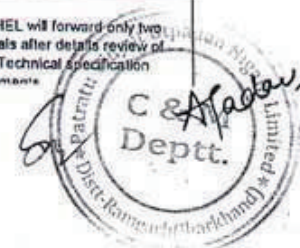


NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP						
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE						
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2				REVISION NO : 00						
						DATE : 26.04.2017						
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QV/Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
1	DDC MIS / HMI System	I				SIEMENS	Gurgaon / Germany	#				# - Final acceptance subjected to system specific acceptance from NTPC Engg
2	Operator work stations	III				M/s BHEL (MAX DNA) Main Contractor approved Sources	Bangalore	# A				
3	Flame Monitoring System (SCANNER)	II				Forney	USA	A				Bought out item shall be finalised during detailed engineering
		II				ABB	Bangalore	A				
		II				Durag	Bangalore	A				
		II				BFI	Germany	A				
		II				BHELSCAN	Tridby	A				
4	HEA Ignitor	III				Fossil Power System Inc. Unison Industries	Canada USA	DR A				
		III				Durag	Germany	A				
		III				Durag	Bangalore	A				Make Durag, Germany
		III				Ignition system INC	USA	A				
		III				Tesi	Italy	A				
		I				Hindustan Thermometer	Ambala	A				Conditional
		*				Hamworthy Peabody Combustion Inc.	UK	DR				
5	Furnace Flame viewing system (High Temperature CCTV Components)	II				Forney	USA	DR				
		II				Diamond Power	USA / Sweden	A				
		II				TLT Engg Pvt. Ltd.	Kolkata	A				M/s Diamond Power, USA / Sweden make system
		II				Miron	UK	A				M/s Miron, UK make System
		II				Toshnival Industries	Ajmer	A				M/s Lenox, USA make System
		II				Lenox	USA	A				M/s Lenox, USA make System
		II				Hi Tech System and Service	Kolkata	A				M/s Lenox, USA make System
		II				Durag	Germany	A				M/s Durag, Germany make System
		II				Durag	Bangalore	A				M/s Durag, Germany make System
		II				Sabota GmbH	Germany	A				M/s Durag, Germany make System
		II				Piper GmbH	Germany	A				M/s Durag, Germany make System
		*				Tempens	Udaipur	DR				System integrator for Piper GmbH, Germany.
6	Coal Flow Monitoring System	II				PROMECON	GERMANY	A				
		II				SWR Engg	GERMANY	A				
		II				EU Tech	GERMANY	A				
		*				Transwelling	India	DR				
		*				Technomark Engginers & Consultant	India	DR				
		*				Stock Redeller	India	DR				
		*				Greenbank Engery Systems	UK	DR				

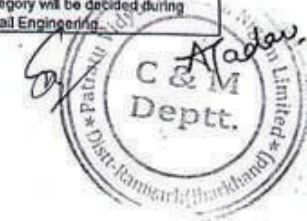
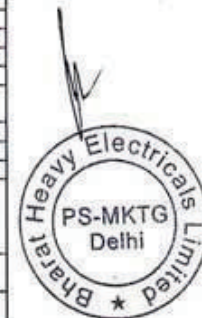


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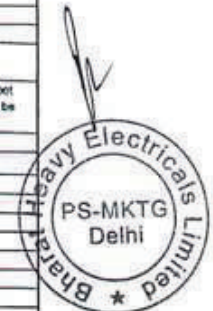
NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP						
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE						
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2				REVISION NO : 00						
						DATE : 28.04.2017						
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		*				Berthold	Germany	DR				requirements.
		*				EDIT	Germany	DR				
7	Acoustic pyrometers	II				M/s Scientific Environment Instrument Inc	USA	A				
		II				M/s Bonenberg + Drescher GmbH,	Germany	A				
		II				Lucent	Delhi	A				M/s Scientific Environmental Instrument Inc., USA make system
		II				Hi Tech	Kolkata	A				M/s Bonenberg + Drescher GmbH, Germany make system
		*				Hanaefertech	Korea	DR				
8	Coal feeder control system	II				Stock	USA	A				
		II				Merick	USA	A				
		I				Stock Redeller	Bangalore	A				Main components from Stock, USA
		I				Merick	Bangalore	A				Main components from Merick, USA
		I				BHEL	Trichy	A				
9	Acoustic Coal Flow Detector	III				Stock	USA	A				
		*				Merrick	USA	A				
		*				Stock Redeller	Bangalore	DR				
		*				Merrick	Bangalore	DR				
10	On line carbon in Ash Analyser	II				Greenbank Engery Systems	UK	A				
		II				ABB	Bangalore	A				
		II				Promecon	GERMANY	A				
		II				Berhold Technologies	Germany	A				
		*				M and W	Denmark	DR				
		*				EMERSON	India	DR				M/s BHEL will forward only one proposal after details review of NTPC Technical specification requirements.
		*				Yokogawa	Bangalore	DR				
		*				Forbes Marshall	Pune	DR				
11	Furnace Exit Gas Temperature Probe	III				Main Contractor approved Sources	India /UK/USA					
12	Boiler tube leak detection system	II				Procon	UK	A				
		II				Rtman Instruments	Delhi	A				
		II				Acoustic Monitoring International Inc.	USA	A				M/s Procon, UK make System
		II				Hi Tech System and Service	Kolkata	A				M/s AMI, USA make System
		II				Instolech	South Africa	A				
		II				Reclusan	Korea	A				
		II				BHELSONIC	Trichy	A				
13	Coal bunker Level monitor	%				%						% - Type, vendor and inspection category will be decided during detail Engineering



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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP						
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE						
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2				REVISION NO : 00						
						DATE : 26.04.2017						
No.	Major Equipment	QP Inspection Category	QP No. 9585-001-QVI-Q	QP Submission SCH	QP Approval SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
14	Tube thickness Meter	III				Main Contractor approved sources		A				
15	POSITIVE DISPLACEMENT FLOW METER/ TRANSMITTER	III				BROOKS	USA	A			Sub QR	Calibration reports to be submitted.
		III				BOPP & ROUTHIER	GERMANY	A				
		III				OVAL	JAPAN	A				
		II				Toshniwal corporation Hyvac	Chennai	A				Up to 4 inch only
16	Coriolis Type Mass Flow meter	III				Main Contractor approved Sources		A			Sub QR	
17	Control Valve for Start Up System	II				CCI	USA/Switzerland/Korea	A				
		II				Tyco Sempel	Germany	A				
		II				EMERSON (Fisher)	USA/France/Japan	A				Reference list and performance feedback are to be submitted.
		-				Dressor Masonellan	France	DR				
		II				KOSO	Japan / Nasik	A				
		II				HORA	Germany	A				
		II				CCI	Sri City	A				
18	Control valves for Soot blower pressure reducing ,SH/ RH Attenuation.	II				CCI	USA/Sweden /Korea / Austria	A				
		II				Dressor Masonellan	France	A				
		II				HORA	Germany	A				
		II				EMERSON (Fisher)	USA/France /Japan	A				
		II				Spx Copes Vulcan	USA	A				only for SH / RH Attenuation, for Soot blower application Reference to list to be provided.
		II				KOSO	JAPAN	A				
		II				Tyco Sempel	Germany	A				
		II				Leslie	USA	A				
		I				Dressor	Colimbatore	A				Up to 2500 Class
		I				ii	Palakkad	A				Up to 2500 Class
		I				KSB MIL	Alwaye	A				
		I				KOSO	Nasik	A				
		I				EMERSON	Chennai	A				Up to 2500 Class
		I				Flow Serve	Bangalore	A				Up to 2500 Class
		I				CCI	Sri City	A				Up to 2500 Class
		-				Copes Vulcan	UK	DR				
		-				Circor (Leslie)	Colimbatore	DR				
		-				CCI	USA / Austria / Korea	A				
19	Control Valve for BFP Recirculation	II				EMERSON (Fisher)	USA/France/Japan	A				
		II				Dressor Masonellan	France	A				
		II				HORA	Germany	A				
		-				Sempel	Germany	DR				
		-				Leslie	USA	DR				
		I				CCI	Sri City	A				M/s BHEL will forward only three proposals after details review of NTPC Technical specification

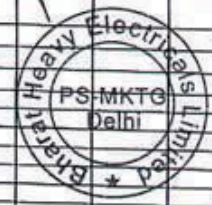


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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP			REVISION NO : 00				
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			DATE : 26.04.2017				
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY							
		CONTRACT NO : CS-9585-001-2											
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark	
		*				KOSO	Japan / Nasik	DR				requirements.	
		*				Nakakata	Japan	DR					
		*				Parcol Spa	USA	DR					
		*				Yamatake	Japan	DR					
		*				BOPP & ROUTHIER	Germany	DR					
		*				KSB MIL	Germany	DR					
20	Control valve for feedwater flow Control	II				CCI	USA/Austria /Korea	A					M/s BHEL will forward only three proposals after details review of NTPC Technical specification requirements.
		II				Dressor Masonellan	France	A					
		II				HORA	Germany	A					
		II				EMERSON (Fisher)	USA/France /Japan	A					
		II				Sempell	Germany	A					
		II				KOSO	Japan	A					
		*				LESLIE	USA	DR					
		I				CCI	Italy	A					
		*				Parcol Spa	USA	DR					
		*				WEIR VALVES and Controls	UK	DR					
		*				KOSO	Nasik	DR					
		I				KSB MIL	Germany	DR					
		*				Emerson Process Management	Chennai	A					
		*				BOMFA Special valve solutions Pvt. Ltd.	Ahmedabad	DR					
		*				Suzhou delan enery scdnce and tehnology co. Ltd.	China	DR					
21	Control Valve ( other than Sr. No. - 17 to 20)	II				CCI	USA/Switzerland/Korea	A					
		II				Tyce Sempell	Germany	A					
		II				EMERSON (Fisher)	USA/France/Japan / Chennai	A					
		II				Dressor Masonellan	France	A					
		II				KOSO	Japan	A					
		II				HORA	Germany	A					
		II				CCI	Italy	A					
		II				Spx Copes Vulcan	USA	A					
		II				Dressor	Coimbatore	A					
		II				IL	Palakkad	A					
		II				KSB MIL	Alwaye	A					
		II				KOSO	Palakkad	A					
		II				EMERSON	Chennai	A					
		II				Flow Serve	Bangalore	A					
		II				Copes Vulcan	UK	A					
		II				Leslie	USA	A					
		II				Parcol Spa	Italy	A					
		II				KOSO	Nasik	A					

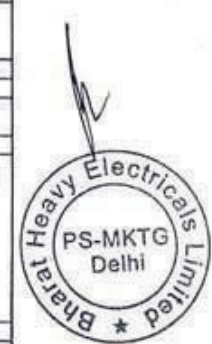


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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP							
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE							
		CONTRACTOR : BHEL Ltd				REVISION NO : 00							
		CONTRACT NO : CS-9585-001-2				VENDOR AS APPROVED BY							
						DATE : 26.04.2017							
No.	Major Equipment	QP Inspection Category	QP No. 9585-001-QVI-Q	QP Submission SCH	QP Approval SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark	
		II				Forbes Arca	Pune	A				Approvd up to 4" and 300 Class. "DR" for Higher rating and Size. M/s BHEL will forward only three proposals after details review of NTPC Technical specification requirements.	
		*				Daume Reglamaturean GmbH	Germany	DR					
		*				Metso Singapore PTE Ltd.	South Korea	DR					
		*				Severn Glocon	Chennai	DR					
		*				Spx Corporation	USA	DR					
		*				Ringo Valvulas SL	Spain	DR					
		*				Vahitalia SPA	Italy	DR					
		*				R K Controls	Thane	DR					
		*				Circor (Leslie)	Colmbatore	DR					
		*				Spx Flow Technologies	USA	DR					
		*				Circor (Leslie)	Colmbatore	DR					
		*				Schenjiang valve co. Ltd.	China	DR					
		*				Spx Flow Technologies	Ahamadabad	DR					
		*				WEIR Valves and Controls	UK	DR					
		*				WALDEMAR PRUSS	Germany	DR					
		*				ARMATURENFABRIK GMBH							
		*				BOMAFSA Special valve solutions Pvt. Ltd.	Ahmedabad	DR					
		*				Suzhou delan enery science and technology co. Ltd.	China	DR					
22	Temperature Transmitter	III				EMERSON	U.S./Pawane / Singapore	A			Sub QR		
	(Single and Dual Input)	III				Yokogawa	Japan	A					Final testing at M/S YIL, Bangalore is also acceptable
		III				Moore	USA	A					
		III				M System	JAPAN	A					
		III				ABB	GERMANY/ Bangalore	A					
		III				ENDRESS & HOUSER	Aurangabad	A					
		*				Khrona		DR					
		*				Tokyo Keiso	Japan	DR				M/s BHEL will forward only two proposals after details review of NTPC Technical specification requirements.	
		*				Honeywell	Pune	DR					
		*				INOR	Sweden	DR					
		*				P & F	Bangalore	DR					
		*				Siemens		DR					
		*				Yamatake	JAPAN	DR					
		*				Yaman	JAPAN	DR					
		*				Foxboro		DR					
		*				Refer Electrical List							
		*				EMERSON (Rosemount)	USA/ Pawane	A			Sub QR		
23	Conduits/Pipe(GI)	III				FUJI ELECTRIC	France	A					
24	Electronic transmitters (pressure, DP,Flow)	III				YOKOGAWA	JAPAN	A				Testing and Calibration at M/s YIL, Bangalore is also acceptable.	



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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP			REVISION NO : 00			
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			DATE : 28.04.2017			
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspection Category	QP No. 9585-001-QV/Q	QP Submission SCH	QP Approval SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		III				YOKOGAWA	Bangalore	A				EJA- E series 110,430,530
		III				ABB	Bangalore	A				Model - 2600 T
		III				ABB	GERMANY / Italy	A				Model - 2600 T
		III				Siemens	France / Kahwa	A				
		III				Honeywell	Pune	A				
		III				Laxson Automation	Daman	A				SMAR Make
		III				Baldota	Mumbai	A				SMAR Make
		*				ENDRESS & HOUSER	Aurangabad/ Germany	DR				
25	Thermocouples, RTD & Thermowell	III				CHINO HERAUS SENSOR	Ghazabad GERMANY	DR A			Sub QR	
		III				WISE Control	Korea	A				
		II				Tempens	Udaipur	A				
		II				Pyroelectric	Goa	A				
		II				Detriv Instrumentation & Electronics Ltd	Mumbai	A				
		III				Minco	USA	A				
		III				OKAZAKI corporation	JAPAN	A				
		III				Yamari	JAPAN	A				
		III				Yamari	Singapore	A				For RTD Reference list and Performance feedback is to be submitted.
		III				ABB(SENSYCON)	Germany	A				
		III				EMERSON (Rosemount)	Germany	A				
		II				EMERSON (Rosemount)	Pawane	A				Imported from Emerson, Germany (make)
		II				Thermal Instruments(GIC)	Savantwadi	A				
		II				Techno Instruments	Ahamadabad	A				
		II				GOA Instrument Industries	GOA	A				
		*				GOA Instrument Industries	GOA	DR				For Thermowell only
		*				WIKA	Pune	DR				M/s BHEL will forward only two proposals after details review of NTPC Technical specification requirements.
		*				Techniwal Industries	Ajmer	DR				
		*				E & H	Aurangabad	DR				
		*				Nesstech	Vapi	DR				
		*				Industrial Instruments	Kolkatta	DR				
		*				Exotherm	Thane	DR				
		*				Baumer Technologies	Vapi	DR				
		*				Elsind Engineering	Noida	DR				
		*				Siemens India	Gurgaon	DR				
		II				Jindal Electronics	Roorkee	A				For Generator, turbine & Motor
26	Ultrasonic type level Transmitter	III				E & H	Aurangabad/ Germany	A			Sub QR	
		III				EMERSON	Pawane	A				
		III				SIEMENS MILTRONICS	CANADA	A				
		III				Nivelco	Hungary	A				
		*				Vega	Germany	DR				



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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP						
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			REVISION NO : 00			
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY			DATE : 26.04.2017			
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		*				Khrono	France / USA / Pune	DR				M/s BHEL will forward only two proposals after details review of NTPC Technical specification requirements.
		*				Yokogawa	Bangalore	DR				
		*				PAF	Germany	DR				
		*				Magnetrol	Belgium	DR				
		*				ABB	Germany / India	DR				
		*				Fobes Marshall	Pune	DR			Sub QR	
27	Orifice plate assembly	III				Instrumentation Limited	Palghat	A				
		III				Microprecision	Palwal	A				
		III				Starmech	Pune	A				
		III				Flow Star	Fardabad	A				
		III				SEIKO	Austria	A				
		III				MINCO India Pvt. Ltd.	GOA	A				Up to 32"
		III				MINCO India Flow Elements Pvt. Ltd.	GOA	A				Up to 28"
		III				WISE Control	Korea	A				
		III				T M Technomatic	Italy	A				
		*				IEPL	Hyderabad	DR				
		*				Engg. Specialities	Kolkata	DR				
		*				BALIGA	CHENNAI	DR				
		*				Pyroelectric	Mumbai	DR				
		*				Hydropneumatics	Mapusa	DR				
		*				Tansa Equipment Pvt. Ltd.	Thane	DR				
		*				Dynamic Fluid Vales Pvt. Ltd.	Belgaun	DR				
28	Pressure, DP Gauge	III				BUDENBERG	UK	A				
		III				ASHCROFT	USA/Germany/ India	A				
		III				Wika	GERMANY	A				
		III				WISE Control	Korea	A				
		III				Nagano KEIKI	Japan	A				
		III				H.Guru South India	Bangalore	A				Not for MS & FW application
		III				A.N. Instruments	Kolkata	A				Not for MS & FW application
		III				Gauge Bourdon	Parvel	A				
		III				Goa Thermostatic	GOA	A				
		III				Wika	Pune	A				Not for MS & FW application
		III				Baumer	Vapi	A				DR for MS & FW application
		III				Precision mass products Pvt. Ltd.	Gandhinagar	A				DR for MS & FW application
		III				H Guru	Rishra/Muzaffarpur	A				Not for MS & FW application
		*				US Gauge	USA	DR				Not for MS & FW application
		*				Winters	USA	DR				
		III				Forbes Marshall	Hyderabad	A				
		*				Manometer	Mumbai	DR				
		III				Walchandnagar Industries Ltd.	Dharwad	A				
		III				Nesstech	Vapi	A				
		*				Gauges Bourdon	UK	DR				DP Gauge for M/s Nesstech, Japan
		*				Fisher Mess	Germany	DR				

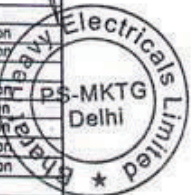
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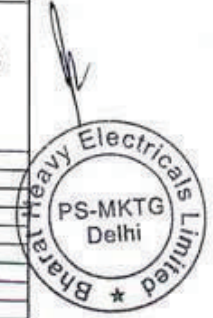


NTPC		PROJECT : Patratu STPS Phase-I ( 3 X600MW)				LIST OF ITEMS REQUIRING QP				REVISION NO : 00		
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE				DATE : 28.04.2017		
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		-				Protech Control	Kolkata	DR				
		-				New Scientific	Kolkata	DR				
		-				PTCI	Kolkata	DR				
29	Level gauge (Transparent & Reflex, Tubular type)	III				Main Contractor approved Sources		A				
30	Press, OP, Vacuum Switch	III				SOR	USA	A			Sub QR	
		III				DRESSOR (ASHCROFT)	USA/Germany	A				
		III				ITT BARTON	USA	A				
		III				HERION	GERMANY	A				
		III				BARNSDALE	GERMANY	A				
		-				Nagano KEIKI	Japan	DR				
		II				Switzer Process Instrument	Chennai	A				Up to 40kg/cm2 & not for Compound Switch and except 900 series
		II				Trafag	Gurgaon	A				Up to 40kg/cm2 & not for Compound Switch
		II				Switzer Process Instrument	Ghaziabad	A				Up to 40kg/cm2 & not for Compound Switch
		III				Delta control	UK	A				
		I				Gauges Bourdon (GIC)	Panvel	A				
		I				ASHCROFT	Gandhinagar	A				Up to 40kg/cm2 & not for Compound Switch
		-				Wika	Pune	DR				
		III				Gorgeson	France	A				
		III				United Electric	USA	A				
		-				SMC	Japan	DR				
		-				Neodyne	USA	DR				
		-				IMI NORGEN	Noida	DR				
		-				WISE Control	Korea	DR				
		-				Baumer	Vapi	DR				
		-				Vasu Tech	New Delhi	DR				
		III				Boil & Krich	Germany	DR				
31	Temperature Switch	III				SOR	USA	A			Sub QR	
		III				DRESSOR (ASHCROFT)	USA/Germany	A				
		III				ITT BARTON	USA	A				
		III				DELTA CONTROLS	UK	A				
		I				Switzer Process Instrument	Chennai	A				up to 200 Deg. C
		I				Switzer Process Instrument	Ghaziabad	A				up to 200 Deg. C
		II				Trafag	Gurgaon	A				up to 200 Deg. C
		I				ASHCROFT	Gandhinagar	A				
		-				Wika	Pune	DR				
		III				Gorgeson	France	A				
		III				United Electric	USA	A				
		-				SMC	Japan	DR				
32	Flow switch	III				UNIVERSAL FLOW METER	USA	A			Sub QR	
		III				Switzer	Chennai	A				

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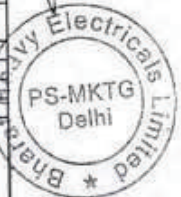
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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP				REVISION NO : 00		
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE				DATE : 26.04.2017		
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		III				Levcon	Kolkata	A				
		III				DK Instrument	Kolkata	A				
		III				Khrono Marshal	Pune	A				
		III				Chemtrol	India	DR				
		III				V Automat	NewDelhi	DR				
		III				Gauges Bourdon	Panvel	A				
		III				Magnetrol	Belgium	A				
		III				Ashcroft	Germany	A				
		III				Auxitrol	UK	A				
		III				Mericoid	USA	A				
		III				Delta Control	UK	A				
		III				Merium	USA	A				
		-				Sunag Corporation		DR				
33	Condensing Pots	III				Main Contractor approved Sources		A				
34	Electric to Pneumatic converter	III				IMI NORGEN	India	A			Sub QR	Make : WATSON SMITH
		III				Fair child	USA	A				
		-				ABB	India	A				Subject to meeting the NTPC specification requirement
		-				SMC Pneumatics	Noida	DR				
		-				P & F	Bangalore	DR				
		-				Fairchild India Pvt, Ltd.	Noida	DR				
		-				FESTO	Bangalore	DR				
35	Conduits lead coated (Flexible)	III				Plica	Ghaziabad	A				Main contractor can propose additional vendor for this item
		III				Bansal laboratories	BHOPAL	A				
36	Intelligent Battery charger 24V DC & DCDB /BHMS	II				Chabbi Electricals	Jalgaon	A			Sub QR	Modules from EMERSON
		II				Ellech	Gurgaon	A				Modules from ELTEK
		II				MasTech	Jalgaon	A				Modules from ELTEK
		II				Emerson	India	A				
		II				MasTech (Selek Modules)	Jalgaon	A				BHMS from M/s USV, Germany
		*				HBL Power Systems	India	DR				
		*				Dubas	India	DR				
		*				Chabbi Electricals (Chabbi Modules)	Jalgaon	DR				
		*				Hiachi Hi Rel	Gandhinagar	DR				
		*				Statcon Power Controls Pvt. Ltd.	Noida	DR				
		*				Chiondo Power Systems (caldyne)	India	DR				
		*				Amararaja	Tirupati	DR				
		*				Kellron Power Electronics	Trivendram	DR				



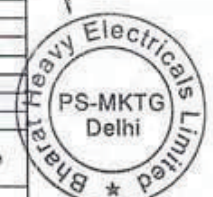
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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP			REVISION NO : 00			
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			DATE : 26.04.2017			
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspect on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		-				Universal Instrument manufacturing co P Ltd	India	DR				
		-				Hind Rectifier Ltd	India	DR				
37	Battery Health Monitoring System	III				Emerson	Mumbai	A				
		III				Eltek SGS Pvt Ltd	Gurgaon	A				
		-				B Tech Inc	USA	DR				
		III				Hilachi Hi Rel	Gandhinagar	A				
		-				Hopecke	Germany	DR				
		-				Hilachi Hi Rel	Gandhinagar	DR				
38	Battery(Ni-cd)	I				AMCO SAFT	Bangalore	A				
		II				SAFT	France/Sweeden	A				
		I				HBL POWER	Hyderabad	A				
		II				Hopecke	Germany	A				
39	Socket weld fittings	III				BHEL Approved Sources						
40	Impulse pipe & tubes	II				Maharashtra 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				Makes shall be as per approved list (Sr. No. 41)
		II				ISMT	Ahamadnagar	A				Carbon steel only.
		II				Sandvik		A				For SS only.
		-				TUBACES	Spain	DR				
		-				Salzgitter Mannesmann International	Germany	DR				
		-				Jindal saw	India	DR				
		II				Rafanamani Metal and Tubes	Ahamadabad	A				SS only
		II				Heavy metals and Tubes	Ahamadabad	A				SS and CS only.
		-				Shubhataxmi Metal and Tubes	Mumbai	DR				
41	Compression fittings	III				Parker	USA	A				
		III				Precision	Mumbai	A				
		III				Azlech	Mumbai	A				
		III				Fluid control Pvt. Ltd.	Pune	A				
		III				H/P Valves and fittings	CHENNAI	A				Ferrules are to be hardened at Exim Holand for pressure above 9000 psi.
		III				Excel hydro	Mumbai	A				Ferrules are to be hardened at Exim Holand for pressure above 9000 psi.
		III				Swagelok	USA	A				
		III				Panem	Mumbai	A				
		III				Melpress	Kolkata	DR				
		-				AURA INC	New Delhi	DR				
		-				Prime Engineers		DR				
		-				Arya Craft		DR				



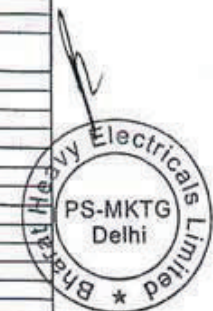
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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING OP				REVISION NO : 00		
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE				DATE : 28.04.2017		
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9555-001-2										
No.	Major Equipment	QP Inspection Category	QP No. 9555-001-QV/Q	QP Submission SCH	QP Approval SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		-				PMT Engineers	Ahemdabad	DR				
		-				Flowtech	Kolkata	DR				
		-				Parker Hannin India Pvt Ltd		DR				
42	Instrument valves	III				BHEL	Trichy	A				
		II				Excel Hydro	Mumbai	A				
		II				Instrumentation Ltd.,	Palghat	A				
		III				Swagelock	USA	A				
		III				Parker	USA	A				
		II				HP Valves and fittings	CHENNAI	A				
		II				Fluid control Pvt. Ltd.	Pune	A				
		II				Baldota	Mumbai	A				
43	Valve manifolds	III				Excel hydro	Mumbai	A				
		III				SCHNEIDER	Germany	A				
		III				Anderson Greenwood	USA	A				
		III				Astech	Mumbai	A				
		III				HP Valves and fittings	CHENNAI	A				
		III				Fluid control Pvt. Ltd.	Pune	A				
		III				Microprecision	Faridabad	A				
		III				Parker	USA	A				
		III				Swagelock	USA	A				
		III				Baldota	Mumbai	A				
		*				Melpress Engg. works	Kolkata	DR				
		*				Flow tech	Kolkata	DR				
44	Local Instrument Enclosure/Rack	I				Pyrotech	Udaipur	A				
		I				Instrumentation Limited	Kota	A				
		I				Sajas electrical	Trichurapalli	A				
		I				Prammen	Puddukottai	A				
		I				Chemim	Pondicherry	A				
		*				Forbes Marshall	Pune	DR				
		*				Positronics	Vadodara	DR				
		*				Procon	Chennai	DR				
45	Instrument Cables	I				Paramount	Khushkhera	A				PVC.FRLS type.RQP
		I				Polycab	Daman	A				PVC.FRLS type.RQP
		I				Delton	Faridabad	A				PVC.FRLS type.RQP
		I				KEI	Bhiwadi	A				PVC.FRLS type
		I				Ekey Telelinks	Faridabad	A				PVC.FRLS type
		I				CORDS	Chopanki	A				PVC.FRLS type.RQP
		I				CORDS	Kaharani	A				PVC.FRLS type.RQP
		I				Nicco	Kolkata	A				PVC.FRLS type
		II				TEW & C	USA	A				PVC.FRLS type
		II				Habia cables	Sweden	A				
		II				Kerpen cables	Germany	A				
		II				Lapp cables	Germany	A				
		II				Thermo electra Bv	Neiherland	A				
		I				Universal Cable	Salna	A				PVC.FRLS type
		I				Thermocables	Hyderabad	A				PVC.FRLS type



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NTPC		PROJECT : Patratu STPS Phase-I (3 X800MW)				LIST OF ITEMS REQUIRING QP			REVISION NO : 00			
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			DATE : 26.04.2017			
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspect on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		I				Finolex Cable	Pune	DR *				M/s BHEL will forward only two proposals after details review of NTPC Technical specification requirements.
		I				Incab	Pune	DR *				
		I				Gupta Power Infrastructure Ltd.	Khurdha	A				
		*				Lepp cables	India	DR				
		*				Lioni cable	Pune	DR				
		*				RR Kabel	Sivase	DR				
		*				Gemscab	Bhivadi	DR				
		*				KEC International	Mysore	DR				
		*				Advance cable Technologies	Bangalore	DR				
		*				Suyog Electricals Ltd.	Vadodara	DR				
		*				Special Cable	India	DR				
		*				CMF	Fardabad	DR				
		*				Govind Cables	Kolkata	DR				
		*				Associate Cables	Mumbai	DR				
		*				Radiant RSCC Speciality	Hyderabad	DR				
		*				APAR Industries	Banglore	DR				
		*				Tempens Cable	Udaipur	DR				
		*				Mansfield cables co. Ltd.	Hyderabad	DR				
		*				Servel India Pvt. Ltd.	Neemrana	DR				
		*				TC Communication Pvt. Ltd.	Ghazalbad	DR				
46	Electrical actuator	III				Auma	Germany	A				
		III				Limtorque	USA	A				
		III				Rotorq	UK	A				
		II				Limitorque	Fardabad	A				
		II				Rolork	Chennai/ Bangalore	A				
		III				Nippon gear	Japan	A				
		II				Auma	Bangalore	A				
		III				Harold Beck	USA	A				
		III				Drehmo	Germany	A				
		I				Antrieb	Chennai	A				For Low torque application such as SHRH vent, circulation isolation
		*				Lindco	USA	DR				
		*				Siemens	Germany	DR				
47	Electrical actuator for ID/FD/PA Blade pitch and Guide vane control	III				Harold Beck	USA	A				
		III				SIFOS Aktorik GmbH	Germany	A				
		*				ABB	Germany	DR				
48	Flow nozzle / Venturi assembly	II				Microprecision	Fardabad	A			Sub QR	
		II				SEIKO	Austria	A				
		II				TECHNOMATIC	Italy	A				
		II				Instrumentation Limited	Patghat	A				
		I				Starmech	Pune	A				
		II				WISE Control	Korea	A				

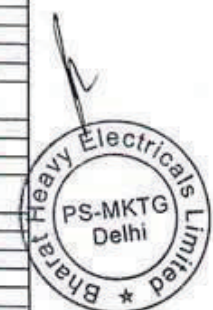


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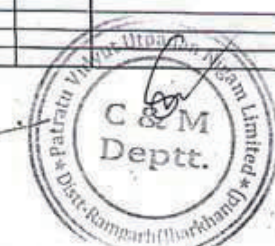
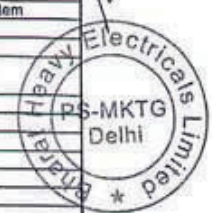
NTPC		PROJECT : Patratu STPS Phase-I ( 3 X600MW)				LIST OF ITEMS REQUIRING QP						
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE						
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2				REVISION NO : 00 DATE : 26.04.2017						
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		I				MINCO India Flow Elements Pvt. Ltd.	GOA	A				
		*				SAMIL	Korea	DR				
		*				MINCO	GOA	DR				
		*				Engg. Specialities	Kolkata	DR				
		*				Pyroelectric	Mumbai	DR				
		*				Hydropneumatics	Mapusa / GOA	DR				
		*				ASIAN INDUSTRIAL VALVES	Chennai	DR				
		*				Dynafluid valves Pvt. Ltd.	Belgium	DR				
49	HIGH Temp. cable (PTFE/FEP)	II				Habia cables	Sweden	A				
		II				Lapp cables	Germany	A				
		II				Kerpan cables	Germany	A				
		II				TEW & C	USA	A				
		II				Thermo-Electra Bv	Netherland	A				
		II				Habia cables	China	A				
		II				Thermocables	Hyderabad	A				
		II				Tempsens	Udaipur	A				
		*				Delton Cables	Faridabad	DR				
		*				RJ Cables	Roorkee	DR				
50	Fiber optic cable	II				HFCL	Goa	A				
		II				R&M	Switzerland	A				
		II				Aksh Fibre	Bhivadi	A				
		II				Finolex	Pune/Goa	A				
		II				Birla Ericson	Rewa	A				
		II				Molex	UK	A				
		II				Corning	USA	A				
		II				Schneider	GOA	A				Previcusly known as D Link / Smarlink, Goa
		*				RPG Cables	India	DR				
		*				Unillex Cables	India	DR				
		*				Terracon	India	DR				
51	Pneumatic Actuator (Power Cylinder e. g. FOR SADC)	II				Dong Woo Valve Control Co. LTD	Korea	A				
		II				Shin Hwa Engineering Co. LTD	Korea	A				
		I				Instrumentation Limited	Palghat	A				
		I				Kelton	Cochin(Alleppey)	A				
		I				SMC Pneumatics	Noida	A				
		I				Rotex	Mumbai	A				Up to 12 inch only Conditional
		*				Emerson Process Management	Chennai	DR				
		*				MIL Controls	Alwaye	DR				
		*				Festo	Bangalore	DR				
		*				IMI Norgren	Noida	DR				
52	Level switch capacitance type	III				ENDRESS & HOUSER	Aurangabad	A			Sub OR	
		III				MAGNETROL	BELGIUM	A				
		III				SBEM	PUNE	A				
		III				PUNE TECHTROL	PUNE	A				



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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X600MW)				LIST OF ITEMS REQUIRING QP				REVISION NO : 00		
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE				DATE : 26.04.2017		
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI-Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		III				LEVCON	KOLKATA	A				
		III				Nivo Controls	Indore	A				
		-				V AUTOMAT	New Delhi	DR				
		-				D K Instrument	Kolkata	DR				
		-				Siemens	Germany	DR				
		-				ABB	Korea	DR				
		-				Rosemount	Korea	DR				
53	Transducer	II				AE	Mumbai	A				
		II				Southern Transducer	Chennai	A				
		II				Elster	Mumbai	A				
		III				Camille Bauer	Germany	A				
		III				Metrawat	Germany	A				
		II				Rishab	Nasik	A				
		-				Pyrotech	Udaipur	DR				
		-				Masibus	Gandhinagar	DR				
		-				SIEMENS	Germany	DR				
54	Mini UPS up to 3.5 KVA	III				EMERSON	Mumbai	A				
		III				EMERSON	Pune	A				
		III				Hitachi Hi- Rel	Gandhinagar	A				
		III				APC	Bangalore	A				
		III				APLAB	Mumbai	A				
		III				Delta	Gurgaon	A				
		-				Powertronix	Bangalore	DR				
		-				DUBAS ENGG.PVT.LTD., BANGALORE		DR				
		-				Grid power conversion Pvt Ltd.		DR				
		-				Schneider	Bangalore	DR				
55	Level switch- cond type	III				EMERSON (Solartron mobrey)	UK	A			Sub QR	
		II				Hi Tech	Kolkata	A				
		III				Yarway	USA	A				Levelstate, UK System
		III				LEVELSTATE	UK	A				
		II				Raman Instruments	Delhi	A				Emerson (Mobrey) System
		-				BHEL	Trichy	DR				
		-				IGEMA	Germany	DR				
56	Level switch - Float/Displacer Type	III				ENDRESS & HOUSER	AURANGABAD	A			Sub QR	
		III				MAGNETROL	BELGIUM	A				
		III				LEVCON	KOLKATA	A				
		III				SBEM	PUNE	A				
		III				Chemtrols samil	Mumbai	A				
		III				NAKATIYA	JAPAN	A				
		III				Sigma Industries	Mumbai	A				
		III				D K Instrument	KOLKATA	A				
		III				PUNE TECHTROL	PUNE	A				
		-				V AUTOMAT	NEW DELHI	A				
		-				WAREE	WAPI	DR				
		III				LEVELSTATE	UK	A				



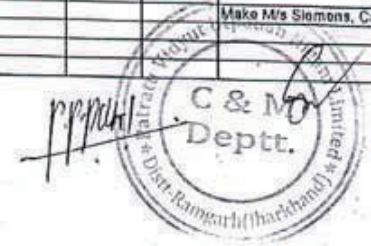
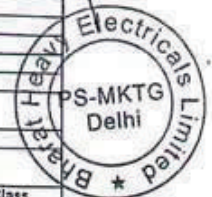
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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X600MW)				LIST OF ITEMS REQUIRING QP						
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE						
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2				REVISION NO : 00						
						DATE : 26.04.2017						
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		III				Gauges Bourdon (GIC)	Panvel	A				
		*				Nisan Scientific Process	Navi Mumbai	DR				
57	Air filter regulator	III				Fairchild	USA	A				
		III				Shayo Norgren	Mumbai	A				
		III				SMC Pneumatics	NOIDA	A				
		III				Emerson (Asco)	Chennai	A				
		III				Festo	Bangalore	A				
		III				Placka	Chennai	A				
		III				Divya Control Elements	Gujarat	DR				
58	Copper tubing/Brass connectors	III				Main Contractor approved Sources		A				
59	Coupling / Interposing relays	III				PARAMOUNT	BANGALORE	A				
		III				OMRON		A				
		III				OEN		A				
		III				Jyoti	Baroda	A				
		III				ELSTA	SWITZERLAND	A				
		*				Schneider	Germany	DR				
		*				Siemens	Germany	DR				
		*				Phoenix	Germany	DR				
		*				Finder		DR				
60	Solenoid valve	III				Rotex	Vadodara	A			Sub QR	
		III				Avcon	Mumbai	A				
		III				Herion	Germany	A				
		III				IMI NORGEN	GERMANY	A				
		III				Jafferson	Argentina	A				
		III				Asco	Chennai/USA	A				
		III				Festo	Bangalore	A				
		III				SMC	Noida	A				
		III				Parker	Brand Name	A				
		*				Schneider	Germany	DR				
		*				Neucon Industries Pvt. Ltd.		DR				
61	Lube oil control valve - Self Regulating	III				NUOVO PIGNONE	ITALY	A				
		III				EMERSON	CHENNAI	A				
		III				SAMSON	GERMANY / PUNE	A				
		III				Forbes marshall arca Pvt. Ltd.	Pune	A				
62	Guided wave Radar type level transmitter	III				Magnetrol	Belgium	A			Sub QR	Approved up to 16", 900 Class.
		III				Endress & Houser	Germany/ Aurangabad	A				
		III				Emerson Process Management	Sweden/ PAWANE	A				
		III				ABB(K-Tech)	USA	A				
		II				Supreme Technology	Thane	A				
		*				Yokogawa	Japan	DR				Make M/s Siemens, Canada
		*				ABB	India	DR				
		*				P & F	Bangalore	DR				

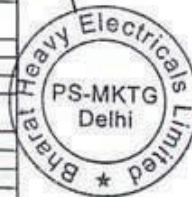
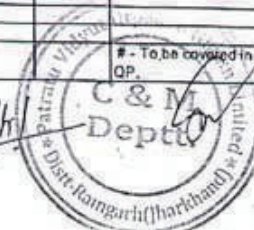


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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X600MW)				LIST OF ITEMS REQUIRING QP				REVISION NO : 00		
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE				DATE : 26.04.2017		
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QV/Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		-				Khrono	France	DR				
		-				HONEYWELL	Pune	DR				
		-				Vega	Germany / India	DR				
		-				Siemens	India	DR				
		-				SBEM	Pune	DR				
63	Maintenance and Calibration Equipment					Main Contractor will propose the vendors during detail Engineering.						
64	Temperature Gauge	III				BUDENBERG	UK	A				
		III				DRESSOR (ASHCROFT)	USA/Germany	A				
		III				Wika	GERMANY/ Pune	A				
		III				WISE Control	Korea	A				
		III				Nagano KEIKI	Japan	A				
		III				H.Guru South India	Bangalore	A				
		III				A.N. Instruments	Kolakkatta	A				
		III				NUOVA FIMA	ITALY	A				
		III				Goa Thermostatic	Goa	A				
		III				Goa Instrument Industries	Goa	A				
		III				Baumer	Vapi	A				
		III				Precision mass products Pvt. Ltd.	Gandhinagar	A				
		III				H Guru	Rishra/Muzaffarpur	A				
		III				Baumer	Vapi	A				
		III				Forbes Marshall	Hyderabad	A				
		III				Gauges Bourdon (GIC)	Panvel	A				
		-				Konics	Korea	DR				
		-				Pyroelectric	GOA	DR				
		-				Winters Gauge	USA	DR				
		III				Walchandnagar Industries Ltd.	Dharwad	DR				
		-				Nesstech	Vapi	A				
		-				US Gauge	USA	DR				
65	Furniture for computer (Chair, Almirah, Lock etc.)	III				Main contractor approved sources		A				
66	Terminal Block (Cage and Clamp type)	III				Weidmuller	Germany	A				
		III				Phoenix	Germany / India	A				
		III				Wago	Germany / India	A				
		III				Elmex	Vadodara	A				
67	FRP Junction Box for C&I system	III				BHEL Approved Sources		A				CE Mark only
68	PLC System (if applicable)	I				GE Intelligent platforms	Bangalore	A				
		I				ABB	Bangalore	A				
		I				Schneider	Nasik	A				
		I				Rockwell	Sahibabad	A				
		I				Siemens	Nasik	A				
		I				HONEYWELL	Pune	A				
69	SMART POSITIONER ( Make )	#				ABB						



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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP						
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE						
		CONTRACTOR : BHEL Ltd				REVISION NO : 00						
		CONTRACT NO : CS-9585-001-2				VENDOR AS APPROVED BY						
						DATE : 26.04.2017						
No.	Major Equipment	QP Inspect on Category	QP No. 9585-001-QV/Q	QP Submission SCH	QP Approval SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		#				Masolenien						
		#				Siemens						
		#				Smar						
		#				Yokogawa						
		#				EMERSON (Fisher Rosemount)						
		#				METSO						
		#				Yamatake						
		#				Moore						
70	ROTAMETER	III				IEPL	HYDRABAD	A			Sub QR	
		III				TRAC	HYDRABAD	A				
		III				PLACKA	CHENNAI	A				
		III				EUREKA	PUNE	A				
		III				SCIENTIFIC DEVICES	MUMBAI	A				
		III				FLOW STAR	FARIDABAD	A				UP TO 300 NB
		III				TOKYO KEISO	JAPAN	A				
		*				Flowtech Instrument Services	Vadodara	DR				
		*				Samil Chemtrol	MUMBAI	DR				
		*				Gauges Bourdon	Parvel	DR				
		*				Tansa Equipment Pvt. Ltd.	Thane	DR				
71	SINGLE AND MULTI POINT TEMPERATURE RECORDER (Microprocessor based)	III				YOKOGAWA INDIA	BANGALORE	A				Make Yokogawa, Japan
		III				CHINO CORPORATION	JAPAN	A				
		III				EUROTHERM	UK	A				
		III				EUROTHERM	INDIA	DR				
		III				YOKOGAWA	JAPAN	A				
		III				ABB	UK / GERMANY	A				
		III				FUJI	JAPAN	A				
		III				HONEYWELL	USA /	A				
72	Reverse Rotation Indicator (RRI)	III				GE BENTLY NEVEDA	NETHERLAND	A				
		III					USA	A			Sub QR	ALL TSI VENDORS ARE ALSO ACCEPTABLE
		I				SHINKAWA	JAPAN	A				
73	Instrument Tube Fittings (Air)	III				P & F	Bangalore	A				
74	pH/ Conductivity Analyser	III				Main contractor approved sources		A				
		III				HACH	Switzerland / USA	A			Sub QR	
		III				YOKOGAWA	Bangalore / Japan	A				Make Yokogawa- Japan
		III				ABB	UK / USA	A				
		*				EMERSON	Pawane	A				
		*				Thermo orlon		DR				
		*				Forbes Marshall	Pune	DR				
75	PADO					Main Contractor will propose the vendors during detail Engineering.						
76	DEW Point Sensor / meter/ Moisture Measuring System	III				GE Sensing	USA / Ireland	A				Panametric brand
		III				Michell Instrument	UK	A				
		III				Shaw	UK	A				



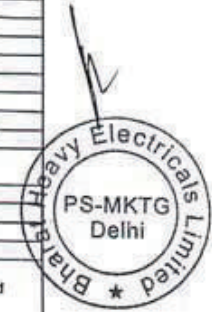
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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP			REVISION NO : 00			
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			DATE : 26.04.2017			
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspection Category	QP No. 9585-001-QVI Q	QP Submission SCH	QP Approval SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		III				COSA XENTAUR	USA	A				through Spectrum automation faridabad
		*				VAISHALA	Sweden / Japan	DR				
		*				DWER	USA	DR				
		*				Endee	Mumbai	DR				
		*				Nivo Controls	Indore	DR				
77	Blank Panels / Cabinets	III				Bartec GMBH	Germany	DR				
		III				Rittal	Bangalore	A				
		III				Hoffman	BANGALORE	A				
		III				Pyrotech	Udaipur	A				
		III				BHEL	Bangalore	A				
78	CCTV Components (IP)	*				Schneider	Bangalore	DR				
		*				Sony	Japan	DR				
		*				Siemens	Pondichery	DR				
	Integrators will be decided during detail Engineering.	*				Dv Tel	USA	DR				
		*				Honey Well	Gurgaon	DR				
		II				Bosch	Bangalore	A				With Bosch Software
		*				Axis	Sweden	A				With Bosch Software
		*				Palco	USA	DR				
		II				Axis	Sweden	A				With Milestone Software
79	Control Desk, Server / PC Rack for Unit Control room and Auxiliary control room.	I				Pyrotech works Space	Udaipur	A				
		I				Cosmas	Noida	A				
		I				Adarsh Control	Bangalore	A				
		*				Cherlin Controls	Pondichery	DR				
80	Digital Indicators	III				Harmony Systems	New Delhi	DR				
		III				Masibus	Gandhi Nagar	A				For Non mosaic mounting
		III				ABB	Germany	A				
		III				Foxboro	UK	A				
		III				Yokogawa	Japan	A				
		III				Gossen / Metrowall / Camille Bauer	Germany	A				
		III				Siemens	Germany	A				
		III				Chino	Japan	A				
		III				Welgeß Messgerate	Germany	A				
		III				Pyrotech	Udaipur	A				
		*				Chino Corporation	Mumbai	DR				For Non mosaic mounting
		*				Yokogawa	Bangalore	DR				For Non mosaic mounting and submit only two proposals
		*				Lektrotok	Pune	DR				
		*				Teletherm	Chennai	DR				
81	Dust Emission Monitor	III				Land Instrument International	UK	A				Land Combustion Division
		III				Durag	Germany	A				
		III				Sick Maihak	Germany	A				
		III				Emerson Process Management	Ireland	A				
		III				Codei	UK	A				

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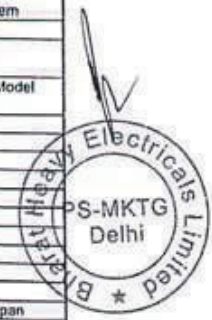
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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP			REVISION NO : 00			
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			DATE : 26.04.2017			
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		II				Forbes Marshall	Pune	A				Main kit from M/s Codel, UK
82	Electrical Indicating Instruments (Mosaic Compatible)	III				Siemens	Germany	A				
		III				Gossen / Melrowall / Camille Bauer	Germany	A				
		III				Ganz	Germany	A				
		III				Welgeß Messgerate	Germany	A				
83	Flue Gas Analyser (CO)	III				Codel	UK	A			Sub QR	
		III				Emerson Process Management	Pawane	A				Analysar from M/s Emerson, Germany / USA.
		III				Land Instrument International	UK	A				Land Combustion Div
		III				Sick Maihak	Germany	A				
		III				Siemens	Germany	A				
84	Flue Gas Analyser (CO2)	*				Codel	UK	DR			Sub QR	
		*				Sick Maihak	Germany	DR				
		*				Kilwake Procal Ltd.		DR				
85	Flue Gas Analyser (SO2 and Nox)	III				Sick Maihak	Germany	A			Sub QR	
		III				Emerson Process Management	Pawane	A				Analysar from M/s Emerson, Germany / USA.
		III				Siemens	Germany	A				
		III				Fuji Electric	Japan	A				
		*				Yokogawa	Japan	DR				
		*				Codel	UK	DR				
		*				ABB	Gloucestershire	DR				
86	Flue Gas Analyser (O2 Analyser (HT))	II				SECO	Chennai	A			Sub QR	Main Contractor Can propose additional vendor for this item
		III				Marathon Monitor	USA	A				
87	Flue Gas Analyser (O2 Analyser (LT))	III				Emerson (Rosemount)	Pawane	A			Sub QR	Make EMERSON, USA
		III				Forbes Marshall	Pune	A				Make Enctec, Germany : Model Oxitec 5000 series
		III				ICE	Mumbai	A				Make Ametek, USA
		III				Yokogawa	Bangalore	A				Make Yokogawa, Japan
		III				ABB	Bangalore	A				Make ABB, UK
		*				AMETEK (P and AI division)	Singapore	DR				
		*				Enotec	Germany	DR				
		*				Fuji Electric	Japan	DR				
		*				Teledyne	USA	DR				
88	Flue Gas Analyser Panel	I				Chemtrol	Goa	A			Sub QR	
		I				Emerson Process Management	Navi Mumbai	A				
		I				Pyrotech	Udaipur	A				
		I				Analytical Instrument Company	Kota	A				
		I				Yokogawa	Bangalore	DR				Analysar from M/s Fuji, Japan
		I				Adago	Mumbai	A				
		*				Marvel Engg Company	Chennai	DR				

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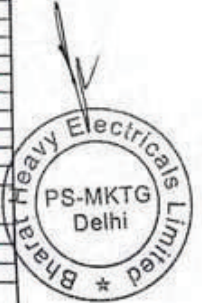
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NTPC		PROJECT : Patratu STPS Phase-I (3 X800MW)				LIST OF ITEMS REQUIRING QP				REVISION NO : 00		
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE				DATE : 26.04.2017		
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QV Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		*				Forbes Marshall Codel	Pune	DR				
						ICE(Asia) Private India	Mumbai	DR				
89	Graphic Interface Unit	III				Rockwell Automation		A				
		III				Digital Instruments and Control System (Proface)	Bangalore	A				Proface Brand
		III				Red Lion	USA	A				
		III				Schnieder Electric		A				
90	Hand Held Calibrator	III				Main contractor approved sources		A				Compatible with the Transmitter to be Supplied & Subject to meeting NTPC specification requirement
91	Hart Management System	III				Yokogawa	India	A				
		III				Emerson Process Mgmt	USA / Singapore / India	A				
		III				P & F	Germany / Bangalore	A				
		III				MTL	Chennai	A				
		*				Stahl	Germany	DR				
92	Impact Head Type Flow Element	II				Detriech / Emerson	USA	A			Sub QR	
		II				Midwest	USA	A				
		II				Veris Inc	USA	A				
		*				TM Technomatic SPA	Italy	DR				
93	Isolator	III				Main contractor approved sources						
94	Master Slave Clock System	II				Hopf	Germany	A				
		I				Sertel	Chennai	A				
		II				Halfway	USA	A				
		II				Moser Baer AG	Switzerland	A				
		II				Mein Berg	Germany	A				
		I				Sands	Chennai	A				
		I				Masibus	Gandhinagar	A				
		*				Signals & System	Chennai	DR				
95	Mosaic Tiles / Console Items	III				Pro-Plan	Germany	A				Earlier Boyko Strey
		III				Tew	Germany	A				Earlier Subklew
94	Network Components	III				Main contractor approved sources						
95	Online Mercury Analyser	III				Durag	Bangalore	A			Sub QR	Make Durag, Germany
		*				Maihak	Germany	DR				Main Contractor Can propose additional vendor for this item
		*				Thermo	USA	DR				
97	P A System (IP Based)	*				Commend	Austria	DR				
		*				Stanlaphone Zenitel	Norway	DR				
		*				Armiel	Russia	DR				
		*				Industronic Industrie Electronic GmbH and Co. KG	Germany	DR				
		*				LARAON Enginners and Consultants Pvt. Ltd.	Gurgaon	DR				
		*				Aishan Technologies India Pvt. Ltd.	Bangalore	DR				

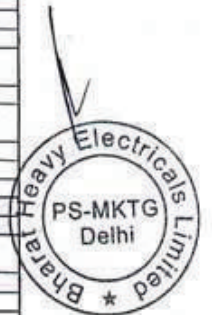
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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)			LIST OF ITEMS REQUIRING QP			REVISION NO : 00				
		PACKAGE : EPC PACKAGE			APPROVAL & ACCEPTABLE			DATE : 26.04.2017				
		CONTRACTOR : BHEL Ltd			VENDOR AS APPROVED BY							
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub OR	Remark
98	Printer (Dot Matrix)	III				BHEL Approved Sources						Make
99	Printer (Inkjet)	III				BHEL Approved Sources						Make
100	Printer (Laser)	III				BHEL Approved Sources						Make
101	Semaphore Indicators	III				Subklew	Germany	A				
		III				K & N	Austria	A				
		III				ABB	Germany	A				
		III				Siemens	Germany	A				
102	Synchronising Relay	III				Siemens	Mumbai	A				
		III				Areva	Chennai	A				Sub OR
		III				ABB	Bangalore	A				
103	Synchroscope	III				BHEL Approved Sources						
104	Ultrasonic Type Flow Meter (for Stack)	III				Maihak	Germany	A				Sub OR
		III				Durag	Germany	A				
		III				Teledyne	USA	A				
		*				GE Sensing	USA	DR				
105	UPS / ACDB	I				EMERSON (DB Power)	Pune	A				
		I				Merlin & Gerin	France	A				Sub OR
		I				Gutur	Switzerland	A				
		I				AEG (Safit)	Germany	A				
		I				Hitachi Hirel	Gandhinagar	A				
		I				Emerson (Tala Libert)	Ambamath	A				Approved up to 150 kVA, 1φ
		I				Fuji Electric	Japan	A				Approved up to 150 kVA, 1φ
		*				Kellron	Kerala	DR				
		*				APC	India	DR				
		*				DUBAS ENGG.PVT.LTD., BANGALORE		DR				
		*				Grid power conversion Pvt Ltd,		DR				
106	Vibration Monitoring System for BOP	II / I				Shinkawa	Japan	A				Sub OR
	Refer Note - 1	II / I				Bentley Niveda	USA	A				
		II / I				Vibrometer	Switzerland	A				
		II / I				Rockwell Automation	USA	A				
		II / I				SKF	USA	A				
		I				GE	Pune	A				Refer Note - 1
		I				Meggil	Bangalore	A				GE Benby, USA make System
		I				Forbes Marshall	Pune	A				Vibromer, Switserland make System
		I				Rockwell Automation	Sahibabad	A				Shinkawa, Japan make System
		*				Emerson	Mumbai	DR				
		*				Burel and Kajer		DR				
		*				IRD Mechanalysis	Mumbai	DR				
107	Voltmeter	III				Rishabh	Nasik	A				Sub OR
		III				AE	Mumbai	A				
		III				Yokogawa	Japan	A				
		*				MECO		DR				
108	Walhour Meters	III				L&T	Bangalore	A				



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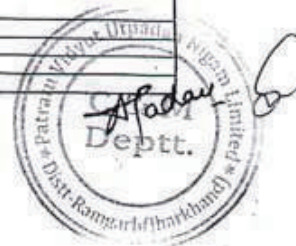
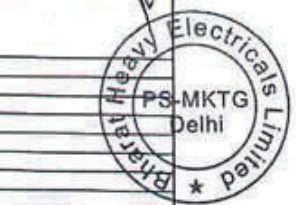
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NTPC		PROJECT : Patratu STPS Phase-I (3 X800MW)				LIST OF ITEMS REQUIRING QP			REVISION NO : 00			
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			DATE : 26.04.2017			
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
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No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		III				Elster	Mumbai	A				
		III				Secure Meters	Udaipur	A				
		III				Yokogawa	Japan	A				
		III				GEC	UK	A				
		III				Schnieder Electric	India	DR				
		III				Lendis + Gyr	Kolkata	DR				
109	Wireless Solution (Microwave Tower Communication)	III				D Link	Goa	A				
		III				Sheetal	Pune	A				
		III				Pyrotech	Udaipur	A				
		III				Arya Communications	New Delhi	A				
		*				Lotus Wireless	Vishakhapatnam	DR				
		*				Avilon	Israel	DR				
		*				Prudent Automation Pvt. Ltd.	Hyderabad	DR				
		*				AMG Systems Ltd.	UK	DR				
110	Large Video Screen (LED Based)	III				Della	Gurgaon	A				
		III				Barco	Noida	A				
		III				Planer System	USA	A				
		*				Christie	USA	DR				
		*				Eyevis	Germany	DR				
111	CJC Box (If applicable)					Main Contractor will propose the vendors during detail Engineering.						
112	3 D level Scanner for Solid Application	III				APM	ISRAIL	A				
113	Dust Sensor	III				BHEL Approved Sources						
114	Pulse jet Controller	III				Switching Circuit	Kolkata	A				
		III				Advance Concept	Kolkata	A				
		*				Control Devices	Kolkata	A				
		*				Voltcraft	Kolkata	DR				
		*				Micro System	Kolkata	DR				
115	Solid Mass Flow Meter	III				Schenk	Ranchi	A				
		III				Thermofisher (Ramsay)	Nasik	A				
		III				Siemens Mitronics	Canada	A				
		III				Mutec	Germany	A				
116	Nucleonic Density meter	III				SWR	Germany	A				
		III				E & H	Aurangabad	A				
		III				Thermofisher Scientific	UK	A				
		*				Siemens	Germany	DR				
		*				EMERSON	USA	DR				
		*				GE Sensing	USA	DR				
		*				Berthhold	Germany	DR				
117	Humidistat / Thermostat / Gysterstat / Airstat	III				BHEL Approved Sources						Sub QR
118	Level Switch (RF Type)	II				EIP Enviro	Noida	A				Sub QR
		II				FLOW STAR	Fardabad	A				
		II				Nivo Controls	Indore	A				
		*				BHEL		DR				

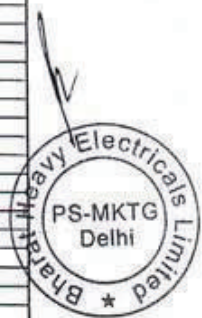
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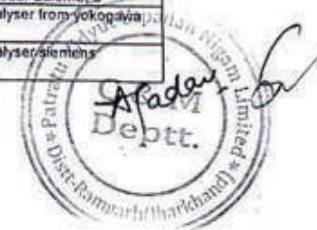
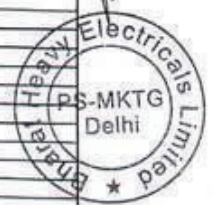
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		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			DATE : 26.04.2017			
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspect on Category	QP No. 9585-001-QVI Q	QP Submission SCH	QP Approval SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
119	Turbine supervisory Instruments along with vibration analysis system.	II				GE BENTLY	USA	A				
	Refer Note - 1	II				MEGGITT (VIBROMETER)	SWITZERLAND	A				
		II				SHINKAWA	JAPAN	A				
		I				GE	Pune	A				For GE Bently, USA System
		I				MEGGITT (VIBROMETER)	Bangalore	A				For Meggitt, Switzerland System
		I				Forbes Marshall	Pune	A				For Shinkawa, Japan system
		*				EMERSON	INDIA	DR				
		*				Bruel and Kjaer		DR				
		*				Rockwell Automation	Sahibabad	DR				
		*				SKF	USA / India	DR				
		*				BHEL EDN	Bangalore	DR				
120	SWAS (Sampling Handling System and Dry Panel)	I				Emerson Process Management	Navi Mumbai	A			Sub QR	
		I				Forbes Marshall	Pune	A				
		I				Lowe	UK	A				
		I				ABB	Bangalore	A				Conditional
		I				Yokogawa	Bangalore	DR				
		I				Analysar Instrument Co. Ltd.	Kota	DR				
		*				Steam Equipment	Pune	A				
		*				Flow Line Instrument	Bangalore	DR				
		*				Instrumentation Limited	Kota	DR				
		*				Chemin Controls	Pondichery	DR				
121	SWAS Analyser (Chloride)	III				ABB	UK	A			Sub QR	
		III				Orion	USA	A				Orion Brand
		*				DKK	Japan	DR				
122	SWAS Analyser (Conductivity)	III				Hach	Switzerland	A			Sub QR	Polymetron Brand
		III				Emerson Process Management	Navi Mumbai	A				
		III				Yokogawa	Japan	A				
		III				ABB	UK	A				
		*				Honeywell	USA	DR				
		*				DKK	Japan	DR				
		*				Orion	USA	DR				
123	SWAS Analyser (Dissolved Oxygen)	III				Orion	USA	A			Sub QR	Orion Brand
		III				Hach	Switzerland	A				Polymetron Brand
		III				Emerson Process Management	USA	A				
		III				ABB	UK	A				
		*				Honeywell	USA	DR				
		*				DKK	Japan	DR				
124	SWAS Analyser (Hydrazine)	III				Hach	Switzerland	A			Sub QR	Polymetron Brand
		III				Orion	USA	A				Orion Brand
		III				ABB	UK	A				



22.07.16

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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X600MW)				LIST OF ITEMS REQUIRING QP			REVISION NO : 00			
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			DATE : 26.04.2017			
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2										
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		*				DKK	Japan	DR				
		*				Rosemount Analytical Inc Irvine		DR				
125	SWAS Analyser (pH)	III				ABB	UK	A			Sub QR	
		III				Hach	Switzerland	A				Polymetron Brand
		III				Emerson Process Management	Navi Mumbai	A				
		III				Yokogawa	Japan	A				
		*				Honeywell	USA	DR				
		*				DKK	Japan	DR				
		*				Orion	USA	DR				
126	SWAS Analyser (Phosphate)	III				Hach	USA	A			Sub QR	
		III				Hach	Switzerland	A				Polymetron Brand
		III				ABB	UK	A				
		*				DKK	Japan	DR				
		*				Orion	USA	DR				
		*				Rosemount Analytical Inc Irvine		DR				
127	SWAS Analyser (Silica)	III				Hach	USA	A			Sub QR	
		III				Hach	Switzerland	A				Polymetron Brand
		III				ABB	UK	A				
		*				DKK	Japan	DR				
		*				Orion	USA	DR				
		*				Rosemount Analytical Inc Irvine		DR				
128	SWAS Analyser (Sodium)	III				Hach	Switzerland	A			Sub QR	Polymetron Brand
		III				Orion	USA	A				Orion Brand
		III				ABB	UK	A				
		*				DKK	Japan	DR				
129	SWAS Analyser (Turbidity)	III				ABB	UK	A			Sub QR	
		III				Emerson	USA	A				
		III				WTW	Germany	A				
		III				E & H	Germany	A				
		*				DKK	Japan	DR				
130	Operator Testing Simulator					Main Contractor will propose the vendors during detail Engineering.						
131	Concentration Analyser					Main Contractor will propose the vendors during detail Engineering.						
132	Electromagnetic Flow Meter	II				Krohne Marshal	Pune	A			Sub QR	
		II				E & H	Aurangabad	A				
		II				Emerson	Pawane	A				
		III				Yokogawa	Japan / China	DR				Only Ref list and catalogues to be submitted.
		III				SIEMENS	Germany	DR				
133	Fiber Optic Generator End winding VMS	II				Vibro System INC	Canada	A				
		II				MC-Monitoring SA	Switzerland	A				Note-6
134	H2 Gas Analyser Cabinet	II				ABB	Bangalore	A				H2 Gas Analyser Germany
		II				Adage Automation	Mumbai	A				H2 Gas Analyser siemens
		II				Yokogawa	Bangalore	A				Germany Model Calomat-6
		II										H2 Gas Analyser from yokogawa
		II				Siemens	India	A				Japan
												H2 Gas Analyser siemens
												Germany



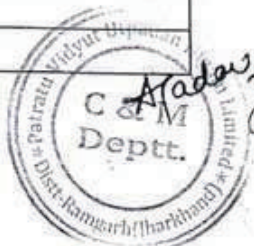
28.04.2017

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NTPC		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP						
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE						
		CONTRACTOR :BHEL Ltd				VENDOR AS APPROVED BY						
		CONTRACT NO : CS-9585-001-2				REVISION NO : 00						
						DATE : 26.04.2017						
No.	Major Equipment	QP Inspecti on Category	QP No. 9585-001-QVI Q	QP Submis sion SCH	QP Appro val SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
135	Sight Flow Indicator	III				BHEL Approved Sources		A				
136	Amonia Analyser	*				Sick Mahak	Germany	DR				
		*				Emerson Process Management	Pawane	DR				
		*				Siemens	Germany	DR				
		*				Fuji Electric	Japan	DR				
		*				Thermodfisher	Mumbai	DR				
		*				Yokogawa	Banglore	DR				
		*				Dongwoo Optron		DR				
137	AAQMS	I				Environment SA India Pvt. Ltd.	Bangalore	A			Sub QR	Analysers for Environment SA, France : Multipoint Calibrator from M/s L N Industrial, Switzerland and Metrological Sensors from M/s LSI Lastem SRL, Italy.
		I				Chemtrols	GOA	A				Analysers for Teledyne API, USA: Metrological Sensors & SPM from M/s Melone Instruments, USA.
		I				Thermo Electron LLS India PVI. Ltd.	Mumbai	A				Analysers for M/s Thermoenvironmental Instruments Inc., USA & Metrological Sensors from M/s Melone Instruments, USA.
		*				Land Combustion	UK	DR				
		*				Thermodfisher	India / USA	DR				
138	EQMS	*				SEPL	Pune	DR			Sub QR	
		*				AJGPL	Kota	DR				
		*				Nevoa	Surat	DR				
		*				Thermodfisher	Mumbai	DR				
		*				Thermax	Pune	DR				
		*				Supreme Technology	Mumbai	DR				
139	RESIDUAL CHLORINE ANALYSER	III				E & H	GERMANY	A				
						EMERSON PROCESS	PAWANE	A				
						HACH	USA	A				
140	ORP ANALYZER	III				Emerson process	USA/Pawane	A				
						ABB	UK/USA	A				
						HACH	Switzerland	A				
						Yokogawa	Japan	A				
141	CL2 Leak detector	III				W&T	Germany	A				
142	Flame Scanner Cable	I				Thermocable	Hyderabad	A				
		I				Delton cables	Faridabad	A				



*P. Prakash*

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<b>NTPC</b>		PROJECT : Patratu STPS Phase-I ( 3 X800MW)				LIST OF ITEMS REQUIRING QP						
		PACKAGE : EPC PACKAGE				APPROVAL & ACCEPTABLE			REVISION NO : 00			
		CONTRACTOR : BHEL Ltd				VENDOR AS APPROVED BY			DATE : 26.04.2017			
		CONTRACT NO : CS-9595-001-2										
No.	Major Equipment	QP Inspection Category	QP No. 9585-001-QVI Q	QP Submission SCH	QP Approval SCH	Proposed Sub Supplier	Country	SS Approval Status	SS Detail Sub.SCH	SS Approval SCH	Sub QR	Remark
		I				Cords Cable	Bhiwadi / Kaharani	A				

**LEGENDS :**

**1.0 SYSTEM SUPPLIER / SUB SUPPLIER APPROVAL STATUS CATEGORY (SHALL BE FILLED BY NTPC)**

A - For those items proposed vendor is acceptable to NTPC, subject to meeting the NTPC Specification requirement. To be indicated with letter "A" in the list along with the condition of approval, if any.

DR - For those items "Detailed Required" for NTPC review. To be identified with letter "DR" in the list.

NOTED : For those items vendors are approved by Main Supplier and accepted by NTPC without specific vendor approval from NTPC. To be identified with "NOTED"

**2.0 QP INSPECTION CATEGORY :**

CAT - I : For those items the Quality Plans are approved by NTPC and final acceptance will be on physical inspection witness by NTPC

CAT - II : For those items the Quality Plans are approved by NTPC. However no physical inspection shall be done by NTPC. The final acceptance by NTPC shall be on the basis of review of documents.

CAT-III:

UNITS/WORKS : Place of manufacturing- Place of main supplier of multi units/works.

\* - Inspection category will be decided during vendor evaluation.

NOTE - 1 : EMPTY CABINETS, COMPUTERS, SIGNAL ISOLATOR/ MULTIPLIER, MCB, TB, POWER SUPPLY ETC. SHALL ALSO BE ACCEPTABLE FROM INDEGENEOUS SOURCES AGREED BY NTPC IN QP. IF THE TOTAL INTEGRATED PANEL AND FAT IS CONDUCTED INDEGENEOUSLY ITEM TO BE TREATED AS CAT - I.

NOTE - 2 : Mandatory Sapre will be treated as CAT-III

NOTE - 3 : For the items not appearing in the proaward list, bidder and NTPC will mutually discussed in future.

NOTE - 4 : Intergration testing of DDCMIS shall be done with monitor connected to the LVS workstation. This would be tied up in the QAP/ATST. Dispatch of LVS can be allowed like a CAT-III item but only after successful testing of functionality as indicated in QP and completion of ATST of first unit.

NOTE - 5 : C&I items Integral for skid, Fan, Motor, Pump etc Instrument shall be supplied as per OEM standard/ approved sources.

NOTE - 6 : for instrumentation cable quantity less than 1 km of each type inspection category is III and for less than 2.5 km of each type inspection category is CAT-II  
FORMAT NO. : QS-01-QAI-P-1/F3-R0  
Engg. Div/QA&I



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26.04.26

*P.P. Patil*  
PRASHANT P. PATIL  
DGM (QA-CCF)

*Apaalav*  
AMIT YADAV  
Mgt. / MKTG.  
BHEL  
C & M Deptt.  
Patratu