
	<b>Project/ परियोजना : EPC PACKAGE FOR DEVELOPMENT OF BESS AT NTPC THERMAL POWER STATIONS</b> <b>Package/ पैकेज : BESS</b> <b>Supplier/ आपूर्तिकर्ता:</b> <b>Contract No./ अनुबंध सं.:</b>		<b>INDICATIVE LIST OF ITEMS REQUIRING QUALITY PLAN AND SUB-SUPPLIER APPROVAL</b> <b>क़्वालिटी प्लान तथा सब -वेंडर के अनुमोदन सहित मदों की सूची</b>  <b>SUB-SYSTEM उप-प्रणाली: AC , VENTILATION &amp; FDPS SYSTEMS MECH</b>			<b>DOC. NO./ दस्तावेज सं.:</b> <b>REV. NO.:</b> <b>DATE/ तिथि : 05.08.2025</b> <b>PAGE/ पृष्ठ :</b>			
	<b>S. N.</b> <b>क्र.सं.</b>	<b>Item / मद</b>	<b>QP / Insp. Cat. क्यूपी/ निरी. श्रेणी.</b>	<b>QP No. / क्यूपी. सं.</b>	<b>QP Sub. Schedule क्यूपी उप.अनुसूचि</b>	<b>Proposed sub-supplier/ प्रस्तावित उप आपूर्तिकर्ता</b>	<b>Place/ स्थान</b>	<b>Sub-suppliers approval status / category उप आपूर्तिकर्ता के अनुमोदन की स्थिति /श्रेणी (NOTE-1)</b>	<b>Sub-supplier Details submission schedule/ उप आपूर्तिकर्ता के विवरण प्रस्तुतीकरण की सूची</b>
1	BRANCH PIPE , COUPLING & NOZZLE	III			BIS APPROVED SOURCES WITH VALID BIS LICENSE				
2	PIPES-MS- (BLACK/ GI) AS PER IS:1239 & IS:3589 UPTO 1000 NB	II			(BIS MARKED, MANUFACTURERS WITH VALID BIS LICENSE)				
3	SHEET/DUCT	III			MAIN CONTRACTOR's APPROVED SOURCES				
4	FIRE EXTINGUISHER	II			BIS APPROVED SOURCES WITH VALID BIS LICENSE				
5	SPLIT, CASSETTE, WINDOW, PRECISION/PACKAGED AC (PAC)	III			MAIN CONTRACTOR's APPROVED SOURCES				
6	INSULATION	III			MAIN CONTRACTOR's APPROVED SOURCES				
7	COPPER PIPES/REFREGERANT PIPES	III			MAIN CONTRACTOR's APPROVED SOURCES				
8	AXIAL FANS(<10 KW)	II			MAIN CONTRACTOR's APPROVED SOURCES				
9	PROPELLER FANS	III			MAIN CONTRACTOR's APPROVED SOURCES				
Note-1	Items for which Sub-QR is envisaged, vendors are accepted subject to Sub-QR clearance from NTPC Engg.								
Note-2	The items not covered in the above list shall be mutually discussed & agreed for Item categorisation & sub-vendor control.								
A – For these items proposed vendor is acceptable to NTPC. To be indicated with letter “A” in the list along with the condition of approval, if any./ इन मदों के लिए प्रस्तावित वेंडर एनटीपीसी को स्वीकार्य है। अनुमोदन की शर्त, यदि कोई हो, के साथ-साथ पत्र “क” में DR – For these items “Detailed required” for NTPC review. To be identified with letter “DR” in the list. एनटीपीसी द्वारा इन मदों की समीक्षा के लिए “विस्तृत ब्यौरे की आवश्यकता” होगी। सूची में “DR” पत्र में इंगित किया जाना चाहिए। QP / INSPECTION CATEGORY: CAT-I / श्रेणी- I: For these items the Quality Plans are approved by NTPC and the final acceptance will be on physical inspection witness by NTPC. इन मदों के लिए गुणवत्ता योजनाओं को एनटीपीसी द्वारा अनुमोदित किया जाता है और एनटीपीसी द्वारा अंतिम स्वीकृति CAT-II / श्रेणी- II: For these items the Quality Plans approved by NTPC. However no physical inspection shall be done by NTPC. The final acceptance by NTPC shall be on the basis review of documents as per approved QP. इन मदों के लिए गुणवत्ता CAT-III/ श्रेणी-III : For these items Quality control to be exercised as per Main contractor Quality Assurance System. The final acceptance by NTPC shall be on the basis of Certificate of Conformance (COC) by Main Contractor. UNITS/WORKS इकाइयाँ / कार्य: Place of manufacturing/ निर्माण का स्थान Place of Main Supplier of multi units/works/बहु- इकाइयाँ / कार्यों के मुख्य सप्लायर का स्थान.  FORMAT NO./ प्रारूप सं: QS-01-QAI-P-1B/F1-R0									
							Engg. Div. / QA&I		

		Project/ परियोजना : DEVELOPMENT OF BESS AT NTPC THERMAL POWER STATIONS					LIST OF ITEMS REQUIRING QUALITY PLAN AND SUB-SUPPLIER APPROVAL क्वालिटी प्लान तथा सब -वेंडर के अनुमोदन सहित मदों की सूची			Doc. No./ दस्तावेज सं.:	
		Package/ पैकेज : EPC PACKAGE					SUB-SYSTEM उप-प्रणाली: ELECTRICAL			REVISION NO : 00	
		Supplier/ आपूर्तिकर्ता:								DATE/ तिथि : 05.08.2025	
		Contract No./ अनुबंध सं.:									
S. No. क्र.सं	Item / मद	QP/ Insp. Cat. क्यूपी/ निरी. श्रेणी.	QP No. / क्यूपी. सं.	QP Sub. Schedule क्यूपी उप.अनुसूचि	Proposed sub-supplier/ प्रस्तावित उप आपूर्तिकर्ता	Place/ स्थान	Sub-suppliers approval status / category उप आपूर्तिकर्ता के अनुमोदन की स्थिति /श्रेणी	Sub-supplier Details sub sch/ उप आपूर्तिकर्ता के विवरण प्रस्तुतीकरण की सूची	Remarks/ टिप्पणी		
Main Contractor and manufacturers of all items/equipments shall comply with the latest GOI and Make in India circulars/guidelines as envisaged in contract provisions.											
2	Battery Management System	*			NTPC ACCEPTED SOURCES®				* SHALL BE DISCUSSED & FINALISED DURING DETAILED ENGINEERING WITH THE SUCCESSFUL BIDDER.		
3	PCS (Power Conversion System)	*			NTPC ACCEPTED SOURCES®						
4	Energy Management System (EMS)	*			NTPC ACCEPTED SOURCES®					# BASED ON SUB-QR CLEARANCE AND QUALITY TIE-UP.	
5	Power Transformers	CAT I							Subject to sub-QR clearance, if applicable.		
					ABB	Sweden	A		Up to 765 KV Class		
					ABB	Vadodara	A		Up to 765 KV Class		
					Toshiba	Japan	A		Up to 765 KV Class		
					CG Power & Industrial Solutions Ltd	Mandideep	A		Up to 765 KV class		
					BHEL	Bhopal	A		Up to 400 KV Class		
					Siemens	Mumbai	A		Up to 400 KV Class		
					GE T&D India Limited	Naini	A		Up to 400 KV Class		
					GE T&D India Limited	Vadodara	A		Up to 765 KV Class		
					TELK	Angamally	A		Up to 400 KV Class		
6	Auxiliary Oil Filled Transformers	CAT I							Subject to sub-QR clearance, if applicable.		
					BHEL	Jhansi	A		Up to 220 KV Class		
					Indotech Transformers	Chennai	A		Up to 16 MVA, 11 KV Class		
					Kanohar	Meerut	A		Upto 16 MVA, 33 KV Class		
					Kirloskar Electric Company Limited	Mysore	A		Up to 16 MVA, 33 KV Class		
					Schneider	Vadodara	A		Up to 50MVA, 132 KV Class		
					Transformers & Rectifiers Ltd.	Ahmedabad	A		Upto 90 MVA, 132 KV Class		
					CG Power & Industrial Solutions Ltd	Malanpur	A		Upto 50MVA, 132kV Class		
					Voltamp	Savli	A		Up to 3.5 MVA, 33 KV Class		
					Shree Abhirami Engineering	Sri Perambudur	A		Upto 2.5MVA, 11kV Class		
					TESLA TRANSFORMERS INDIA LIMITED	Bhopal	A		Upto 9MVA, 11kV Class		
					TELAWNE POWER EQUIPMENT PVT. LTD	MUMBAI	A		up to 33 KV, 12.5 MVA		
7	Dry Type Transformer	CAT I							Subject to sub-QR clearance, if applicable.		
					ABB	Savli	A		Up to 8 MVA, 24 KV Class		
					Raychem	Pune	A		Up to 3.5 MVA, 33 KV Class		
					Toshiba	Hyderabad	A		Up to 2.0 MVA, 33 KV Class		
					BHEL	Jhansi	A		Up to 6.3 MVA, 33 KV Class		
					Kirloskar Electric Company Limited	Pune	A		Up to 4.0 MVA, 33 KV Class		
					Voltamp	Savli	A		Up to 3.25 MVA, 33 KV Class		
					Ames Impex	Mehsana Gujrat	A		Up to 1.6 MVA, 11 KV Class		

				Sudhir Power Ltd	Silvassa	A		Up to 1 MVA, 11 KV Class	
				Hammond Power Solutions	Hyderabad	A		Up to 95 KVA, 33KV Class	
				Indcoil Transformers Pvt Ltd	Murbad	A		Up to 600 KVA, 6.6KV Class	
8	OIP/RIP BUSHING								
				BHEL	Bhopal	A		Up to 400 KV class	
				Crompton Greaves Ltd	Nasik	A		Up to 400 KV class	
				Crompton Greaves Ltd	Aurangabad	A		Up to 245 KV Class (excluding GT)	
				ABB Ltd.	Vadodara	A			
				ABB Switzerland Ltd. MICAFIL Bushings	Switzerland	A		Up to 400 KV class	
				TELK	Angamaly	A		Up to 400 KV class	
				GE T&D India Limited	Hosur	A		Up to 400 KV class	
				Alstom-Passoni Villa	Italy	A		Up to 400 KV class	
				ABB Power Tech.Products	Sweden	A		Up to 400 KV class	
				Trench	France	A		Up to 400 KV class	
8.2	RIP Bushing	CAT I							
				ABB AB Components	Sweden	A		Up to 420 KV Class	
				ABB Micafil	SwitzerLand	A		Up to 420 KV Class	
				Izolytor (Massa LLC)	Rusia	A		Up to 420 KV Class	
				HSP	Germany	A		Up to 420 KV Class	
				Yash High Voltage	Vadodara	A		Up to 145 KV Class	
				Mehru Electricals & Mechanicals Pvt. Ltd (MIM make)	Bhiwadi	A		Up to 420 KV Class	conditions apply
9	INSULATING OIL (MINERAL)	CAT I							
				Apar Industries	Rabale/Silvassa	A			
				Power Oil Petroleum Products	Silvassa	A			
				NYNAS NAPTHENICS AB	SWEEDEN / USA	A			
				Kanden Engg Corp Ltd	Japan	A			
				Raj Petro Specialities	Chennai/Silvassa	A			
				Savita Oil Technologies	Mumbai/ Silvassa	A			
				COLUMBIA PETRO CHEMICAL PVT LTD	SILVASSA	A			
				GANDHAR OIL	SILVASSA	A			
10	ON LINE DGA ANALYZER	CAT III							
				GE Kelmen Ltd	UK	A			
				GE GRID SOLUTIONS LTD	LISBURN, UK	A			
				Serveron	USA	A			
				CIC	Vadodara	A		Approval Conditions apply	
				Morgan Scephaffer	Canada	A			
11	LT Switchgear - Floor mounted Draw out type indoor switchgear Panel (MCC , ACDB / DCDB etc.)	CAT I						Subject to sub-QR clearance, if applicable.	
				Schneider (formerly L&T)	Mumbai / Coimbatore/ Ahmednagar	A			
				C&S Electric	Noida / Haridwar	A			
				Schneider	Nasik	A		ACB from Schneider, France	
				Siemens	Kalwa	A		Conditions apply	
				Schneider	Vadodara	A			
				BCH ELECTRIC LIMITED	FARIDABAD	A		ACB from Schneider Electric India	
				PYROTECH ELECTRONICS PVT LTD, UNIT IV	Udaipur	A			
11.1	Numerical Relays	CAT I							
				SEL	Pullman, USA	A			
				GE T&D	Stafford, UK	A		P14X, P34X, P44X, P64X, P74X models	
				GE T&D	Chennai	A		P14X, P24X, P34X, P44X, P64X, P74X models	
				ABB	Finland	A			
				ABB	Baroda	A		For 6XX Series	
				GE Multilin	Zamudio, Vizcaya, Spain/ Markham, Ontario, Canada	A		F-650 only	
				Schneider	Stone- UK , Vassa- Finland	A		PX30, PX40, VAMP 5X and VAMP 2XX models	
				Siemens	Germany	A		7SX Series only	
				Siemens	Goa	A			
				Schneider Electric	Bengaluru	A			
				Schneider Electric	Latvia	A		P3, P5 series, conditions applicable- FAT at Chennai works	

11.2	LV Air Circuit Breaker	CAT II							
					C&S Electric	Noida	A		
					L&T	Mumbai	A		
					GE	Bangalore	A		
					Siemens	Germany	A		
					Schneider	France	A		
11.3	LT CT/PT/CBCT/Control Transformer	CAT III							
					Kappa	Bangalore	A		
					Southern Electric	Chennai	A		
					Precise	Mumbai	A		
					G&M	Baroda	A		CBCT Only
					Silkaans	Mumbai	A		
					Ind Coil	Mumbai	A		
					Pragati	Thane	A		
					Prayog	Pune	A		
					AE	Mumbai	A		
					Logicstat	Delhi	A		For control transformer only
					C&S Electric	Noida	A		For CT only
					Newtek	Aurangabad	A		For CT/PT/Control transformer
12	LT Switchgear - Floor mounted Fixed type indoor LT Switchgear Panel ( MLDB )	CAT I							
					Switching Circuits	Kolkata	A		
					Hindustan Control & equipment Ltd	Kolkata	A		With fabrication & painting at unit II & MP Electrical Narendrapur
					Maktel	Vadodara	A		Prior Type Testing
					Jakson	Greater Noida	A		
					Vidyut Control	Gaziabad	A		
					Adlec Power	Rohad ( Jhajjar)	A		
					Conquerent Control System	Manesar	A		Condition apply upto 1250A
					Control & Schematics	Hyderabad	A		
					Positronics	Vadodara	A		
					Schneider (formerly L&T)	Mumbai / Coimbatore/Ahmednagar	A		
					GE	Bangalore	A		
					C&S Electric	Noida/ Haridwar	A	carbon	
					Schneider	Nasik	A		
					PYROTECH ELECTRONICS PVT LTD, UNIT IV	Udaipur	A		
					Siemens	Kalwa	A		
					Tricolite	Sahibabad/Manesar	A		
					Schneider	Vadodara	A		
					BCH ELECTRIC LIMITED	FARIDABAD	A		ACB from Schneider Electric India
					Nitya Electrocontrols	Noida	A		
12.1	LT Switchgear - Wall mounted fixed type indoor / outdoor non-compartmentalized Panel ( Lighting panels / AC / DC Fuse boards etc.)Power Panel , Emergency Lighting Panel	CAT I							
					Control Devices	Kolkata	A		
					Jasper	Noida	A		
					Havells	Faridabad	A		
					Novateur Electrical & distribution systems	Murthal	A		
					Avald Technovator	Manesar	A		
					Switching Circuits	Kolkata	A		
					Hindustan Control & equipment Ltd	kolkata	A		With fabrication & painting at unit II & MP Electrical Narendrapur
					Maktel	Vadodara	A		
					Jakson	Greater Noida	A		
					Vidyut Control	Gaziabad	A		
					Adlec Power	Rohad (Jhajjar)	A		

				Conquerent Control System	Manesar	A		Condition apply ,upto 1250A	
				Control & Schematics	Hyderabad	A			
				Positronics	Vadodara	A			
				L&T	Mumbai / Coimbatore/ Ahmednagar	A			
				GE	Bangalore	A			
				C&S Electric	Noida / HARIDWAR	A			
				Schneider	Nasik	A			
				PYROTECH ELECTRONICS PVT LTD, UNIT IV	Udaipur	A			
				Siemens	Kalwa	A			
				Tricolite	Sahibabad/ Manesar	A			
				Nitya Electrocontrols	Noida	A			
				BCH ELECTRIC LIMITED	FARIDABAD	A		ACB from Schneider Electric India	
				Saravana Switchgear	Bengaluru	A			
12.2	LT Switchgear - Floor mounted Fixed type indoor LT Switchgear Panel ( MLDB )	CAT I							
				Switching Circuits	Kolkata	A			
				Hindustan Control & equipment Ltd	Kolkata	A		With fabrication & painting at unit II & MP Electrical Narendrapur	
				Maktel	Vadodara	A		Prior Type Testing	
				Jakson	Greater Noida	A			
				Vidyut Control	Gaziabad	A			
				Adlec Power	Rohad ( Jhajjar)	A			
				Conquerent Control System	Manesar	A		Condition apply ,upto 1250A	
				Control & Schematics	Hyderabad	A			
				Positronics	Vadodara	A			
				Schneider (formerly L&T)	Mumbai / Coimbatore/Ahmednagar	A			
				GE	Bangalore	A			
				C&S Electric	Noida / Haridwar	A			
				Schneider	Nasik	A			
				Pyrotech	Udaipur	A			
				Siemens	Kalwa	A			
				Tricolite	Sahibabad/Manesar	A			
				Schneider	Vadodara	A			
				BCH ELECTRIC LIMITED	FARIDABAD	A		ACB from Schneider Electric India	
				Nitya Electrocontrols	Noida	A			
13	MV Switchgear Panel	CAT I						Subject to sub-QR clearance, if applicable.	
				BHEL	Bhopal	A		Upto 33KV	
				Megawin	Salem	A*		Upto 33KV	*SUBJECT RESOLUTION OF SITE ISSUES
				Schneider Electric India (Formerly L&T)	Ahmednagar	A		Upto 33KV	
				Siemens	Mumbai	A		Upto 33KV	
				ABB	Nasik	A		Upto 33KV	
				Schneider	Vadodara	A		Upto 11KV	
				Schneider (Salt lake works)	Kolkata	A		Upto 11KV	
14	LT MOTOR	CAT - I							
				ABB	FARIDABAD	A*	* SUBJECT TO VERIFICATION VISIT	UPTO 55KW	
				ABB	BANGALORE	A		UPTO 690V, 475kW	
				JYOTI LTD.	VADODARA	A			
				TIPM	JAPAN	A		UPTO 15 KW (NON FLAME PROOF)	
				HYOSUNG	SOUTH KOREA	A			
				WEG	BRAZIL	A			
				HYUNDAI	SOUTH KOREA	A			
				LHP	SOLAPUR	A		UPTO 400KW FROM B-16 WORKS. UPTO 200KW FROM B-11 WORKS.	
				CGL	AHMEDNAGAR	A		RQP, FOR FLAME PROOF MOTOR	
				TMEIC	JAPAN (NAGASAKHI)	A			
				NGEF	BANGALORE	A		UPTO 15 KW	
				BHARAT BIJLEE	MUMBAI	A		RQP, FOR FLAME PROOF ALSO	
				KEC	BANGALORE/ HUBLI*	A		*UPTO 90KW, RQP, FOR FLAME PROOF ALSO	
				MARATHON	KOLKATA	A		RQP (UPTO 690V & 600 KW) FOR FLAME PROOF ALSO	
				ABB	SWEDEN	A		UPTO 55KW	
				HAVELL	NEEMRANA	A		UP TO 90KW	
				KAWAMATA	JAPAN	A		UP TO 75 KW	
				HEM Industries	DAMAN	A		UP TO 30 KW	

					TIPS	JAPAN	A		UP TO 45KW	
15	Fire sealing system - Type A Material supplier									
		CAT II			3M India	Bangalore	A			
		CAT III*			GE Silicon	USA	A		*WITH MTC	
		CAT III*			Hilti	Germany	A		*WITH MTC	
		CAT III*			DOW Corning	USA	A		*WITH MTC	
15.1	Fire sealing system - Type B Material supplier	CAT II								
					LLOYDS	Delhi	A			
					Signum	Nagpur	A			
					Vijay System Engineers Pvt Ltd	Valsad	A			
15.2	Executing Agency for Fire sealing system	CAT I								
					LLOYDS	Delhi	A			
					Signum	Nagpur	A			
					Vijay System Engineers Pvt Ltd	Valsad	A			
					3M India	Bangalore	A			
16	CURRENT TRANSFORMER	CAT I							Subject to sub-QR clearance, if applicable.	
					Mehru Electrical	Bhiwadi	A		UP TO 132 KV	
					GE T&D	Hosur	A		UP TO 765 KV	
					ABB	Vadodara	A		UP TO 400KV	
					CGL	Nasik	A		UP TO 400KV	
					BHEL	Bhopal	A		UP TO 400KV	
					BHEL	Jhansi	A		UP TO 220 KV	
					Vishal Transformer	Meerut	A		UP TO 132 KV	
					Heptacare	Meerut	A		UP TO 33KV	
17	GIS	CAT-I							Subject to sub-QR clearance, if applicable.	
					ABB/HITACHI ENERGY INDIA LIMITED	VADODARA	A		UPTO 400kV	
					GE Vernova TD India Limited	CHENNAI	A			
					HYOSUNG	S.KOREA	A			
					HYOSUNG T&D INDIA PVT LTD	PUNE	A		UPTO 400kV	
					TOSHIBA TRANSMISSION AND DISTRIBUTION SYSTEMS (India) PVT. LTD.	SANGAREDDY, HYDERABAD	A		UPTO 400kV	
18	CIRCUIT BREAKER	CAT I							Subject to sub-QR clearance, if applicable.	
					GE T&D	KANCHIPURAM	A		UP TO 765 KV	
					ABB	VADODARA	A		UP TO 400 KV	
					SIEMENS	AURANGABAD	A		UP TO 400 KV	
					BHEL	Hyderabad	A		UP TO 400 KV	
					CGL	NASHIK	A		UP TO 400 KV	
19	ISOLATOR	CAT I							Subject to sub-QR clearance, if applicable.	
					GR POWER	HYDERABAD	A		UP TO 400KV	
					S&S POWER	PONDICHERRY	A		UP TO 400KV	
					SIEMENS	HYDERABAD	A		UP TO 765 KV	
					ELEKTROLITES	JAIPUR	A		UP TO 33 KV	
					SWITCHGEAR & STRUCTURALS	HYDERABAD	A		UP TO 765 KV	
					Switchgear Manufacturing Company Private Limited	CHITTOOR	A		UPTO 145kV	
20	SURGE ARRESTOR	CAT I							Subject to sub-QR clearance, if applicable.	
					CGL	NASIK	A		UP TO 400KV	
					ELEKTROLITES	JAIPUR	A		UP TO 33 KV	
					LAMCO	HYDERABAD	A		UP TO 400KV	
					OBLUM	HYDERABAD	A		UP TO 765 KV	
21	CLAMPS & CONNECTORS & WELDING SLEEVES	CAT I							Subject to sub-QR clearance, if applicable.	
					ELCTROMECH TRANSTECH	KOLKATA	A			
					EXALT	MUMBAI	A			
					KLEMMEN ENGG	CHENNAI	A			
					MEGHA ENGG	CHENNAI	A			
					MILIND	MUMBAI	A			
					EMI	MUMBAI	A			
					NOOTAN ENGG	MUMBAI	A			
					TAG CORPORATION	CHENNAI	A			

				ITPL	MUMBAI	A		
				RASHTRA UDYOG	KOLKATA	A		
				Premier Power Products	Chennai	A		
				PEE VEE ENGG	BANGALORE	A		
				LEGION ENERGY	BANGALORE	A		
				Vensun Techno Links (P) Ltd.	Chennai	A		
21.1	ACSR CONDUCTOR	CAT I						Subject to sub-QR clearance, if applicable.
				APAR INDUSTRIES	SILVASSA	A		
				CABCON	KOLKATA	A		
				DIAMOND	VADODARA	A		
				GALAXY	SANGLI	A		
				GUPTA POWER INFRA	BHUBANESWAR	A		
				ISK	SILVASSA	A		
				LUMINO	KOLKATA	A		
				HIREN ALUMINIUM	SILVASSA	A		
				SHASHI CABLES LTD	LUCKNOW	A		
				Mahavir Transmission Limited	DEHRADUN	A		
				TRANSRAIL LIGHTING LIMITED	SILVASSA	A		
				PALRIWAL Industries	RANCHI	A		
				Rajasthan Cables and Conductors Pvt. Ltd.	Jaipur	A		
				LASER POWER & INFRA PVT. LTD.	Howrah	A		
21.2	ALUMINIUM TUBE	CAT I						Subject to sub-QR clearance, if applicable.
				ALOM EXTRUSIONS UNIT-II	BALASORE	A		
				BANCO	VADODARA	A		
				CENTURY EXTRUSION	KOLKATA	A		
				HINDALCO	RENUKOOT	A		
				HINDALCO	ALUPURAM	A		
				HINDAL ALUMINIUM	BANGALORE	A		
				SUDAL	NASIK	A		
22	SUB STATION AUTOMATION SYSTEM (BCU, GRP, ENERGY METER, NUMERICAL	CAT I						Subject to sub-QR clearance, if applicable.
				GE T&D	CHENNAI	A		
				ABB	PEENYA	A		
				SCHNEIDER	NOIDA	A		
				SIEMENS	KALWA/GOA	A		
				BHEL	BHOPAL	A		
23	AB Tariff energy meter	CAT I						Subject to sub-QR clearance, if applicable.
				SEMS	Udaipur/Solan	A		
				Elster	Mumbai	A		
				L&T	Mysore	A		For Model ER300P With CMS software.
24	EHV Cables	CAT I						Subject to sub-QR clearance, if applicable.
				Iljin Electric	South Korea	A		For 132KV & 220 KV only
				KEC International	Vadodara	A		Upto 220KV
				KEI Industries	Bhiwadi	A		Upto 132KV , 220KV
				Phelps Dodge	Bangkok	A		For 132 KV only
				LS CABLE & SYSTEM LTD	South Korea	A		Up to 400 KV
				LS CABLE & SYSTEM LTD	BHIWADI	A		Up to 132 KV
				Universal Cable Ltd.	Satna	A		Upto 132KV only
25	H.T. CABLE upto 33KV	CAT I						Subject to sub-QR clearance, if applicable.
				Apar Industries	Umbergaon	A		Upto 33kV
				Gemscab	Bhiwadi	A		Upto 33kV
				Gupta Power	Kashipur	A		Upto 33kV
				Havells India Ltd.	Alwar	A		Upto 11kV
				KEC International	Vadodara	A		Upto 33kV
				KEI Industries	Bhiwadi	A		Upto 33kV
				Krishna Electrical Industries Ltd	Gwalior	A		Upto 11kV
				Polycab Wires Pvt. Ltd	Daman	A		Upto 33kV
				Tirupati Plastomatics	Jaipur	A		Upto 11kV
				Torrent Cable Ltd	Nadaid	A		Upto 33kV
				CMI	Baddi	A		Upto 11kV
				Universal Cable Ltd.	Satna	A		Upto 33kV
				Dynamic Cables	Reengus	A		Upto 33kV

				Paramount Communications	Khushkhhera	A		Upto 33kV	
				V-Marc	Roorkee	A		Upto 11kV	
				Suyog Electricals Limited	Halol	A		Upto 11kV	
26	1.1 KV LT Power Cables (Type- XLPE Insulated, PVC sheathed (incl FRLS)	Refer Note-5							
				Advance Cable	Bengaluru	A			
				Apar Industries Ltd	Umbergaon	A			
				Cords Cables	Bhiwadi	A			
				CMI	Baddi	A			
				Delton Cable Ltd	Faridabad	A			
				Dynamic Cables	Jaipur	A			
				Gemscabs Industries	Bhiwadi	A			
				Goyoline Fibres (I) Ltd	Silvassa	A			
				Gupta Power Cables	Khurda	A			
				Havells India Ltd.	Alwar	A			
				KEC International	Silvassa , Mysore	A			
				KEI Industries	Bhiwadi	A			
				Paramount Cable	Khushkhhera	A			
				Polycab Wires Pvt. Ltd	Daman	A			
				Ravin Cables	Pune	A			
				Special Cables	Rudrapur	A			
				Suyog Electricals Ltd	Halol	A			
				Thermocables	Hyderabad	A			
				Tirupati Plastomatics	Jaipur	A			
				Torrent Cable Ltd	Nadiad	A			
				Universal Cable Ltd.	Satna	A			
				Ravi Industries	Sonepat	A			
				Chandresh Cables	Gandhinagar	A		conditions apply	
				Zenium Cables	Valsad	A			
				INSUCON CABLES AND CONDUCTORS PVT. LTD.	JAIPUR	A			
				LASER POWER & INFRA PVT LTD	HOWRAH	A			
				SBEE CABLES (INDIA) LIMITED	BANGALORE	A			
27	LT Control Cable 1.1 KV, Type - PVC (incl FRLS)	Refer Note-5							
				Advance Cable	Bengaluru	A			
				Apar Industries Ltd	Umbergaon	A			
				Cords Cables	Bhiwadi	A			
				CMI	Faridabad	A			
				CMI	Baddi	A			
				Delton Cable Ltd	Faridabad	A			
				Elkay Telelink	Faridabad	A			
				Gemscabs Industries	Bhiwadi	A			
				Goyoline Fibres (I) Ltd	Silvassa	A			
				Gupta Power Cables	Khurda	A			
				Havells India Ltd.	Alwar	A			
				KEC International	Silvassa , Mysore	A			
				KEI Industries	Bhiwadi	A			
				Paramount Cable	Khushkhhera	A			
				Polycab Wires Pvt. Ltd	Daman	A			
				Ravin Cables	Pune	A			
				Special Cables	Rudrapur	A			
				Suyog Electricals Ltd	Halol	A			
				Thermocables	Hyderabad	A			
				Tirupati Plastomatics	Jaipur	A			
				Torrent Cable Ltd	Nadiad	A			
				Universal Cable Ltd.	Satna	A			
				Chandresh Cables	Gandhinagar	A		conditions apply	
				Zenium Cables	Valsad	A			
				INSUCON CABLES AND CONDUCTORS PVT. LTD.	JAIPUR	A			
				TEMPSENS INSTRUMENTS INDIA PVT LTD	UDAIPUR	A			
				POLYVION CABLES PRIVATE LIMITED	SONIPAT	A			
				LASER POWER & INFRA PVT LTD	HOWRAH	A			



					SBEE CABLES (INDIA) LIMITED	BANGALORE	A			
28	DC Cables	CAT-I							Subject to sub-QR clearance, if applicable.	
					Siechem	Pondicherry	A		Upto 35 sq.mm.	
					Apar	Khatalwada	A			
					Polycab		NOTED			
					KEC		NOTED			
					Leoni	Pune	A		6 mm2	
					LAPP	Korea	NOTED		Up to 12 mm2	
29	DC Cable Connector	CAT III			Any make-model which is Type Tested as per EN 50521: 2008 or having marking of VDE/ CE/UL/ CSA/ "BIS with CML no."					
30	DC Batteries (Ni-Cd type BATTERY)	CAT I							Subject to sub-QR clearance, if applicable.	
					HBL-Power System	MEDCHAL	A		Up to 990 Ah with conditions	
					Saft India	Bangalore	A		8Ah to 990Ah- KPH type	
							A		10Ah to 1365 Ah- KPM type	
							A		11Ah to 1550Ah - KPL type	
31	BATTERY CHARGER ( 48V/110V/220V)	CAT I							Subject to sub-QR clearance, if applicable.	
					Amararaja	Tirupati	A			
					HBL- Power System	Hyderabad	A			
					Chhabhi electrical	Jalgaon	A			
					EXIDE	Kolkatta	A			OLD NAME: CHLORIDE POWER
					Statcon	Hapur	A		Up to 220 V, 850 A	
					Dubas	Bangalore	A		Up to 220 V, 800 A	
					VERTIV	PUNE	A		UPTO 220V	
					BANAVATHY POWER PRIVATE SYSTEMS LTD.	Bangalore	A		UPTO 220V,100A	
					SERVILINK ENGINEERS PRIVATE LIMITED	Vadodara	A		UPTO 220V,100A	
31.1	Battery Health Monitoring System	CAT I							Subject to sub-QR clearance, if applicable.	
					EXIDE	Kolkatta	A			OLD NAME: CHLORIDE POWER
					HBL- Power System	Hyderabad	A			
					Exide	Kolkatta	A			
32	GI CABLE TRAYS AND ACCESSORIES ( LADDER & PERFORATED TYPE), fitting &	Refer Note-6								
					Inar Profiles Ltd	Enkapalli (Vishakhapatnam)	A			
					Vatco	Mumbai	A		Galvanization at Sigma Mumbai	
					Indiana cable trays	Mumbai	A		Galvanization at Karamtara galvanizer- Mumbai	
					Industrial Perforation	Kolkata	A		Galvanized and offered for inspection at Industrial Perforation Pvt Ltd, Ganganagar , Kolkata, WB	
					Ratan Projects	Bagnan	A		In black condition from M/s Ratan Projects, Sankrail	
					India Electric Syndicate	Kolkata	A		Galvanization at BMW Industries/B.P Projects- Howrah	
					Steelite engg.	Mumbai	A			
					Premier Power Products	Howrah	A		Galvanising at Neha Galvaniser- Howrah	
					Indiana Gratings	Pune	A			
					M.J. Engineering	Okhla/ Bhiwadi	A			
					Maheshwari	Ghaziabad	A		Galvanization at NTPC approved Galvaniser.	
					T.R.G	Chennai	A		Galvanization at TM Radhakrishna Chetty & Co-Chennai	
					Amtech	Pune	A		Galvanization at B.G. Shirke - Pune	
					Kannade Anand Udyog	Mumbai	A		- Fabrication at their units: Plot No. 42, Morivali, MIDC, Thane & Plot No.: D-35 Anand Nagar MIDC, Addl. Ambernath , Thane - Galvanization and offer the galvanized trays for inspection at: Plot No. D-34 Anand Nagar MIDC, Addl. Ambernath,Thane	

				Rukmani	Raipur	A		Ladder type cable trays only	
				Passive Infra	Hasangarh (Rohtak)	A			
				Unitech Fabricators & Engineers	Howrah/ Hoogly	A			
				Patny System	Hyderabad	A			
				Rabi Engg	Kolkata	A		Galvanizing from NTPC approved sources	
				MKSD Industries	Taloja	A		Galvanization from Encorp Power Trans- Palghar	
				Reliable Sponge	Kalunga	A			
				Pinax Steel	Patna	A			
				Rukmani	Hoogly	A		Galvanization at Rukmani Fab & Gal-Howrah	
				RMG Steels Pvt Ltd	Noida	A		Galvanization at Shivam Engineers and Fabricators, Ghaziabad	conditions apply
				EROS METAL WORKS (P) LTD	Nagpur	A		Galvanization at M/S EROS INFRASTRUCTURE PVT. LTD., HAVING WORKS ADDRESS AS G-97, M.I.D.C. INDUSTRIAL AREA, BUTIBORI, NAGPUR-441103	
32.1	GI FLEXIBLE CABLE TRAY SUPPORT SYSTEM	Refer Note-6							
				Vatco	Mumbai	A		Galvanising at Sigma Mumbai	
				Inar profiles	Enkapalli	A			
				Industrial perforations	Kolkata	A			
				Premier power products	Howrah	A		Galvanising at Neha Galvaniser-Howrah	
				Steelite engg.	Mumbai	A			
				Indiana gratings	Pune	A		Galvanising at Poona Galvaniser- Pune	
				Amtech	Pune	A		Galvanising at B.G. Shirke- Pune	
				Ratan Projects	Howrah	A		Galvanization at NTPC approved sources	
				Patny Systems	Hyderabad	A			
33	Galvanised Steel Structure( other than Switchyard & Transmission line GI structures)	CAT II							
				Sangam Structural Ltd	Prayagraj	A		Galvanising at NTPC approved sources	
				RS Infraprojects	Ghaziabad	A			
				Anil Steels	Rohtak	A			
				Jamuna Metals	Delhi	A			
				Pioneer Fabricators	Meerut	A			
				Passive Infraprojects	Rohtak	A			
				PAVITRA INDUSTRIES	HYDERABAD	A		GALVANISATION TO BE DONE FROM GURPREET GALVANIZERS HYDERABAD	
				Namdhari Industrial Traderrs Pvt. Ltd.	Ludhiana	A			
				Eros Infrastructures Private Limited	Nagpur	A			
34	SPBD	CAT I							
				BHEL	Rudrapur	A			
				C&S	Haridwar	A			
				GODREJ & BOYCE MANUFACTURING COMPANY LTD	Bangalore	A			
				Powergear	Hindupur	A			
				Powergear	Chennai / Bangalore	A			
				KGS Engg.	Chennai	A			
34.1	Air Insulated Non Segregated phase type LT busduct	CAT I							
				BHEL	Rudrapur	A			
				C&S Electric	G.Noida	A			
			LT	C&S Electric	HARIDWAR	A			
				Unilec	Gurgaon	A		Upto 3200 A	
				Stardrive	Chennai	A			
				Spaceage Swgr Ltd	Bawal	A			
				REEP	Chennai	A			
				Enpro	Chennai	A			
				Nitya Electrocontrols	Noida	A			


					PYROTECH ELECTRONICS PVT. LTD.	UDAIPUR	A		UPTO 4000A	
					GODREJ & BOYCE MFG. CO. LIMITED	Bengaluru	A			
34.2	Sandwitched type LT Busduct	CAT I								
					Godrej	Bangalore	A			
					Henikwon	Malaysia	A			
					C&S	HARIDWAR	A			
35	132 KV cable termination & straight through jointing kits	CAT I							Subject to sub-QR clearance, if applicable.	
					Iijin	South Korea	A			
					ABB Kabeldon	Sweden	A			
					Pfisterer AG	Switzerland	A			
					Tyco Electronics Raychem GmbH	Germany	A			
36	Cable Termination kits and straight through jointing kits	CAT II								
					3M Electro & communication	Pune	A		Upto 33KV	
					Raychem	Mumbai	A		Heat shrinkable type upto 33KV	
					Hari consolidated	Delhi	A		Heat shrinkable type upto 33KV	
37	Lighting Mast with raise & Lower Type Lantern Carriage / Polygonal Poles	CAT I								
					Bajaj	Pune	A			
					BP Projects	Kolkata	A			
					Skipper	Howrah	A			
					Transrail Lighting	Silvassa	A			
					AVAIDS TECHNOVATORS	Alwar	A			
					Utkarsh India Limited	Howrah	A			
					Vakrangee Metal & Mineral Pvt. Ltd.	Raipur	A			
37.1	Lighting poles- Tubular/ polygonal	CAT II			Main contractor approved sources having BIS Licensee/ ISI marked with CML Number					
37.2	Lighting fixtures with accessories ( LED type)	CAT II								
					Wipro	Pune	A			
					Surya Roshni	Noida	A			
					Bajaj	Mumbai	A			
					Phillips	Noida	A			
					Pyrotech Technologies Pvt. Ltd	UDAIPUR	A			
					Mika	Thane	A			
					GOLDWYN LIMITED	NOIDA	A			
Items Identified as Main Contractor approved sources										
MC 1	Continous Cast Copper Rod	CAT III								
MC 2	Unimpregnated Densified Wood	CAT III								
MC 3	Marshalling Box Components	CAT III								
MC 4	Air Cell	CAT III								
MC 5	Terminal Connector	CAT III								
MC 6	Oil Flow Indicator	CAT III								
MC 7	Pressure Relief Valve	CAT III								
MC 8	Magnetic Oil Level Gauge	CAT III								
MC 9	OTI/WTI (RTD Type)	CAT III								
MC 10	Off-Circuit Tap Changer	CAT III								
MC 11	Cooling Fan & Motor Assembly	CAT III								
MC 12	Silica Gel Breather	CAT III								
MC 13	Bushing Metal Parts	CAT III								

MC 14	Copper Conductor Bus Bar	CAT III								
MC 15	Copper Foil/Sheet for Dry Type Transformer	CAT III								
MC 16	Core cheese assembly for Bus Reactor	CAT III								
MC 17	Core Clamps & OLTC Bracket, Core/Tie Bolt, Rods & Nuts	CAT III								
MC 18	Epoxy Casting Material for Dry Type Transformer	CAT III								
MC 19	Fibre Glass Covered Copper Conductor for Dry Type Transformer	CAT III								
MC 20	Fibre Glass Sheet for Dry Type Transformer	CAT III								
MC 21	Gaskets	CAT III								
MC 22	Hardwares	CAT III								
MC 23	Motor for OLTC	CAT III								
MC 24	Sheet Metal Enclosure for Dry Type Transformer	CAT III								
MC 25	Steel Plate & Pipe	CAT III								
MC 26	Tank Fabrication up to 5 MVA	CAT III								
MC 27	Temperature Surveillance Unit for Dry Type Transformer	CAT III								
MC 28	Valves (for Radiator/Gun Metal/CJ valves,etc.)	CAT III								
MC 29	Gas Collecting Device	CAT III								
MC 30	Networking of Numerical Relay	*(with Switchgear MQP)								
MC 31	Paint	CAT III								
MC 32	Copper for Copper Flats & Copper strips/flexibles	CAT III								
MC 33	OIL PURIFYING EQUIPMENT	CAT III								
MC 34	VACUUM PUMP WITH MOTOR	CAT III								
MC 35	ON LINE MOISTURE REMOVAL SYSTEM	CAT III								
MC 36	Oil Tanker (wheel mounted),10 kL capacity	CAT III								
MC 37	POST INSULATOR	CAT II								
MC 38	DISC INSULATOR/ PIN INSULATOR	CAT II								
MC 39	FIBRE OPTIC CABLE	CAT I								
MC 40	EVENT LOGGER	CAT III								
MC 41	GPS TIME SYNCHRONISATION EQUIPMENT	CAT III								
MC 42	RELAY TEST KIT	CAT III								
MC 43	DISTURBANCE RECORDER	CAT III								
MC 44	OPERATIONAL ANALYSER WITH DCRM KIT	CAT III								
MC 45	FOTE	CAT II								
MC 46	OPGW	CAT II								

MC 47	LARGE VIDEO SCREEN (LVS)	CAT III								
MC 48	Porcelain Insulator	CAT III								
MC 49	Lighting & Welding Transformer	CAT III								
MC 50	Industrial /Welding receptacle & boxes	CAT III								
MC 51	MS Rod/GI Strip/Flat and Wire for Earthing & Lightning protection	CAT III								
NOTE	L2 LIST OF MAJOR EQUIPMENT (POWER TRANSFORMER)								SOURCES FOR THESE ITEMS SHALL BE FINALIZED DURING DETAILED ENGINEERING AND MQP FINALIZATION	
1	CRGO STEEL	CAT II								
2	TANK FABRICATION	CAT II								
3	CRGO PROCESSORS	CAT II								
4	CONTINUOUSLY TRANPOSED CONDUCTOR	CAT II								
5	PAPER INSULATED COPPER CONDUCTOR	CAT II								
6	INSULATING PAPER for PICC	CAT III								
7	MOULDED INSULATION COMPONENTS	CAT III								
8	PRE-COMPRESSED BOARDS & INSULATION COMPONENTS	CAT III								
9	OIL PUMP AND MOTOR SET	CAT II								
10	BUCHOLZ RELAY	CAT III								
11	ON LOAD TAP CHANGER	CAT III								
12	OFAF COOLER	CAT III								
13	RADIATORS	CAT II								
14	REGENERATIVE MAINTENANCE FREE BREATHER	CAT III								
15	CMS System	CAT I								
16	CMS PANEL	CAT II								
17	TRANSFORMER TESTING & MAINTENANCE EQUIPMENTS	CAT III								
NOTE	L2 LIST OF SWITCH GEAR								SOURCES FOR THESE ITEMS SHALL BE FINALIZED DURING DETAILED ENGINEERING AND MQP FINALIZATION	
1	Numerical Relays	CAT I							SUB-QR CLEARED VENDORS ARE ACCEPTABLE FOR NUMERICAL RELAYS	
2	Silver Plating	CAT III								
3	LV Air Circuit Breaker	CAT I								
4	LT CT/PT/CBCT/ Control Transformer	CAT II								
5	MV Vacuum Type Circuit Breaker	CAT I								
6	MV CT / PT & CBCT	CAT I								
7	MCBs	CAT III								
8	ENERGY METER	CAT III								
9	H.V. Fuse	CAT III								
10	Terminal Blocks (Control)	CAT III								
11	Surge Capacitors	CAT II								

Note - 1 : Vendors to submit project specific documents as per Sub-QR requirements in case the Vendor is approved under collaboration agreement.

<b>Note - 2:</b> Vendors under 'A' are approved and accepted by NTPC with/without conditions in the past. Similar conditions as the case may be for the vendor shall be applicable for this project and tied up in the quality plan.			
<b>Note - 3:</b> Main contractor approved sub vendors are acceptable those are evaluated / assessed as per Main contractor Quality Management System for vendor approval. Main contractor to inform the finally selected vendor to NTPC as soon as PO is placed for these items. In case of sub-QR Note-1 is also applicable.			
<b>Note - 4 :</b> BOI shall be reviewed and finalised during MQP approval for items/systems where ever applicable.			
<b>Note - 5: Category of inspection for LT Cables:</b>			
	<b>For Total Contract Quantity per Size</b>	<b>Category Of Inspection</b>	
	For cable total quantity ≤ 2.5 KM	Cat-III - submission of TC & Certificate of Conformance by Main Contractor for the manufacturers having successfully supplied to any NTPC project-site through Corporate contracts for atleast 2 years	
	For cable total quantity above 2.5 km & up to ≤ 10 km per size/type	Cat-II for the manufacturers having successfully supplied to any NTPC project-site through Corporate contracts for atleast 2 years	
	For cable total quantity 10 km and above per size/type	Cat-I	
<b>Note - 6: Category of inspection for Cable Trays &amp; Cable Tray Flexible Support System:</b>			
	<b>For Total Contract Quantity per Size</b>	<b>Category Of Inspection</b>	
	For cable total quantity ≤ 2.5 KM	Cat-III - submission of TC & Certificate of Conformance by Main Contractor for the manufacturers having successfully supplied to any NTPC project-site through Corporate contracts for atleast 2 years	
	For cable total quantity above 2.5 km & up to ≤ 10 km per size/type	Cat-II for the manufacturers having successfully supplied to any NTPC project-site through Corporate contracts for atleast 2 years	
	For cable total quantity 10 km and above per size/type	Cat-I	
<b>Note - 7:</b>	i) <b>For Motors less than 50 KW: CAT-III.</b> Acceptance of Motor less than 50 KW is based on COC of the Manufacturer and the Main Contractor confirming as follows: "It is hereby confirmed that the above mentioned motor /motors was/ were manufactured taking care of NTPC specific requirements regarding ambient temp, voltage & frequency variation, hot starts, pull out torque, starting KVA/KW, temp. rise, distance between centre of stud & gland plate and tested in accordance with approved drawing /data sheets". ii) <b>For Motors 50 KW and less than 75 KW : CAT- II.</b> Acceptance of Motor is based on NTPC review of Routine Test inspection report as per <b>IS: 12615</b> / applicable standards duly witnessed by main contractor along with COC of the Manufacturer and the Main Contractor confirming as follows: "It is hereby confirmed that the above mentioned motor /motors was/ were manufactured taking care of NTPC specific requirements regarding ambient temp, voltage & frequency variation, hot starts, pull out torque, starting KVA/KW, temp. rise, distance between centre of stud & gland plate, space heater and tested in accordance with approved drawing /data sheets". iii) <b>For Motors 75 KW &amp; above : CAT- I.</b> AS PER NTPC APPROVED QUALITY PLAN (To be submitted seperately for NTPC review & approval). iv) <b>DC motors (all rating) - Inspection CAT-I</b>		
<b>Note - 8:</b>	<b>NTPC approved Galvanizers:</b>		
	1. M/s M J Engg,Delhi	7. M/s National Galvanizer, Kolkata	13. M/s Gurpreet Galvanizer, Hyderabad
	2. M/s A.V. Engg, Kolkata	8. M/s Unistar Galvanizer, Kolkata	14. M/s Sigma, Mumbai
	3. M/s Inar Profiles, Vishakapatnam	9. M/s B.P. Project. Kolkata	15. M/s Radhakrishnan Shetty, Chennai
	4. M/s Anand Udyog, Mumbai	10. M/s Bajaj Pune	16. Karamtara Mumbai
	5. M/s Techno Engg,Chandigarh	11. M/s Electrocare Industries, Mumbai	17. Poona Galvanizers Pune
	6. M/S Steelite Engg, Mumbai	12. M/s B.G. Shirke, Pune	18. Neha Galvanizer- Kolkata
<b>Note - 9:</b> Relevant certificates shall be submitted for NTPC approval.Approval conditions attached to above identified vendors, as applicable shall be adhered to.			
<b>Note - 10 :</b> Indigenous sub-vendors for Annexure-I items are acceptable subject to meeting the MLC (Minimum Local Content) in line with latest MOP order.			
<b>LEGENDS / संकेतिका</b>			
<b>SYSTEM SUPPLIER/SUB-SUPPLIER APPROVAL STATUS CATEGORY /प्रणाली आपूर्तिकर्ता / सब-वेंडर की स्वीकृति की स्थिति की श्रेणी (SHALL BE FILLED BY NTPC एनटीपीसी द्वारा भरा जाएगा)</b>			
A – For these items proposed vendor is acceptable to NTPC. To be indicated with letter "A" in the list along with the condition of approval, if any./ इन मदों के लिए प्रस्तावित वेंडर एनटीपीसी को स्वीकार्य है। अनुमोदन की शर्त , यदि कोई हो, के साथ-साथ पत्र "क" में इंगित किया जाए ।			
DR – For these items "Detailed required" for NTPC review. To be identified with letter "DR" in the list. एनटीपीसी द्वारा इन मदों की समीक्षा के लिए "विस्तृत व्यौर की आवश्यकता" होगी। सूची में "DR" पत्र में इंगित किया जाना चाहिए।			
QP/INSPN CATEGORY: क्पेरी / निरीक्षण की श्रेणी:			
CAT-I / श्रेणी- I: For these items the Quality Plans are approved by NTPC and the final acceptance will be on physical inspection witness by NTPC. इन मदों के लिए गुणवत्ता योजनाओं को एनटीपीसी द्वारा अनुमोदित किया जाता है और एनटीपीसी द्वारा अंतिम स्वीकृति भौतिक निरीक्षण के दौरान उपलब्ध गवाह के आधार पर दी जाएगी।			
CAT-II / श्रेणी- II: For these items the Quality Plans approved by NTPC. However no physical inspection shall be done by NTPC. The final acceptance by NTPC shall be on the basis review of documents as per approved QP. इन मदों के लिए गुणवत्ता योजनाओं को एनटीपीसी द्वारा अनुमोदित किया जाता है। हालांकि एनटीपीसी द्वारा कोई भौतिक निरीक्षण नहीं किया जाएगा। एनटीपीसी द्वारा अंतिम स्वीकृति अनुमोदित ब्यूपी के अनुसार दस्तावेजों की समीक्षा के आधार पर दी जाएगी।			
CAT-III/ श्रेणी-III : For these items Quality control to be exercised as per Main contractor Quality Assurance System. The final acceptance by NTPC shall be on the basis of Certificate of Conformance (COC) by Main Contractor.			
UNITS/WORKS इकाईयाँ / कार्य: Place of manufacturing/ निर्माण का स्थान Place of Main Supplier of multi units/works/बहु- इकाईयों / कार्यों के मुख्य सप्लायर का स्थान.			
: Control measure of item covered in quality plan of main item.			
<b>Format No./ प्रारूप सं: QS-01-QAI-P-1B/F1-R0</b>			
<b>Engg. Div. / QA&amp;I</b>			

		PROJECT :EPC PACKAGE FOR DEVELOPMENT OF BESS AT NTPC THERMAL POWER STATIONS			LIST OF ITEMS REQUIRING QUALITY PLAN AND SUB VENDOR APPROVAL		REVISION NO :
		PACKAGE :					DATE : 05/08/2025
		CONTRACTOR:					
		CONTRACT NO :					SUB SECTION: C&I
Sr No	Item Description	QP Inspection Category	QP No	Proposed Sub Vendor	City / State / Country	SV Approval Status (Note-1)	Approval Conditions / Remarks
1	Battery for 24VDC charger & UPS						
		Note-4		Hoppecke Batterien GmbH & Co Kg	Germany	A	For Lead Acid- Plante
		Note-4		Exide	Kolkata	A	For Lead Acid- Plante
		Note-4		SAFT India Ltd	Bengaluru	A	For Ni-Cd
		Note-4		HBL Power	Hyderabad	A	For Ni-Cd ,Upto 990AH (H type)
		Note-4		SAFT	France/Sweeden	A	For Ni-Cd
		Note-4		Hoppecke Batterien GmbH & Co Kg	Germany	A	For Ni-Cd
2	Blank Panels / Cabinets						
		III		Pyrotech Electronics Pvt. Ltd	Udaipur	A	
		III		Rittal India Private Ltd	Bengaluru	A	
		III		Hoffman	Bengaluru	A	
		III		BHEL	Bengaluru	A	
		III		BCH ELECTRIC LIMITED	Faridabad	A	
3	CCTV System (IP Based )						
		III		Axis	Sweden	A	1-CCTV components will be of Axis communication AB,Sweden make & Video Management Software will be of Milestone Brand. 2.Other BOI items shall be from LOA approved sources & will be tied up during the finaliztion MQP.
		III		Bosch	Bengaluru	A	1.CCTV components will be of M/S Bosch make, and supplied through M/s Bosch, Bengaluru. 2.Other BOI items shall be from LOA approved sources & will be tied up during the finaliztion MQP.
		III		Pelco	USA	A	1.CCTV components will be of M/S Pelco, USA make 2.Other BOI items shall be from LOA approved sources & will be tied up during the finaliztion MQP.
		III		M/s Samriddhi Automations Pvt. Ltd (sparsh make)	Haridwar	A	1.CCTV components will be of M/S Samriddhi, Haridwar make. 2.Other BOI items shall be from LOA approved sources & will be tied up during the finaliztion MQP.
4	CCTV System (IP Based ) /System Integrators						
		I		Jonson Control India Pvt Ltd	Mumbai	A	M/S Pelco Make CCTV system
		I		Toshniwal Industrial Pvt Ltd	Ajmer	A	M/S Axis Make CCTV system
		I		L&T TECHNOLOGY SERVICES	Faridabad	A	M/S Samriddhi(sparsh) Make CCTV system
		I		Score Information Technologies Limited	Kolkata	A	M/S Bosch Make CCTV system

		I		Netware Computers	Gurugram	A	M/s Samriddhi Automations Pvt. Ltd (Sparsh Make) CCTV
5	Control Desk						
		I		Pyrotech Workspace Solutions Pvt Ltd	Udaipur	A	BOI items like Mosaic tiles /Console items shall be as per LOA approved sources
		I		Cosmos Media Products Pvt Ltd	Greater Noida	A	1.BOI items like Mosaic tiles /Console items shall be as per LOA approved sources 2. H block should be from knurr Germany .Solid acrylic surface should be procured from Du Pont/NTPC approved sources 3.Extruded Al profile structure should be procured from Hindalco (With Knurr design)
		I		Adarsha Control system Pvt Ltd	Bengaluru	A	1.BOI items like Mosaic tiles /Console items shall be as per LOA approved sources 2. Acrylic solid surface (ASS) should be procured from Du Pont /NTPC approved sources 3.wood works are to be done by M/S C K Furn Bangaluru
6	Fiber optic cable						
		Note-3		U M Cables Ltd	Silvassa (Daman)	A	
		Note-3		KEC International Ltd	Mysore	A	
		Note-3		Apar Industries Limited	Valsad (Gujrat)	A	
		Note-3		HFCL	Goa	A	
		Note-3		Aksh Fibre	Bhiwadi (Raj)	A	
		Note-3		Finolex Cable Ltd	Goa	A	
		Note-3		Birla Cable Limited	Rewa	A	
		Note-3		R&M	Switzerland	A	
		Note-3		Molex	UK	A	
		Note-3		Corning	USA	A	
7	Fire alarm Panel						
		II		Toshniwal Industrial Pvt Ltd	Ajmer	A	1.M/S Notifier Make Fire alarm Panel 2.PI Refer Note-07
		II		Bosch Security system	Bengaluru	A	1.Detector , Hooter, MCP, Modules, Panel shall be M/s Bosch Make
		II		Notifier	USA	A	
		II		Autronica	Norway	A	
		II		Schrack	Austria	A	
		II		Edwards	Mexico	A	
		II		Shield Fire safety and security Ltd	UK	A	
		II		Jhonson Controls	Mexico	A	Simplex Brand
8	High Temp. cable (PTFE/FEP)						
		II		Thermocables	Hyderabad	A	
		II		Tempsens	Udaipur	A	
		II		Habia cables	Sweden	A	
		II		Thermo Electrica BV	Netherlands	A	
		II		Lapp cables	Germany	A	
		II		Kerpen cables	Germany	A	
		II		TEW & C	USA	A	
9	Instrument Cables ( F,G & T/C Cables )						
		Note-2		Goyolene Fibers ( India) Pvt Ltd	Silvassa	A	F&G Type Cable
		Note-2		Tempsens Instruments Ind Pvt Ltd	Udaipur	A	
		Note-2		Havells India	Alwar	A	F Type Cable



		Note-2		Paramount Communication Ltd	Khushkhera	A	
		Note-2		Polycab	Daman	A	
		Note-2		Delton	Faridabad	A	
		Note-2		KEI	Bhiwadi (Raj)	A	
		Note-2		Elkey Telilinks	Faridabad	A	
		Note-2		CORDS	Kaharani	A	
		Note-2		CORDS	Bhiwadi	A	
		Note-2		Nicco	Kolkata	A	
		Note-2		Universal Cable	Satna	A	
		Note-2		Thermocables	Hyderabad / Mahbubnagar	A	
		Note-2		Gupta Power Infrastructure Ltd.	Khurdha	A	
		Note-2		CMI	Faridabad	A	
		Note-2		Advance Cables Pvt Ltd	Bengaluru	A	F&G Type Cable
		Note-2		Gemscab Industries Ltd	Bhiwadi (Raj)	A	F&G Type Cable
		Note-2		Apar Industries Limited	Valsad	A	F&G Type Cable
		Note-2		Suyog Electricals Ltd	Halol (Gujrat)	A	
		Note-2		Special Cables Pvt Ltd	Rudrapur	A	
		Note-2		T C Communication	Ghaziabad	A	
		Note-2		TEW & C	USA	A	
		Note-2		Habia cables	Sweden	A	
		Note-2		Kerpen cables	Germany	A	
		Note-2		Lapp cables	Germany	A	
		Note-2		Thermo elecrt a Bv	Netherland	A	
		Note-2		M/s Svam infratel pvt ltd	palwal, haryana	A	
10	Intelligent Battery charger 24V DC / DCDB/BHMS						
		II		Chabbi Electricals	Jalgaon	A	Rectifier module, Controller module and Battery Health monitoring system shall be of M/s Vertiv make
		II		Eltek SGS Pvt Ltd	Gurugram	A	
		II		Vertiv Energy Pvt ltd	Pune	A	
11	Large Video Screen (LED Based)						
		I		Pyrotech Electronics Pvt Ltd	Udaipur	A	
		I		Delta India Electronics Pvt Ltd	Gurugram	A	
		I		Barco Electronics system (P) Ltd	Noida	A	
		I		Planner System Inc	USA	A	
12	Master Slave Clock System						
		I		Signals and Systems Pvt. Ltd. (SANDS )	Chennai	A	
		I		Masibus	Gandhinagar	A	
		I		Sertel Electronics Pvt. Ltd.	Chennai	A	
		II		Hopf Elektronik GmbH	Germany	A	
		II		Hathway	USA	A	
		II		Mein Berg	Germany	A	
		II		Moser Baer AG	Switzerland	A	
13	PA System (IP Based)						
		III		BNA Technology Consulting Ltd.	Bengaluru	A	BOI shall be from LOA approved sources.
		III		Armtel	Russia	A	
		III		Zenitel	Norway	A	1.PA system active component , Proprietary item will be Zenitel Norway make 2.Other components & BOI shall be from LOA approved sources
		III		Commend International GMBH	Austria	A	
13-A	PA System (IP Based)/System Integrators						note-7

		III		Willstrong Solutions Pvt. Ltd	Greater Noida	A	For M/s Armtel Russia system Approval conditions as per approval letter no Patratu-QA/9585-001-102/VA-Willstrong Dated: 21.12.20
		III		Toshniwal Industries Pvt Ltd	Ajmer	A	For M/s Commend Austria make system
		III		Aishan Technologies Pvt Ltd	Bengaluru	A	For M/s Zenitel Norway make system
		III		Haritasa Checkmate Electronics Pvt Ltd	Bengaluru	A	For M/s Commend Austria make system
		III		Netware Computer Pvt Ltd	New Delhi	A	For M/s Commend Austria make system
		I		M/S L&T Technology Services Limited	Faridabad	A	For M/s Commend Austria make system
14	PLC System						
		I		Emerson Automation solution Inteligent plateforms Pvt Ltd	Bengaluru	A	PLC modules from M/s Emerson USA & BOI shall be from LOA approved sources
		I		ABB India Ltd	Bengaluru	A	
		I		Schneider Electric system india Pvt Ltd	Chennai	A	PLC modules from M/s Schneider France & BOI shall be from LOA approved sources
		I		Rockwell	Sahibabad	A	
		I		Siemens	Nasik	A	
		I		Honeywell	Pune	A	PLC modules from M/s Honeywell ,S.Korea & BOI shall be from LOA approved sources
		I		Schneider Electric India Pvt Ltd	Bengaluru	A	PLC modules from M/s Schneider France & BOI shall be from LOA approved sources
14-A	PLC System Integrators						<b>Note-11 and note-7</b>
		I		Ladder Automation Solution Pvt Ltd	Gurugram	A	For M/s Honeywell make system
		I		Virtual Automation	Mazeedpur Hyderabad	A	For M/s Schneider make system
		I		Cotmac Electronics Pvt Ltd	Pune	A	For M/s SIEMENS make system
		I		Tech-Masters	Hyderabad	A	For M/s Emerson make system
		I		Powertech Switchgear (I) Pvt Ltd	Sonepat	A	For M/s Schneider make system
		I		Unity Industrial Automation Pvt Ltd	Delhi	A	For M/s Rockwell make system
		I		EMCONS	Ranchi	A	For M/s Rockwell make system
		I		Divya Engineers	Chennai	A	For M/s SIEMENS make system
		I		M D Industries	Vadodara	A	For M/s Emerson make system
		I		Velox automation	Surat	A	For M/s SIEMENS make system
		I		Vision Comptel	Kolkata	A	For M/s Emerson make system
		I		Adaptive Engineering Private Limited	Ahmedabad	A	For M/s Schneider make system
		I		Greenwave Solutions Private Limited	Kolkata	A	For M/s Rockwell make system
		I		Dreamz Automation	Ghaziabad	A	For M/s SIEMENS make system
		I		Creative Robotics	Ghaziabad	A	For M/s Honeywell make system
		I		Kruti Techno Engineer Pvt Ltd	Chhapraula (GB Nagar	A	For M/s SIEMENS make system
		I		EDS Instruments & Systems Pvt Ltd	Chennai	A	For M/s Honeywell make system
		I		Delsys Automation Technologies Pvt Ltd	Chennai	A	For M/s Emerson make system
		I		Hindustan Controls and Equipment Ltd	Kolkata	A	For M/s Emerson make system
		I		Vollkraft Engineering And Consultant (P) Ltd	Kolkata	A	For M/s Emerson make system
		I		SSM Infotech Solutions Pvt Ltd	Surat	A	For M/s Schneider make system
		I		Sun Industrial Automation & Solutions	CHENNAI	A	For M/s Schneider make system
		I		ARTEE FLOW CONTROL PVT LTD	ANKLESHWAR	A	For M/s Honeywell make system
		I		CSS AUTOMATION PVT. LTD	KOLKATA	A	For M/s Emerson make system
		I		ARMAX AUTOMATION PVT LTD	BANGALORE	A	For M/s ABB make system

		I		KAIZEN AUTOMATION	AHEMDABAD	A	For M/s Schneider make system
		I		ELECON PERIPHERALS LIMITED	ANAND	A	For M/s ABB make system
		I		M/s Skytech Infinite Platform Private Limited	Bangalore	A	For M/s Emerson make system
		I		M/S MECGALE AUTOMATION PRIVATE LIMITED	Nagpur	A	For M/s Emerson make system
15	UPS With ACDB						
		Note-5		Vertive Energy Pvt Ltd	Pune	A	Upto 125 KVA for 1 phase and 300 KVA for 3 Phase
		Note-5		Vertive Energy Pvt Ltd	Mumbai	A	Upto 160 KVA
		Note-5		Hitachi Hirel Power Electronics Pvt Ltd	Gandhinagar	A	Upto 200 KVA,
		Note-5		Fuji Electric Consul Neowatt Private Limited	Pune	A	Up to 100 KVA single phase
		Note-5		KELTRON	Trivendrum	A	
		Note-5		Merlin & Gerin	France	A	
		Note-5		Gutor	Switzerland	A	
		Note-5		AEG	Germany	A	
		Note-5		Fuji Electric	Japan	A	
16	Perimeter Intrusion Detection System						
		III		Senstar	Canada	A	
17	Radar based Perimeter Surveillance System						
		III		Magos System Ltd	Israel	A	Third Party "Cyber Penetration report " shall be provided along with material TC/COC
18	Thermal Camera ( PTZ)						
		III		FLIR Commercial Systems INC	USA	A	

### Main Contractor approved sources (Note-12)

MC-1	Access & Controller Software	III					Main Contractor Approved Sources
MC-2	Air Filter Regulator	III					Main Contractor Approved Sources
MC-3	Amonia Analyser	III					Main Contractor Approved Sources
MC-4	Amonia leak detector	III					Main Contractor Approved Sources
MC-5	Anemometer	III					Main Contractor Approved Sources
MC-6	Annunciator	III					Main Contractor Approved Sources
MC-7	ANPR	III					Main Contractor Approved Sources
MC-8	ATB Bolloard	III					Main Contractor Approved Sources
MC-9	Audible alarm device	III					Main Contractor Approved Sources
MC-10	Battery Health Monitoring System	III					Main Contractor Approved Sources
MC-11	Bio Matrix Reader	III					Main Contractor Approved Sources
MC-12	Biofouling/ Deposit Monitor	III					Main Contractor Approved Sources
MC-13	Boom Barrier	III					Main Contractor Approved Sources
MC-14	CameraPoles	III					Main Contractor Approved Sources
MC-15	Card Reader	III					Main Contractor Approved Sources
MC-16	CHAIN LINK FENCE	III					Main Contractor Approved Sources
MC-17	Chlorine Leak detector	III					Main Contractor Approved Sources
MC-18	Coal bunker Level monitor	III					Main Contractor Approved Sources
MC-19	Comd & Control System	III					Main Contractor Approved Sources
MC-20	Compression Fittings(SS)	III					Main Contractor Approved Sources
MC-21	Condensing Pots	III					Main Contractor Approved Sources
MC-22	Conduits /Pipe (GI)	III					Main Contractor Approved Sources
MC-23	Conduits lead coated ( Flexible )	III					Main Contractor Approved Sources
MC-24	Copper tubing/Brass connectors	III					Main Contractor Approved Sources
MC-25	Coriolios Type Mass Flow meter	III					Main Contractor Approved Sources
MC-26	Coupling /Interposing Relays	III					Main Contractor Approved Sources

MC-27	Density Indicator	III					Main Contractor Approved Sources
MC-28	Density Meter	III					Main Contractor Approved Sources
MC-29	Desk for OWS/EWS/Printer/Server	III					Main Contractor Approved Sources
MC-30	Dew point sensor/meter (H2)	III					Main Contractor Approved Sources
MC-31	Digital Camera (10 MP) with tripod for photo capture	III			Main Contractor	Approved Sources	
MC-32	Digital Indicators	III					Main Contractor Approved Sources
MC-33	Door Frame Metal Detector -DFMD	III			Main Contractor	Approved Sources	
MC-34	Door sensor	III					Main Contractor Approved Sources
MC-35	Dust Sensor	III					Main Contractor Approved Sources
MC-36	Egress Switch	III					Main Contractor Approved Sources
MC-37	Electric to Pneumatic Converter	III					Main Contractor Approved Sources
MC-38	Electrical Control Panel ( UCP/Backup)	III			Main Contractor	Approved Sources	
MC-39	Electrical Indicating Instruments (Mosaic Compatible)	III			Main Contractor	Approved Sources	
MC-40	Electro Magenetic Flow meter	III					Main Contractor Approved Sources
MC-41	EM LOCK	III					Main Contractor Approved Sources
MC-42	Emergency exit / door override switch	III			Main Contractor	Approved Sources	
MC-43	Emergency Siren /Hooter	III					Main Contractor Approved Sources
MC-44	EPABX equipments	III					Main Contractor Approved Sources
MC-45	Flap barrier	III					Main Contractor Approved Sources
MC-46	Flash Lights for covering perimeter area for clear view from PTZ in night time	III			Main Contractor	Approved Sources	
MC-47	Flow Gauge	III					Main Contractor Approved Sources
MC-48	Flow Indicator cum Totaliser	III					Main Contractor Approved Sources
MC-49	Flow Switch	III					Main Contractor Approved Sources
MC-50	FRP Junction Box	III					Main Contractor Approved Sources
MC-51	Furnace exit gas temp probe	III					Main Contractor Approved Sources
MC-52	Furniture for control Room( Chair, Almira, Lock)	III			Main Contractor	Approved Sources	
MC-53	Geo fencing	III					Main Contractor Approved Sources
MC-54	GIS (2D) map application	III					Main Contractor Approved Sources
MC-55	Glass Break switch at Emergency Exit	III			Main Contractor	Approved Sources	
MC-56	GPS Sensor based Vehicle Monitoring system	III			Main Contractor	Approved Sources	
MC-57	Graphic Interface Unit	III					Main Contractor Approved Sources
MC-58	Guard tour	III					Main Contractor Approved Sources
MC-59	Half Height Turnstile	III					Main Contractor Approved Sources
MC-60	Hand Held Calibrator	III					Main Contractor Approved Sources
MC-61	Handheld Walkie - Talkie	III					Main Contractor Approved Sources
MC-62	Hart Management System	III					Main Contractor Approved Sources
MC-63	HHMD	III					Main Contractor Approved Sources
MC-64	Humidistat / Thermostat / Gyserstat / Airstat	III			Main Contractor	Approved Sources	
MC-65	Impact head type flow element	III					Main Contractor Approved Sources
MC-66	Instant Corrosion Rate Monitor & Portable Corrosion Meter	III			Main Contractor	Approved Sources	
MC-67	Instrument Tube Fittings (Air)	III					Main Contractor Approved Sources
MC-68	Instrument Valve	III					Main Contractor Approved Sources

MC-69	IR Detector	III					Main Contractor Approved Sources
MC-70	IR LED based Illuminator	III					Main Contractor Approved Sources
MC-71	Isolator	III					Main Contractor Approved Sources
MC-72	KVM Switch/Matrix KVM Switch	III					Main Contractor Approved Sources
MC-73	LAN-UTP cables	III					Main Contractor Approved Sources
MC-74	Level gauge (Transperent & Reflex, Tubular type)	III			Main Contractor	Approved Sources	
MC-75	Level Indicator (Float & Board type)	III					Main Contractor Approved Sources
MC-76	Level Scanner (3 D)for Solid Application	III			Main Contractor	Approved Sources	
MC-77	Level switch - Float/Displacer Type	III			Main Contractor	Approved Sources	
MC-78	Level Switch (RF Type)	III					Main Contractor Approved Sources
MC-79	Level switch capacitance type	III					Main Contractor Approved Sources
MC-80	LHS CABLE	III					Main Contractor Approved Sources
MC-81	Limit Switch	III					Main Contractor Approved Sources
MC-82	Long Range RFID Reader	III					Main Contractor Approved Sources
MC-83	Maintenance and Calibration Equipiment	III			Main Contractor	Approved Sources	
MC-84	Mini UPS-Type C configuration	III					Main Contractor Approved Sources
MC-85	Monitors 24 Inch Full HD	III					Main Contractor Approved Sources
MC-86	Mosaic tiles /Console items	III					Main Contractor Approved Sources
MC-87	Network components	III					Main Contractor Approved Sources
MC-88	Network Panel	III					Main Contractor Approved Sources
MC-89	On line carbon in Ash analyser	III					Main Contractor Approved Sources
MC-90	Optical Time Domain Reflector-meter (OTDR) with all accessories	III			Main Contractor	Approved Sources	
MC-91	Orifice plate assembly	III					Main Contractor Approved Sources
MC-92	ORP Monitor /Analyser	III					Main Contractor Approved Sources
MC-93	OWS/EWS/Server	III					Main Contractor Approved Sources
MC-94	Panic Button with Audible Alarm	III					Main Contractor Approved Sources
MC-95	Panic button/SOS button supportin SIP protocol	III			Main Contractor	Approved Sources	
MC-96	Pitot Tube	III					Main Contractor Approved Sources
MC-97	Postive dispalcement Type Flow Meter	III			Main Contractor	Approved Sources	
MC-98	Pr./Vaccum./DP Gauges	III					Main Contractor Approved Sources
MC-99	Press, DP, Vaccum Switch	III					Main Contractor Approved Sources
MC-100	Printer (Dot Matrix/Inkjet / Laser)	III					Main Contractor Approved Sources
MC-101	Psychrometer	III					Main Contractor Approved Sources
MC-102	Pulse jet Controller	III					Main Contractor Approved Sources
MC-103	Pulse Valve	III					Main Contractor Approved Sources
MC-104	Residual Chlorine Analyser	III					Main Contractor Approved Sources
MC-105	Reverse Rotation Indicator	III					Main Contractor Approved Sources
MC-106	RFID based Stickers	III					Main Contractor Approved Sources
MC-107	Rotameter	III					Main Contractor Approved Sources
MC-108	Semaphore Indicators	III					Main Contractor Approved Sources
MC-109	Sight Flow Indicator	III					Main Contractor Approved Sources
MC-110	Sliding Gate	III					Main Contractor Approved Sources
MC-111	Smart Positioner	III					Main Contractor Approved Sources
MC-112	SMS gateway	III					Main Contractor Approved Sources
MC-113	Socket Weld Fittings	III					Main Contractor Approved Sources
MC-114	Solenoid Valve	III					Main Contractor Approved Sources

MC-115	Solid Mass Flow Meter	III				Main Contractor Approved Sources
MC-116	SPIKE BARRIER	III				Main Contractor Approved Sources
MC-117	Static Radio Set	III				Main Contractor Approved Sources
MC-118	Storage Device (SAN/NAS/DAS) of 100 TB each	III			Main Contractor Approved Sources	
MC-119	Synchronising Relay	III				Main Contractor Approved Sources
MC-120	Synchroscope	III				Main Contractor Approved Sources
MC-121	Temperature cum Humidity Indicator	III			Main Contractor Approved Sources	
MC-122	Temperature Element(Thermocouple , RTD & Thermowell)	III			Main Contractor Approved Sources	
MC-123	Temperature Gauge( With Thermowell)	III			Main Contractor Approved Sources	
MC-124	Temperature Switch	III				Main Contractor Approved Sources
MC-125	Terminal Block (Cage and Clamp type)	III			Main Contractor Approved Sources	
MC-126	Touchless biometric recorder	III				Main Contractor Approved Sources
MC-127	Traffic Light	III				Main Contractor Approved Sources
MC-128	Transducer	III				Main Contractor Approved Sources
MC-129	Tube thickness Meter	III				Main Contractor Approved Sources
MC-130	Turnstile - half height	III				Main Contractor Approved Sources
MC-131	Ultrasonic Type Flow Transmitter	III				Main Contractor Approved Sources
MC-132	UVSS	III				Main Contractor Approved Sources
MC-133	Valve manifolds	III				Main Contractor Approved Sources
MC-134	Voltmeter/ Watthour Meter	III				Main Contractor Approved Sources
MC-135	X-ray Baggage Scanner	III				Main Contractor Approved Sources

#### LEGENDS :

#### 1.0 SYSTEM SUPPLIER / SUB SUPPLIER APPROVAL STATUS CATEGORY

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

#### 2.0 QP INSPECTION CATEGORY :

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

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

CAT - III : For these items Quality control to be exercised as per Main contractor Quality Assurance System. The final acceptance by NTPC shall be on the basis of Certificate of Conformance (COC) by Main Contractor.

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

#### 3.0 NOTES :

NOTE - 1 : A: Vendors to submit project specific documents as per Sub-QR requirements in case the Vendor is approved under collaboration agreement.

B: In case approved sub vendor is offering product with latest model/series apart from earlier approved, vendors to submit project specific documents as per Sub-QR requirements.

NOTE - 2 : For Instrument cable <= 1 KM inspection category CAT - III, For > 1 KM to <= 10 KM Inspection category CAT - II COC & FOR> 10 KM Inspection category CAT-I

NOTE -3 : For Fiber Optic cable <=10KM inspection category CAT - III & for > 10KM Inspection category CAT-II

NOTE-4 : Batteries for UPS <= 10 KVA and batteries for intelligent battery charger 24 V DC <= 40 Amp inspection category CAT-III & for Batteries for UPS> 10KVA and batteries for intelligent battery charger 24 V DC > 40 Amp rating inspection category CAT-I

NOTE-5 UPS <= 10 KVA rating inspection category CAT-III & for > 10KVA rating inspection category CAT-I

NOTE-6 : No Information available

NOTE - 7 - EMPTY CABINETS, COMPUTERS, SIGNAL ISOLATOR/ MULTIPLIER and TB SHALL ALSO BE ACCEPTABLE FROM OWNER ACCPETED IN QP. IF THE TOTAL INTEGRATED PANEL AND FAT IS CONDUCTED INDEGENEOUSLY
NOTE-8 : For the C & I instrumnts mounted on the skid of the main item or supplied as a integral part of the main item, instrument to be supplied as per proven practice of the manufacturer meeting the Customer technical specification requirement.
NOTE-9- This item is a bought out componenet of main equipments like DDCMIS ,PLC,TSI,CCTV ,PA system etc
NOTE-10- For these controlled items, vendor shall be proposed for owner acceptance with-in the agreed contract schedule of the package
NOTE-11 - Major Bought-Out-Items are to be procured from LOA approved sources & the same shall be finalized during the finalization of Manufacturing Quality Plan . MQP shall be duly vetted by OEM with their project specific authorisation letter .
NOTE-12 : Main contractor apporved sub vendors are acceptable those are evaluated / assesesed as per Main contractor Quality Management System for vendor approval. Main contractor to inform the finaly selected vendor to NTPC as soon as PO is placed for these items. In case of sub-QR Note-1 is also applicable.
Note-13 :The items not covered in the list shall be mutually discussed and agreed for item categorization & sub-vendor control during the detailed Engineering in post award activity.
Note-14 : The items of this list, which are not included during the detailed Engineering of post award activity, shall be ignored for any further action.

	Project/ परियोजना:	DEVELOPMENT OF BESS AT NTPC THERMAL POWER STATIONS		LIST OF ITEMS REQUIRING QUALITY PLAN AND (OR) SUB-SUPPLIER APPROVAL क्वालिटी प्लान तथा सब-वेंडर के अनुमोदन सहित मदों की सूची			Doc No./ दस्तावेज सं.:		
	Package/ पैकेज:						Rev. No./ संशोधन सं.:		
	Main contractor/ मुख्य आपूर्तिकर्ता:						Date/ तिथि:		
	Contract No./ अनुबंध सं.:			Systems प्रणाली:		Sub System/ उप-प्रणाली:	Civil Works	PAGE/ पृष्ठ:	
Sl. No. क्र.सं.	Item / मद	QAP/Insp. Cat./ क्यूपी/ निरी. श्रेणी.	Proposed Sub Supplier/ प्रस्तावित उप आपूर्तिकर्ता				Place/ स्थान	Sub-Suppliers Approval Status/ Category/ उप आपूर्तिकर्ता के अनुमोदन की स्थिति /श्रेणी (NOTE-1)	Remarks/ टिप्पणी
1.	Galvanized Steel Structures (Lattice & Pipe) for Switchyard and Transmission Line	I	Vijay Transmission Ltd				Raipur	A	
			Unitech Power Transmission Ltd				Nagpur	A	
			Associated Power Structures				Vadodara	A	
			R.S. Infraprojects Pvt. Ltd				Surajpur	A	
			New Modern Technomech				Mayurbhanj (Orrisa)	A	
			Good Luck Steel Tubes				Sikandrabad	A	
			Unique Structures & Towers Ltd.				Raipur	A	
			Vatco Elec-Power Pvt. Ltd.				Navi Mumbai	A	Galvanising at M/s Sigma Galvaniser, Navi Mumbai
			R.S. Infraprojects Pvt. Ltd				Sikandrabad	A	
			Advance Steel Tube				Sahibabad	A	
			Sangam Structures Ltd.				Allahabad	A	
			Reliable Sponge Pvt Ltd Unit III				Kalunga	A	



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			VSP Enterprises Pvt. Ltd			Sonepat	A	
			Skipper Limited			Unit-I: Jangalpur, Howrah. Unit-II: Uluberia Unit, Howrah. Unit- III: BCTL, Howrah.	A	Prototype inspection at Unit- Bagnan, Howrah
			Rukmani Electrical & Component Pvt. Ltd			Raipur	A	
			Encorp Powertrans Pvt Ltd			Palghar	A	
			Ratan Projects & Engineering Co. Pvt. Ltd.			Howrah	A	
			Eros Infrastructures Pvt. Ltd.			Nagpur	A	
			Telecom Network Solutions			Bulandshahar (UP)	A	
			Richardson & Cruddas (1972) Ltd			Nagpur	A	
2.	Colour Coated Metal Deck & Cladding/Roofing Sheet (Coil)	I	Tata Steel Limited			Khopoli, Raigarh	A	

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			Tata Steel Limited				Sahibabad	A	AL-ZN coil for cladding
			Tata Bluescope Steel Ltd				Jamshedpur	A	
			Arcelormittal Nippon Steel India Limited				Pune	A	
			National Steel & Agro Industries Ltd				Dhar	A	
			JSW Steel Coated Products Ltd				Kalmeshwar (Nagpur)	A	
			JSW Steel Coated Products Ltd				Tarapur, Boisar	A	
			JSW Steel Coated Products Ltd				Vasind, Thane	A	
			APL Apollo Building Products Private Limited				Baloda Bazar, Raipur, CG	A	AL-ZN coil for cladding
			Bhushan Power & Steel Ltd				Sambalpur (Odisha)	A	
3.	Reinforcement Steel	III	SAIL					A	
		III	Tata steel Ltd.					A	
		III	JSW Steel Ltd.					A	

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		III	Jindal Steel & Power Ltd. (JSPL)				A		
		III	Rashtriya Ispat Nigam Limited (RINL)				A		
		III	ESL Steel Ltd.				A		
		III	JSW Ispat Special Products Ltd.				A		
		II	Jai Balaji Industries Ltd.			Unit IV, Durgapur	A		
		II	Rungta Mines Ltd.			Chaliyama Steel Plant, Jharkhand	A		
		II	Rashmi Metaliks Ltd.			Kharagpur	A		
4.									
5.									

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6.	Electroforged Grating	II	Indiana Gratings Pvt. Ltd.				Pune	A		
			Kanade Anand Udyog				Thane	A		
			Premier Power Products Ltd.				Howrah	A		
			Bhola Ram Steel Pvt. Ltd.				Patna	A		
			Pinax Steel Industries Pvt. Ltd.				Patna	A		
			Ankit Electrograting				Raipur	A		
			Ferrotech Structurals (India) Private Limited.				Pune	A		
			Ratan Projects & Engineering Co. Pvt. Ltd.				Howrah	A		
			MEET Engineering (for Fabrication) Valmont Structure Pvt. Ltd. (for Galvanising)				Vadodara, Gujarat; Halol, Gujarat	A		
			Vinfab Engineers India Pvt. Ltd. (for Galvanising) Vinfab Gratings (for Fabrication)				Thane	A		
7.	Profilers for Colour Coated Metal Deck & Cladding/ Roofing Sheets	II	Main Contractor Approved Source				-	-		
8.							-	-		
9.							-	-		

	Project/ परियोजना:	DEVELOPMENT OF BESS AT NTPC THERMAL POWER STATIONS		LIST OF ITEMS REQUIRING QUALITY PLAN AND (OR) SUB-SUPPLIER APPROVAL  क्वालिटी प्लान तथा सब-वेंडर के अनुमोदन सहित मदों की सूची				Doc No./ दस्तावेज सं.:		
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10.							-	-		
11.	High Performance Moisture Compatible Corrosion Resistant Coating System	III	CECRI Licensed Sources				-	-		
12.	Bitumen	III	All Government Refineries				-	-		
13.							-	-		
14.	Cement	III	BIS approved sources having valid BIS Licence				-	-		
15.	CI Pipes	III	BIS approved sources having valid BIS Licence				-	-		
16.	RCC Pipes	III	BIS approved sources having valid BIS Licence				-	-		
17.	CPVC/UPVC Pipes	III	BIS approved sources having valid BIS Licence				-	-		
18.	PVC Water Stop	III	BIS approved sources having valid BIS Licence				-	-		
19.	Polythene Water Storage Tanks	III	BIS approved sources having valid BIS Licence				-	-		
20.	Ceramic / Vitrified Tiles	III	BIS approved sources having valid BIS Licence				-	-		
21.	Particle Boards, Plywood, MDF	III	BIS approved sources having valid BIS Licence				-	-		
22.	Fire Proof Doors	III	Main Contractor approved sources with valid Prototype Test Report from CBRI/CPRI/Govt. Lab.)				-	-		

	Project/ परियोजना:	DEVELOPMENT OF BESS AT NTPC THERMAL POWER STATIONS		LIST OF ITEMS REQUIRING QUALITY PLAN AND (OR) SUB-SUPPLIER APPROVAL क्वालिटी प्लान तथा सब-वेंडर के अनुमोदन सहित मदों की सूची			Doc No./ दस्तावेज सं.:		
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23.	Construction Chemicals/ Admixture, Water Proofing Compounds and Grouts	III	Main Contractor Approved Source				-	-	
24.	Paint And Painting System	III	Main Contractor Approved Source				-	-	
25.	High Solid Content Liquid Applied Urethane based Elastomeric Membrane for Water Proofing	III	Main Contractor Approved Source				-	-	
26.	Instrumentations (Porous Tube Piezometer, Surface Settlement Point, Water Level Sounder etc.) for Ash Dyke	III	Main Contractor Approved Source				-	-	
27.	Foundation Bolts	II	Main Contractor Approved Source				-	-	
28.	AC Kiosk	III	Main Contractor Approved Source				-	-	

**NOTES:**

- Note-1: Items for which Sub-QR is envisaged, vendors are accepted subject to Sub-QR Clearance from NTPC Engg.
- Note-2: Items not mentioned in above list shall be discussed and mutually agreed in detail engineering during post award activity.
- Note-3: This vendor list is tied up for this project and package as proposed by (Main Contractor Name).
- Note-4: For the items placed in CAT-III for Civil Works, the review and final acceptance shall be done by NTPC-EIC/FQA based on MTC/Certificate of Conformance (COC) in line with Technical Specifications/FQP.

**LEGENDS:**

- A For these items proposed vendor is acceptable to NTPC. To be indicated with letter "A" in the list along with the condition of approval, if any./ इन मदों के लिए प्रस्तावित वेंडर एनटीपीसी को स्वीकार्य है। अनुमोदन की शर्त, , यदि कोई हो, के साथ-साथ पत्र "क" में इंगित किया जाए।
- DR For these items "Detailed required" for NTPC review. To be identified with letter "DR" in the list. एनटीपीसी द्वारा इन मदों की समीक्षा के लिए "विस्तृत ब्यौरे की आवश्यकता" होगी। सूची में "DR" पत्र में इंगित किया जाना चाहिए।

**QP / INSPECTION CATEGORY:**

- CAT-I / श्रेणी- I: For these items the Quality Plans are approved by NTPC and the final acceptance will be on physical inspection witness by NTPC. इन मदों के लिए गुणवत्ता योजनाओं को एनटीपीसी द्वारा अनुमोदित किया जाता है और एनटीपीसी द्वारा अंतिम स्वीकृति भौतिक निरीक्षण के दौरान उपलब्ध गवाह के आधार पर दी जाएगी।
- CAT-II / श्रेणी- II: For these items the Quality Plans approved by NTPC. However, no physical inspection shall be done by NTPC. The final acceptance by NTPC shall be on the basis review of documents as per approved QP. इन मदों के लिए गुणवत्ता योजनाओं को एनटीपीसी द्वारा अनुमोदित किया जाता है। हालाँकि एनटीपीसी द्वारा कोई भौतिक निरीक्षण नहीं किया जाएगा। एनटीपीसी द्वारा अंतिम स्वीकृति अनुमोदित क्यूपी के अनुसार दस्तावेजों की समीक्षा के आधार पर दी जाएगी।
- CAT-III/ श्रेणी-III: For these items Quality control to be exercised as per Main contractor Quality Assurance System. The final acceptance by NTPC shall be on the basis of Certificate of Conformance (COC) by Main Contractor.

**UNITS/WORKS/इकाईयां / कार्य:**

Place of manufacturing/ निर्माण का स्थान Place of Main Supplier of multi units/works/बहु- इकाइयों / कार्यों के मुख्य सप्लायर का स्थान.

<b>1.00.00</b>	<b>INERT GAS PROTECTION SYSTEM</b>
<b>1.01.00</b>	<b>DETECTORS</b>  All 'Detectors' shall be tested as per relevant Indian / International Standards. Detectors shall also meet the requirements of UL / FM / LPC/VDS etc.
<b>1.02.00</b>	<b>PIPING, VALVE AND SPECIALITIES</b>
<b>1.02.01</b>	<b>SHOP TESTS</b>  a) All pipes and fittings shall be tested as per applicable code.  b) DPT of pipe welds (in case of rolled and welded pipes only) shall be carried out for root and finished welds.  c) All strainers shall be subjected to hydraulic pressure test for leakage and Pressure drop v/s Flow for each type and size.  d) All valves shall be hydraulically tested for body, seat and back seat (if applicable) as per relevant standard. Check valves shall also be tested for leak tightness test at 25% of the specified seat test pressure.  e) Valves shall be offered for hydro test in unpainted condition.  f) Functional checks of the valves for smooth opening and closing shall also be done.  g) Anti-corrosive protection shall be tested as per applicable code.
<b>1.03.00</b>	<b>SYSTEM CYLINDERS</b>
<b>1.03.01</b>	<b>SHOP TEST</b>  a) All system cylinders shall be tested as per relevant standard as statutory body as applicable.
<b>1.04.00</b>	<b>SITE TESTS:</b>  a) System Cylinder : A performance demonstration test at site of five (5) percent or one (1) number, whichever is higher, of each type and capacity of the cylinder shall be carried out by the contractor. All consumables and replaceable items require for the contractor without any extra cost to employer would supply this test would be supplied by the Contractor without any extra cost to employer.  a) Piping Protection (as applicable):  1) Thickness, Holiday by spark test, Adhesion test shall be carried out as per relevant standard.



