFPS	PACKAGE	SPRAY	M12 X 65 Long (32NB PIPE) (4 HOLES)	BHEL approved sources	Cat-III	
36.08	WBFPS	PACKAGE	SPRAY	M12 X 55 Long (25NB PIPE) (4 HOLES)	BHEL approved sources	Cat-III	
36.09	WBFPS	PACKAGE	SPRAY	M12 X 50 Long (FOR PYLON PIPE) (4 HOLES)	BHEL approved sources	Cat-III	
39				STUD & BOLTS WITH WASHER			
39.01	WBFPS	PACKAGE	SPRAY	M20 X 150 Long (150NB PIPE) (8 HOLES)	BHEL approved sources	Cat-III	
39.02	WBFPS	PACKAGE	SPRAY	M16 X 140 Long (100NB PIPE) (8 HOLES)	BHEL approved sources	Cat-III	
39.03	WBFPS	PACKAGE	SPRAY	M16 X 130 Long (80NB PIPE)	BHEL approved sources	Cat-III	

SI. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
40				ANCHOR FASTENER			
40.01	WBFPS	PACKAGE	SPRAY	M16X100 ANCHOR FASTENER	BHEL approved sources	Cat-III	
40.02	WBFPS	PACKAGE	SPRAY	M10X100 ANCHOR FASTENER	BHEL approved sources	Cat-III	
40.03	WBFPS	PACKAGE	SPRAY	M12X150 ANCHOR FASTENER	BHEL approved sources	Cat-III	
41				M.S. BLIND FLANGE			
41.1	WBFPS	PACKAGE	SPRAY	25NB M.S. BLIND FLANGE	BHEL approved sources	Cat-III	
42				G.I BLIND FLANGE			
42.01	WBFPS	PACKAGE	SPRAY	150NB G.I BLIND FLANGE	BHEL approved sources	Cat-III	
42.02	WBFPS	PACKAGE	SPRAY	100 NB G.I BLIND FLANGE	BHEL approved sources	Cat-III	
42.03	WBFPS	PACKAGE	SPRAY	80 NB G.I BLIND FLANGE	BHEL approved sources	Cat-III	
42.04	WBFPS	PACKAGE	SPRAY	65 NB G.I BLIND FLANGE	BHEL approved sources	Cat-III	
42.05	WBFPS	PACKAGE	SPRAY	50 NB G.I BLIND FLANGE	BHEL approved sources	Cat-III	
42.06	WBFPS	PACKAGE	SPRAY	40 NB G.I BLIND FLANGE	BHEL approved sources	Cat-III	

SI. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
42.07	WBFPS	PACKAGE	SPRAY	32 NB G.I BLIND FLANGE	BHEL approved sources	Cat-III	
42.08	WBFPS	PACKAGE	SPRAY	25 NB G.I BLIND FLANGE	BHEL approved sources	Cat-III	
46				`U' BOLTS			
46.01	WBFPS	PACKAGE	SPRAY	12φ FOR 150NB `U' BOLTS	BHEL approved sources	Cat-III	
46.02	WBFPS	PACKAGE	SPRAY	10φ FOR 100NB `U' BOLTS	BHEL approved sources	Cat-III	
46.03	WBFPS	PACKAGE	SPRAY	10φ FOR 80NB `U' BOLTS	BHEL approved sources	Cat-III	
46.04	WBFPS	PACKAGE	SPRAY	8φ FOR 65NB `U' BOLTS	BHEL approved sources	Cat-III	
46.05	WBFPS	PACKAGE	SPRAY	8φ FOR 50NB `U' BOLTS	BHEL approved sources	Cat-III	
46.06	WBFPS	PACKAGE	SPRAY	6φ FOR 40NB `U' BOLTS	BHEL approved sources	Cat-III	
46.07	WBFPS	PACKAGE	SPRAY	6φ FOR 32NB `U' BOLTS	BHEL approved sources	Cat-III	
46.08	WBFPS	PACKAGE	SPRAY	6φ FOR 25NB `U' BOLTS	BHEL approved sources	Cat-III	
47				TIE ROD			
47.01	WBFPS	PACKAGE	SPRAY	8 DIA. TIE ROD	BHEL approved sources	Cat-III	
47.02	WBFPS	PACKAGE	SPRAY	10 DIA. TIE ROD	BHEL approved sources	Cat-III	
47.03	WBFPS	PACKAGE	SPRAY	12 DIA. TIE ROD	BHEL approved sources	Cat-III	
48				Paints & Primer for GI Pipes		Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
48.01	WBFPS	PACKAGE	SPRAY	Finish Paint qty (Ltr) (2 coat with 50 micron DFT each coat)	BERGER SHALIMER PAINTS JENSON & NICHOLSON KANSAI NEROLAC AKZO NOBEL ASIAN PAINTS	Cat-III	
48.02	WBFPS	PACKAGE	SPRAY	Thinner (15% of total paint Qty)		Cat-III	
48.03	WBFPS	PACKAGE	SPRAY	Primer qty (Ltr) (2 coat with 75 micron DFT total)		Cat-III	
48.04				Thinner (15% of total primer Qty)		Cat-III	
48.05	WBFPS	PACKAGE	SPRAY	intermdtiate qty (Ltr) (1 coat with 100 micron DFT total)		Cat-III	
48.06	WBFPS	PACKAGE	SPRAY	Thinner (15% of total intermediate qty)		Cat-III	
49	WBFPS	PACKAGE	SPRAY	Paints & Primer for ERW, MS black pipe			
				Finish Paint qty (Ltr) (2 coat with 50 micron DFT each coat)	BERGER SHALIMER PAINTS JENSON & NICHOLSON KANSAI NEROLAC AKZO NOBEL ASIAN PAINTS	Cat-III	
49.01	WBFPS	PACKAGE	SPRAY	Thinner in Ltr (15% of total finish paint)		Cat-III	
49.02	WBFPS	PACKAGE	SPRAY	Primer qty (Ltr) (2 coat with 75 micron DFT total)		Cat-III	
49.03	WBFPS	PACKAGE	SPRAY	Thinner in Ltr (15% of total primer qty)		Cat-III	
49.04	WBFPS	PACKAGE	SPRAY	Intermdtiate qty (Ltr) (1 coat with 100 micron DFT total)		Cat-III	
				Thinner in Ltr (15% of total intermediate qty)		Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
50				INSTRUMENT HOOK UP For Pressure Switch (To be mounted on Detection line and Spray line) WATER SPRAY SYSTEM (WITH DETECTION) - 132 No's			
50.01	WBFPS	PACKAGE	SPRAY	15NB Half Coupling	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
50.02	WBFPS	PACKAGE	SPRAY	15NB threaded Nipple (4") (1/2" NPT(M)x 1/2" NPT(M))	NSPCL/NTPC approved sources		
50.03	WBFPS	PACKAGE	SPRAY	15NB Ball Valve (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
50.04	WBFPS	PACKAGE	SPRAY	15 NB two way Gauge Cock Valve (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
51				INSTRUMENT HOOK UP For SOV			
51.01	WBFPS	PACKAGE	SPRAY	15NB Nipple (1/2" NPT(M)x 1/2" NPT(M))	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
51.02	WBFPS	PACKAGE	SPRAY	15NB Elbow 90 Deg (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
52				TOOLS AND TACKELS			
52.01	WBFPS	PACKAGE	SPRAY	Spanner	GEDORE TAPARIA	Cat-III	
52.02	WBFPS	PACKAGE	SPRAY	Pipe wrench	JHALANI PYE	Cat-III	
52.03	WBFPS	PACKAGE	SPRAY	Screw driver	GRIPHOLD STANLEY	Cat-III	
52.04	WBFPS	PACKAGE	SPRAY	Screw Spanner		Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
52.05	WBFPS	PACKAGE	SPRAY	Ring spanner		Cat-III	
54				HYDRANT-SPRAY PUMP WITH MOTOR ASSEMBLY			
54.01	WBFPS	PACKAGE	PUMPS	FOUNDATION BOLTS(M20 X 2.5 P X LENGTH 310 MM WITH NUTS) (8 NOS FOR EACH ASSEMBLY)	BHEL approved sources	Cat-III	
54.02	WBFPS	PACKAGE	PUMPS	MOTOR CANOPY WITH LEGS (1 NO FOR EACH MOTOR)	BHEL approved sources	Cat-III	
54.04	WBFPS	PACKAGE	PUMPS	PIPE NIPPLE [FOR PRESSURE GAUGE]	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
54.05	WBFPS	PACKAGE	PUMPS	COCK [FOR PRESSURE GAUGE]	NSPCL/NTPC approved sources		
55				HYDRANT-SPRAY PUMP WITH DIESEL ENGINE ASSEMBLY			
55.01	WBFPS	PACKAGE	PUMPS	FOUNDATION BOLTS(M20 X 2.5 P X LENGTH 310 MM WITH NUTS) (8 NOS FOR EACH ASSEMBLY)	BHEL approved sources	Cat-III	
55.06	WBFPS	PACKAGE	PUMPS	CHARGER CUM CONTROL PANEL	NSPCL/NTPC approved sources		Source to be controlled. Not to be part of Misc items.
55.07	WBFPS	PACKAGE	PUMPS	FUEL TANK	NSPCL/NTPC approved sources		To be supplied by supplier of DG supplier
55.08	WBFPS	PACKAGE	PUMPS	EXHAUST PIPE	NSPCL/NTPC approved sources		To be supplied by supplier of DG supplier
55.09	WBFPS	PACKAGE	PUMPS	BEND FOR EXHAUST PIPE	NSPCL/NTPC approved sources		To be supplied by supplier of DG supplier
55.12	WBFPS	PACKAGE	PUMPS	ELECTRIC OPERATED BARREL UNLOADING PUMP WITH DISCHARGE HOSE	BHEL approved sources	Cat-III	
55.13	WBFPS	PACKAGE	PUMPS	MANUAL OPERATED BARREL UNLOADING PUMP WITH DISCHARGE HOSE	BHEL approved sources	Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
56				COMMISSIONING SPARES FOR MOTOR DRIVEN & ENGINE DRIVEN HYDRANT-SPRAY PUMP			
56.01	WBFPS	PACKAGE	PUMPS	SET OF O RINGS	From NSPCL approved vendor		To be supplied by main equipment supplier.
56.02	WBFPS	PACKAGE	PUMPS	SET OF GASKETS	From NSPCL approved vendor		To be supplied by main equipment supplier.
57				COMMISSIONING SPARES FOR MOTOR DRIVEN & ENGINE DRIVEN HYDRANT-SPRAY PUMP			
57.01	WBFPS	PACKAGE	PUMPS	FOUNDATION BOLTS(M20 X 2.5 P X LENGTH 310 MM WITH NUTS) (8 NOS FOR EACH ASSEMBLY)			These items are not commissioning spares.
57.02	WBFPS	PACKAGE	PUMPS	MOTOR CANOPY WITH LEGS (1 NO FOR EACH MOTOR)			
57.04	WBFPS	PACKAGE	PUMPS	PIPE NIPPLE [FOR PRESSURE GAUGE]			
57.05	WBFPS	PACKAGE	PUMPS	COCK [FOR PRESSURE GAUGE]			
58				COMMISSIONING SPARES FOR HYDRANT JOCKEY PUMP WITH DRIVE ASSEMBLY			
58.01	WBFPS	PACKAGE	PUMPS	SET OF O RINGS	From NSPCL approved vendor		To be supplied by main equipment supplier.
58.02	WBFPS	PACKAGE	PUMPS	SET OF GASKETS	From NSPCL approved vendor		To be supplied by main equipment supplier.
59				SPRAY JOCKEY PUMP WITH MOTOR ASSEMBLY			

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
59.01	WBFPS	PACKAGE	PUMPS	FOUNDATION BOLTS(M20 X 2.5 P X LENGTH 310 MM WITH NUTS) (8 NOS FOR EACH ASSEMBLY)	BHEL approved sources	Cat-III	
59.02	WBFPS	PACKAGE	PUMPS	MOTOR CANOPY WITH LEGS (1 NO FOR EACH MOTOR)	BHEL approved sources	Cat-III	
59.04	WBFPS	PACKAGE	PUMPS	PIPE NIPPLE [FOR PRESSURE GAUGE]	NSPCL/NTPC approved sources	Cat-III	Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
59.05	WBFPS	PACKAGE	PUMPS	COCK [FOR PRESSURE GAUGE]	NSPCL/NTPC approved sources	Cat-III	
60				COMMISSIONING SPARES FOR SPRAY JOCKEY PUMP WITH DRIVE ASSEMBLY			
60.01	WBFPS	PACKAGE	PUMPS	SET OF O RINGS	From NSPCL approved vendor		To be supplied by main equipment supplier.
60.02	WBFPS	PACKAGE	PUMPS	SET OF GASKETS	From NSPCL approved vendor		To be supplied by main equipment supplier.
61				MAJOR ITEMS /EQUIPMENT FOR HYDRANT BASED COMPONENT PACKAGE OF			
61.18	WBFPS	PACKAGE	HYDRANT	AIR-COMPRESSOR ALONG WITH ALL NECESSARY INSTRUMENTATION AS A PACKAGE	From NSPCL approved vendor	Cat-I	BHEL to check applicability of this item for Rourkela PP-II Expn Project.
61.19	WBFPS	PACKAGE	HYDRANT	HYDRO-PNEUMATIC TANK ASSEMBLY	From NSPCL approved vendor	Cat-III	BHEL to check applicability of this item for Rourkela PP-II Expn Project.
61.21	WBFPS	PACKAGE	HYDRANT	SPANNER FOR HOSE STATION	BHEL approved sources	Cat-III	
61.22	WBFPS	PACKAGE	HYDRANT	HAMMER FOR HOSE STATION	BHEL approved sources	Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
61.23	WBFPS	PACKAGE	HYDRANT	SPECIAL TOOLS & TACKLES	GEDORE TAPARIA JHALANI PYE GRIPHOLD STANLEY	Cat-III	In stead of Hook-up, BHEL to indicate the item details similar to sl. No. 50 of the list . Seems these items are repeated under Sl. No. 62 to 71.
61.24	WBFPS	PACKAGE	HYDRANT	INSTRUMENT HOOK UP FOR PRESSURE GAUGE			
61.25	WBFPS	PACKAGE	HYDRANT	INSTRUMENT HOOK UP FOR PRESSURE TRANSMITTER	BHEL approved sources	Cat-III	
61.26	WBFPS	PACKAGE	HYDRANT	INSTRUMENT HOOK UP FOR PRESSURE SWITCH	BHEL approved sources	Cat-III	
61.27	WBFPS	PACKAGE	HYDRANT	INSTRUMENT HOOK UP FOR FLOW SWITCH	BHEL approved sources	Cat-III	
61.28	WBFPS	PACKAGE	HYDRANT	INSTRUMENT HOOK UP FOR SOV	BHEL approved sources	Cat-III	
61.29	WBFPS	PACKAGE	HYDRANT	INSTRUMENT HOOK UP FOR LEVEL TRANSMITTER	BHEL approved sources	Cat-III	
61.30	WBFPS	PACKAGE	HYDRANT	INSTRUMENT HOOK UP FOR LEVEL INDICATOR	BHEL approved sources	Cat-III	
61.31	WBFPS	PACKAGE	HYDRANT	INSTRUMENT HOOK UP FOR DIFFERENTIAL PRESSURE SWITCH	BHEL approved sources	Cat-III	
62				Instrument Hook up for Pressure Gauge			
62.01	WBFPS	PACKAGE	HYDRANT	15NB Socket (one side welded & one side threaded)	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
62.02	WBFPS	PACKAGE	HYDRANT	15NB threaded Nipple (6") (1/2" NPT(M)x 1/2" NPT(M))	NSPCL/NTPC approved sources		
62.03	WBFPS	PACKAGE	HYDRANT	15NB Globe valve (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
62.04	WBFPS	PACKAGE	HYDRANT	15NB Elbow 90 Deg (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
62.05	WBFPS	PACKAGE	HYDRANT	15 NB two way Gauge Cock (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
62.06	WBFPS	PACKAGE	HYDRANT	15 NB 3-Piece Union (1/2" NPT(M)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
63				Instrument Hook up for Pressure Switch			
63.01	WBFPS	PACKAGE	HYDRANT	15NB Socket (one side welded & one side threaded)	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
63.02	WBFPS	PACKAGE	HYDRANT	15NB threaded Nipple (6") (1/2" NPT(M)x 1/2" NPT(M))	NSPCL/NTPC approved sources		
63.03	WBFPS	PACKAGE	HYDRANT	15NB Globe valve (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
63.04	WBFPS	PACKAGE	HYDRANT	15NB Elbow 90 Deg (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
63.05	WBFPS	PACKAGE	HYDRANT	15 NB two way Gauge Cock (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
63.06	WBFPS	PACKAGE	HYDRANT	15 NB 3-Piece Union (1/2" NPT(M)x 1/2" NPT(M))	NSPCL/NTPC approved sources		
64				Instrument Hook up for Pressure Transmitter			
64.01	WBFPS	PACKAGE	HYDRANT	15NB Socket (one side welded & one side threaded)	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
64.02	WBFPS	PACKAGE	HYDRANT	15NB threaded Nipple (6") (1/2" NPT(M)x 1/2" NPT(M))	NSPCL/NTPC approved sources		
64.03	WBFPS	PACKAGE	HYDRANT	15NB Globe valve (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
64.04	WBFPS	PACKAGE	HYDRANT	15NB Elbow 90 Deg (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
64.05	WBFPS	PACKAGE	HYDRANT	15 NB two way Gauge Cock (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
64.06	WBFPS	PACKAGE	HYDRANT	15 NB 3-Piece Union (1/2" NPT(M)x 1/2" NPT(M))	NSPCL/NTPC approved sources		

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
65				Instrument Hook up for Diff Pressure Switch			
65.01	WBFPS	PACKAGE	HYDRANT	15NB Socket (one side welded & one side threaded)	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
65.02	WBFPS	PACKAGE	HYDRANT	15NB threaded Nipple (6") (1/2" NPT(M)x 1/2" NPT(M))	NSPCL/NTPC approved sources		
65.03	WBFPS	PACKAGE	HYDRANT	15NB Globe valve (1/2" NPT(F)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
65.04	WBFPS	PACKAGE	HYDRANT	15NB SS tubing (1/2" NPT(M)x 1/2" NPT(M))	NSPCL/NTPC approved sources		
65.05	WBFPS	PACKAGE	HYDRANT	15 Nb Three way Manifold (Process Connection 1/2" NPT(F) 4 nos, Drain ot: 1/4" (F))	NSPCL/NTPC approved sources		
65.06	WBFPS	PACKAGE	HYDRANT	15NB SS tubing (1/2" NPT(M)x 1/2" NPT(F))	NSPCL/NTPC approved sources		
66				Instrument Hook up for Flow Switch			
66.01	WBFPS	PACKAGE	HYDRANT	Stub : 1 1/2"" NPT (F) (one side Welded and one side threaded)	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
67				Instrument Hook up for Level Trans (HPT)			
67.01	WBFPS	PACKAGE	HYDRANT	Flange (SOFF) : 4"	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
67.02	WBFPS	PACKAGE	HYDRANT	Gasket : 4"	NSPCL/NTPC approved sources		
67.03	WBFPS	PACKAGE	HYDRANT	M16 x 90 (Nut and bolts)	NSPCL/NTPC approved sources		

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
68				Instrument Hook up for Level Gauge (HPT)			
68.01	WBFPS	PACKAGE	HYDRANT	Flange (SOFF) : 1"	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
68.02	WBFPS	PACKAGE	HYDRANT	Gasket : 1"	NSPCL/NTPC approved sources		
68.03	WBFPS	PACKAGE	HYDRANT	M12 x 70 (Nut and bolts)	NSPCL/NTPC approved sources		
69				Instrument Hook up for SOV (HPT)			
69.01	WBFPS	PACKAGE	HYDRANT	Flange (SOFF) : 1/2"	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
69.02	WBFPS	PACKAGE	HYDRANT	Gasket : 1/2"	NSPCL/NTPC approved sources		
69.03	WBFPS	PACKAGE	HYDRANT	M12 x 70 (Nut and bolts)	NSPCL/NTPC approved sources		
69.04	WBFPS	PACKAGE	HYDRANT	1/2" Nipple BSPT/PE 150 mm	NSPCL/NTPC approved sources		
70				Instrument Hook up for PSV (HPT)			
70.01	WBFPS	PACKAGE	HYDRANT	Flange (SOFF) : 1"	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
70.02	WBFPS	PACKAGE	HYDRANT	Gasket : 1"	NSPCL/NTPC approved sources		

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
70.03	WBFPS	PACKAGE	HYDRANT	M12 x 70 (Nut and bolts)	NSPCL/NTPC approved sources		
71				Instrument Hook up for PSV (on line)			
71.01	WBFPS	PACKAGE	HYDRANT	25NB Socket (one side welded & one side threaded)	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
71.02	WBFPS	PACKAGE	HYDRANT	25NB threaded Nipple (6") (1/2" NPT(M)x 1/2" NPT(M))	NSPCL/NTPC approved sources		
72				Tool &Tackles			
72.01	WBFPS	PACKAGE	HYDRANT	RING SPANNER 16/18 AND 20/22	GEDORE TAPARIA JHALANI PYE GRIPHOLD STANLEY	Cat-III	
72.02	WBFPS	PACKAGE	HYDRANT	D-SPANNER 16/18 AND 20/22		Cat-III	
72.03	WBFPS	PACKAGE	HYDRANT	SLIDE WRENCH 12"		Cat-III	
72.04	WBFPS	PACKAGE	HYDRANT	Spanner double end fix type confirming to IS:2028 (size : 1/8 " - 3/16" to 5/8" - 3/4")		Cat-III	
72.05	WBFPS	PACKAGE	HYDRANT	Spanner ring type		Cat-III	
72.06	WBFPS	PACKAGE	HYDRANT	(size :1/8" x 3/16" to 5/8" x 3/4")		Cat-III	
72.07	WBFPS	PACKAGE	HYDRANT	Size : 150 mm long x 8 mm blade dia (Screw driver with transparent green handle confirming to is:844 insulated)		Cat-III	
72.08	WBFPS	PACKAGE	HYDRANT	Size : 250 mm long x 8 mm blade dia (Screw driver with transparent green handle confirming to is:844 insulated)		Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
72.09	WBFPS	PACKAGE	HYDRANT	Size : 300 mm long x 8 mm blade dia (Screw driver with transparent green handle confirming to is:844 insulated)		Cat-III	
72.10	WBFPS	PACKAGE	HYDRANT	M.S. Chissel. 1/4" x 3" long		Cat-III	
72.11	WBFPS	PACKAGE	HYDRANT	Machinist file flat smooth (300 mm)		Cat-III	
72.12	WBFPS	PACKAGE	HYDRANT	Machinist file hand bastard (300 mm)		Cat-III	
72.13	WBFPS	PACKAGE	HYDRANT	Combination plier insulated with thick C.A. sleeve confirming to IS:3650 (having length of 205 mm)		Cat-III	
72.14	WBFPS	PACKAGE	HYDRANT	Tommy bar hexagonal		Cat-III	
72.15	WBFPS	PACKAGE	HYDRANT	Hammer with handle confirming to IS:841 (ball pein & cross pein) (500 gms)		Cat-III	
72.16	WBFPS	PACKAGE	HYDRANT	Plyer		Cat-III	
73	Commissioning Spares			Commissioning Spares			
73.01	WBFPS	PACKAGE	HYDRANT	GLASS FOR HOSE BOX	BHEL approved sources	Cat-III	
73.02	WBFPS	PACKAGE	HYDRANT	80 NB GASKET	BHEL approved sources	Cat-III	
76				FLANGES FOR FIELD PIPING			
76.01	WBFPS	ITEM WISE	HYDRANT	FLNG BLIND IS2062 8" CL150 B16.5 FF	BHEL approved sources	Cat-III	
76.02	WBFPS	ITEM WISE	HYDRANT	FLNG BLIND IS2062 14" CL150 B16.5 FF	BHEL approved sources	Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
76.03	WBFPS	ITEM WISE	HYDRANT	FLNG SLIPON IS2062 3" CL150 B16.5 FF	BHEL approved sources	Cat-III	
76.04	WBFPS	ITEM WISE	HYDRANT	FLNG SLIPON IS2062 4" CL150 B16.5 FF	BHEL approved sources	Cat-III	
76.05	WBFPS	ITEM WISE	HYDRANT	FLNG SLIPON IS2062 6" CL150 B16.5 FF	BHEL approved sources	Cat-III	
76.06	WBFPS	ITEM WISE	HYDRANT	FLNG SLIPON IS2062 8" CL150 B16.5 FF	BHEL approved sources	Cat-III	
76.07	WBFPS	ITEM WISE	HYDRANT	FLNG SLIPON IS2062 14" CL150 B16.5 FF	BHEL approved sources	Cat-III	
77				GASKETS FOR FIELD PIPING			
77.01	WBFPS	ITEM WISE	HYDRANT	GASKETS FOR FIELD PIPING (NAB SHEET (NRR) BS 7531 GR.X)	BHEL approved sources	Cat-III	
78				STUD NUTS, U BOLTS, CLAMPS FOR FIELD PIPING			
78.01	WBFPS	ITEM WISE	HYDRANT	STUD WITH TWO NUTS M20X120	BHEL approved sources	Cat-III	
78.02	WBFPS	ITEM WISE	HYDRANT	STUD WITH TWO NUTS M27X140	BHEL approved sources	Cat-III	
78.03	WBFPS	ITEM WISE	HYDRANT	STUD WITH TWO NUTS M16X100	BHEL approved sources	Cat-III	
79A				STRUCTURAL STEEL FOR FIELD PIPING SUPPORTS (Plates, channels & angles)			
79.01	WBFPS	ITEM WISE	HYDRANT	ISA 40 X 40 X 5 mm, GR-A, IS:2062	From NSPCL/NTPC approved sources	Cat-III	Refer attached sheet for vendors for Structural steel. However BHEL may get supply from single supplier sourced from these manufacturer.
79.02	WBFPS	ITEM WISE	HYDRANT	ISMC 150 X 75 mm, GR-A, IS:2062	From NSPCL/NTPC approved sources	Cat-III	
79.03	WBFPS	ITEM WISE	HYDRANT	PI 6 mm IS 2062 E 250 Gr A/BR/SK/K	From NSPCL/NTPC approved sources	Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
79B				U- BOLTS			
79.04	WBFPS	ITEM WISE	HYDRANT	U-BOLT GALVZD 3"	BHEL approved sources	Cat-III	
79.05	WBFPS	ITEM WISE	HYDRANT	U-BOLT GALVZD 4"	BHEL approved sources	Cat-III	
79.06	WBFPS	ITEM WISE	HYDRANT	U-BOLT GALVZD 6"	BHEL approved sources	Cat-III	
79.07	WBFPS	ITEM WISE	HYDRANT	U-BOLT GALVZD 8"	BHEL approved sources	Cat-III	
79.08	WBFPS	ITEM WISE	HYDRANT	U-BOLT GALVZD 10"	BHEL approved sources	Cat-III	
79.09	WBFPS	ITEM WISE	HYDRANT	U-BOLT GALVZD 12"	BHEL approved sources	Cat-III	
82				IGES			
82.06	IGES	PACKAGE	IGES	BALL VALVE, 1 1/2 INCH (DIVERter VALVE) FE - NPT	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.07	IGES	PACKAGE	IGES	HANDLE FOR 1 1/2 INCH BALL VALVE	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.08	IGES	PACKAGE	IGES	BALL VALVE, 1 INCH (DIVERter VALVE) FE - NPT	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.09	IGES	PACKAGE	IGES	HANDLE FOR 1 INCH BALL VALVE	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.1	IGES	PACKAGE	IGES	LEAK VALVE FOR PILOT LINE	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.11	IGES	PACKAGE	IGES	CONTACT GAUGE UNIT	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.13	IGES	PACKAGE	IGES	1/4 INCH CROSS FOR ACTUATION LINE	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.14	IGES	PACKAGE	IGES	HI-FLEX. HOSE FOR PILOT 1/4" X 365 LENGTH.	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.15	IGES	PACKAGE	IGES	HI FLEX HOSE 1/4" X 500MM	From NSPCL/NTPC approved sources		To be supplied by IGES supplier

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
82.16	IGES	PACKAGE	IGES	HI FLEX HOSE 1/4" X 400MM (1X90°)	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.17	IGES	PACKAGE	IGES	HI FLEX HOSE 1/4" X 700MM (1X90°)	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.2	IGES	PACKAGE	IGES	RELEASE UNIT 300 BAR(AUTOMATIC & MANUAL RELEASE)	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.21	IGES	PACKAGE	IGES	1/4 INCH TEE PIECE FOR ACTUATOR LINE	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.23	IGES	PACKAGE	IGES	PRESSURE OPERATOR SWITCH	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.25	IGES	PACKAGE	IGES	RESTRICTOR ASSMBLY 2 INCH	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.26	IGES	PACKAGE	IGES	RESTRICTOR ASSMBLY 1 1/2 INCH	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.27	IGES	PACKAGE	IGES	WARNING SIGN F/ ALARM ARGONITE GB	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.28	IGES	PACKAGE	IGES	WARNING SIGN DOOR ARGONITE GB	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.3	IGES	PACKAGE	IGES	PRE-DISCHARGE INDICATOR (PDI)	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.31	IGES	PACKAGE	IGES	DISCHARGE INDICATOR (DI)	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.32	IGES	PACKAGE	IGES	INHORBIT SWITCH (ABORT SWITCH)	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.33	IGES	PACKAGE	IGES	EMERGENCY PUSH BUTTON (MANUAL RELEASE STATION)	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.34	IGES	PACKAGE	IGES	PRESSURE RELIEF DAMPERS 450MM X 450MM	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.35	IGES	PACKAGE	IGES	PRESSURE RELIEF DAMPERS 600MM X 600MM	From NSPCL/NTPC approved sources		To be supplied by IGES supplier
82.37	IGES	PACKAGE	IGES	CABLE CLAMPS-12 MM	BHEL approved sources	Cat-III	
82.38	IGES	PACKAGE	IGES	CABLE TRAY(PERFORATED TYPE)-50 X 50 X 1.6	NSPCL/NTPC approved sources	Cat-I	
82.39	IGES	PACKAGE	IGES	CABLE TRAY(LADDER TYPE)-300 X 75 X 2	NSPCL/NTPC approved sources	Cat-I	

SI. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
82.4	IGES	PACKAGE	IGES	CABLE GLANDS-12 MM	BHEL approved sources	Cat-III	
82.41	IGES	PACKAGE	IGES	PVC GRIP	BHEL approved sources	Cat-III	
82.42	IGES	PACKAGE	IGES	WOODEN SCREWS-35 X 8MM	BHEL approved sources	Cat-III	
82.43	IGES	PACKAGE	IGES	CABLE TIE-150MM LONG	BHEL approved sources	Cat-III	
82.44	IGES	PACKAGE	IGES	CS END CAP 100NB FORGED STEEL,6000#	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
82.45	IGES	PACKAGE	IGES	ANSI B 16.5 ,CLASS 2500,WELDNECK CS FLANGES-100 NB	NSPCL/NTPC approved sources		
82.46	IGES	PACKAGE	IGES	FULL COUPLINGS 3/4 NPT ASTM A 105, 6000#	NSPCL/NTPC approved sources		
82.47	IGES	PACKAGE	IGES	GASKETS SPIRAL WOUND	BHEL approved sources		
82.48	IGES	PACKAGE	IGES	M 36 X 275 MM LONG STUD &NUTS FOR 100 NB FLANGE 2500#	BHEL approved sources		
82.49	IGES	PACKAGE	IGES	CS PIPE 100 NB ASTM A 106 GR. B SCH XXS	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
82.5	IGES	PACKAGE	IGES	CS ELBOW 100NB FORGED STEEL, 6000#,BW	NSPCL/NTPC approved sources		
82.51	IGES	PACKAGE	IGES	EQUAL TEE 100NB FORGED STEEL,6000#	NSPCL/NTPC approved sources		
82.52	IGES	PACKAGE	IGES	CS FLANGE 100NB ANSI B16.5 2500# SORF	NSPCL/NTPC approved sources		
82.53	IGES	PACKAGE	IGES	ISMIC-150 X 75 X 6	NSPCL/NTPC approved sources	Cat-III	Refer attached sheet for vendors for Structural steel. However BHEL may get supply from single supplier sourced from these manufacturer.
82.54	IGES	PACKAGE	IGES	ISA-75X75X6	NSPCL/NTPC approved sources	Cat-III	
82.55	IGES	PACKAGE	IGES	SQUARE PLATE- 250X150X10	NSPCL/NTPC approved sources	Cat-III	
82.56	IGES	PACKAGE	IGES	SQUARE PLATE-150X150X6	NSPCL/NTPC approved sources	Cat-III	
82.57	IGES	PACKAGE	IGES	STIFFNER PLATE-200X200X6	NSPCL/NTPC approved sources	Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
82.58	IGES	PACKAGE	IGES	STIFFNER PLATE-150X150X6	NSPCL/NTPC approved sources	Cat-III	Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
82.59	IGES	PACKAGE	IGES	M16 X 800MM LONG STUD NUTS & BOLTS WITH WASHERS	BHEL approved sources	Cat-III	
82.6	IGES	PACKAGE	IGES	U-BOLTS M12 FOR 100 NB PIPE	BHEL approved sources	Cat-III	
82.61	IGES	PACKAGE	IGES	100NB CS PIPE A106 GR. B SCH.40	NSPCL/NTPC approved sources		
82.62	IGES	PACKAGE	IGES	80NB CS PIPE A106 GR. B SCH.40	NSPCL/NTPC approved sources		
82.63	IGES	PACKAGE	IGES	65NB CS PIPE A106 GR. B SCH.40	NSPCL/NTPC approved sources		
82.64	IGES	PACKAGE	IGES	50NB CS PIPE A106 GR. B SCH.40	NSPCL/NTPC approved sources		
82.65	IGES	PACKAGE	IGES	40NB CS PIPE A106 GR. B SCH.40	NSPCL/NTPC approved sources		
82.66	IGES	PACKAGE	IGES	EQUAL TEE 100 NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		
82.67	IGES	PACKAGE	IGES	EQUAL TEE 80 NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		
82.68	IGES	PACKAGE	IGES	EQUAL TEE 65 NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		
82.69	IGES	PACKAGE	IGES	EQUAL TEE 40 NB FORGED STEEL 2000# ASTM A 105 GR. B	NSPCL/NTPC approved sources		
82.7	IGES	PACKAGE	IGES	UNEQUAL TEE 100X100X80NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		
82.71	IGES	PACKAGE	IGES	UNEQUAL TEE 100X100X40NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		
82.72	IGES	PACKAGE	IGES	UNEQUAL TEE 80X80X50NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		
82.73	IGES	PACKAGE	IGES	UNEQUAL TEE 80X80X40NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		
82.74	IGES	PACKAGE	IGES	UNEQUAL TEE 65X65X40NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		

SI. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
82.75	IGES	PACKAGE	IGES	UNEQUAL TEE 50 X 50 X 40 NB S/W FORGED STEEL 2000# ASTM A105 GR.B	NSPCL/NTPC approved sources		
82.76	IGES	PACKAGE	IGES	ELBOW 100NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		
82.77	IGES	PACKAGE	IGES	ELBOW 80NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		
82.78	IGES	PACKAGE	IGES	ELBOW 65NB B/W ASTM A234 GR. WPB	NSPCL/NTPC approved sources		
82.79	IGES	PACKAGE	IGES	ELBOW 40NB FORGED STEEL 2000#	NSPCL/NTPC approved sources		
82.8	IGES	PACKAGE	IGES	REDUCING ELBOW 100X80NB B/W ASTM A234 GR.WPB	NSPCL/NTPC approved sources		
82.81	IGES	PACKAGE	IGES	CONCENTRIC REDUCER 100X80NB ASTM A234 GR.WPB	NSPCL/NTPC approved sources		
82.82	IGES	PACKAGE	IGES	CONCENTRIC REDUCER 80X65NB ASTM A234 GR.WPB	NSPCL/NTPC approved sources		
82.83	IGES	PACKAGE	IGES	CONCENTRIC REDUCER 80X50NB ASTM A234 GR.WPB	NSPCL/NTPC approved sources		
82.84	IGES	PACKAGE	IGES	CONCENTRIC REDUCER 65X50NB ASTM A234 GR.WPB	NSPCL/NTPC approved sources		
82.85	IGES	PACKAGE	IGES	CONCENTRIC REDUCER 65X40NB ASTM A234 GR.WPB	NSPCL/NTPC approved sources		
82.86	IGES	PACKAGE	IGES	CONCENTRIC REDUCER 50X40NB FORGED STEEL 2000# ASTM A105 GR.B	NSPCL/NTPC approved sources		
82.87	IGES	PACKAGE	IGES	ISMC 100 X 50 X 5	BHEL approved sources	Cat-III	
82.88	IGES	PACKAGE	IGES	ISA 50 X 50 X5	BHEL approved sources	Cat-III	
82.89	IGES	PACKAGE	IGES	SQUARE PLATE-200 X 100 X 6 MM THICK	BHEL approved sources	Cat-III	
82.9	IGES	PACKAGE	IGES	ANCHOR FASTNERS M12 X 115 MM LONG	BHEL approved sources	Cat-III	
82.91	IGES	PACKAGE	IGES	ANCHOR FASTNERS M10 X 75 MM LONG	BHEL approved sources	Cat-III	
82.92	IGES	PACKAGE	IGES	U-BOLTS, DOUBLE NUTS WITH WASHERS M12 X 100 NB	BHEL approved sources	Cat-III	

Sl. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
82.93	IGES	PACKAGE	IGES	U-BOLTS, DOUBLE NUTS WITH WASHERS M10 X 80 NB	BHEL approved sources	Cat-III	
82.94	IGES	PACKAGE	IGES	U-BOLTS, DOUBLE NUTS WITH WASHERS M8 X 65 NB	BHEL approved sources	Cat-III	
82.95	IGES	PACKAGE	IGES	U-BOLTS, DOUBLE NUTS WITH WASHERS M8 X 50 NB	BHEL approved sources	Cat-III	
82.96	IGES	PACKAGE	IGES	U-BOLTS, DOUBLE NUTS WITH WASHERS M8 X 40 NB	BHEL approved sources	Cat-III	
82.97	IGES	PACKAGE	IGES	FULL COUPLING 40 NB ASTM A105	NSPCL/NTPC approved sources		Refer attached sheet for vendors for socket weld fittings, Impulse Pipes & tubes, compression fittings , instrument valves, valve manifolds etc. However BHEL may get supply from single supplier sourced from these manufacturer.
84				FDA System			
84.04	FDA	PACKAGE	FDA	Response Indicator	NSPCL/NTPC approved sources		To be supplied by FDA supplier
84.12	FDA	PACKAGE	FDA	Monitor Module	NSPCL/NTPC approved sources		
84.13	FDA	PACKAGE	FDA	Exit Sign	NSPCL/NTPC approved sources		
86				FDA Hardware Erection			
86.01	FDA	PACKAGE	FDA	PVC Back Box (for detectors)	NSPCL/NTPC approved sources		To be supplied by Detector supplier
86.02	FDA	PACKAGE	FDA	PVC Back Box (for Modules)	NSPCL/NTPC approved sources		
86.03	FDA	PACKAGE	FDA	3/4" Screw with Rawl Plug (for fixing back box on wall/ceiling)	BHEL approved sources	Cat-III	
86.04	FDA	PACKAGE	FDA	Gland for 1.5 sqmm cable	BHEL approved sources	Cat-III	
86.05	FDA	PACKAGE	FDA	Lugs for 1.5 sqmm cable	BHEL approved sources	Cat-III	

SI. No.	FPS SUB SYSTEM	PROCUREMENT DETAILS	PACKAGE TITLE (SAP)	ITEM DESCRIPTION	VENDOR	INSPECTION CATEGORY	REMARKS
86.06	FDA	PACKAGE	FDA	Lugs for Siren	BHEL approved sources	Cat-III	
86.07	FDA	PACKAGE	FDA	Glands for Siren	BHEL approved sources	Cat-III	
86.08	FDA	PACKAGE	FDA	1" False Ceiling Self Threaded Screw (for detectors on false ceiling & response indicators)	BHEL approved sources	Cat-III	
86.09	FDA	PACKAGE	FDA	ISA 25 (in meters) (for mounting outdoor & MCPs)	NSPCL/NTPC approved sources	Cat-III	Refer attached sheet for vendors for Structural steel. However BHEL may get supply from single supplier sourced from these manufacturer.
86.1	FDA	PACKAGE	FDA	Flexible Hose for Air Purge Unit (dia-19 mm)	BHEL approved sources	Cat-III	
86.11	FDA	PACKAGE	FDA	Nut & Bolt (for fixing IR & Flame detector)	BHEL approved sources	Cat-III	
86.12	FDA	PACKAGE	FDA	Base Plate (for fixing Channel of Outdoor MCP) (100 x 100)	BHEL approved sources	Cat-III	
86.13	FDA	PACKAGE	FDA	Saddles with Screws for 3C x 1.5 Sqmm Cable	BHEL approved sources	Cat-III	
86.14	FDA	PACKAGE	FDA	MS Flat Strip (for fixing outdoor MCP) (25 MM x 3 MM)	BHEL approved sources	Cat-III	

List of vendors for C&I fittings and structural steel

No.	Major Equipment	QP Inspection Category	QP No. 9582 001-QVI-Q	QP Submission SCH	QP Approval SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Remark
1	Socket weld fittings	III				Main Contractor Approved Sources		NOTED			
2	Impulse pipe & tubes	II				Mahrashtra Seamless	Raigarh	A			Carbon steel only
		II				Sumitomo/kawasaki/Nippon	Japan	A			
		II				TPS TECHNITUBE	Germany	A			
		II				Veluric & manessmann	Germany	A			
		II				BHEL	Trichy	A			
		II				Trouvay and Cauvin	France	A			
		II				Ratnamani Metals and Tubes	Gandhinagar	A			SS only
		II				Heavy metals and Tubes	Gandhinagar	A			SS and CS only.
		II				ISMT	Ahamadnagar	A			Carbon steel only.
		II				Sandvik		A			For SS only.
3	Compression fittings	III				Hamlet	Israil	A			
		III				Parker	USA	A			
		III				Precision	Mumbai	A			
		III				DK TECH	Korea	A			
		III				HY LOK	Korea	A			
		III				Astech	Mumbai	A			
		III				Hydair(Fluid control)	Mumbai	A			
		III				HP Valves and fittings	CHENNAI	A			Ferruleas are to be hardned at Exim Holand for pressure above 9000 psi.
		III				Excel hydro	Mumbai	A			Ferruleas are to be hardned at Exim Holand for pressure above 9000 psi.
		III				Swagelock	USA	A			
		III				Panam	Mumbai	A			
4	Instrument valves	II				BHEL	Trichy	A			
		III				DK TECH	Korea	A			
		III				Hamlet	Israil	A			
		II				Excel Hydro	Mumbai	A			
		II				Instrumentation Ltd.,	Palghat	A			
		III				Swagelok	USA	A			
		III				Parker	USA	A			

		III				HY LOK	Korea	A			
		II				HP Valves and fittings	CHENNAI	A			
		II				Hydair Lonavala	Lonavala	A			
		II				Baldota	Mumbai	A			
5	Valve manifolds	III				Hamlet	Israil	A			
		III				Excel hydro	Mumbai	A			
		III				SCHNEIDER	Germany	A			
		III				HY LOK	Korea	A			
		III				DK TECH	Korea	A			
		III				Anderson Greenwood	USA	A			
		III				Astech	Mumbai	A			
		III				HP Valves and fittings	CHENNAI	A			
		III				HYD AIR	LONAVALA	A			
		III				Fluid control	Mumbai	A			
		III				Microprecision	Faridabad	A			
		III				Parker	USA	A			
		III				Swagelock	USA	A			
		III				Baldota	Mumbai	A			
6	REINFORCEMENT AND SRUCTURAL STEEL	III				STEEL AUTHORITY OF INDIA LTD		A			
		III				TATA IRON & STEEL CO LTD		A			
		III				INDIAN IRON & STEEL CO LTD		A			
		III				RASHITRYA ISPAT NIGAM LTD		A			
		III				ESSAR STEEL LTD		A			
		III				ISPAT INDUSTRIES LTD		A			
		III				JSW STEEL LTD		A			
		III				LLOYDS STEEL LTD		A			
		III				JAI BALAJI INDUTRIES		A			
		III				SUNFLAG STEEL & IRON CO		A			