

Annexure – A

LIST OF APPROVED VENDORS (FOR SUBSTATIONS) AS ON: 23/01/2018

<u>Sr. No.</u>	<u>Item Description</u>	<u>Vendor's Name</u>	<u>Remark</u>
1	A. C. Distribution Board	Amara Raja, Tirupati/ Goenka Switchgear, Nagpur/ KMG A to Z, Noida/ Maktel, Vadodara/ Panva, Nashik/ Power Control System, Sangli/ Vimac, Mumbai	
2	Air Conditioners	Blue Star/ Carrier/ Kirloskar/ Lloyd/ Voltas	
3	Aluminium Tube	BALCO/ BANCO, Vadodara/ Century, Kolkata/ Gujrat Metal/ HINDALCO/ INDALCO/ NALCO/ SUDAL	
4	Bus Post Insulator (400kV)	Aditya Birla, Halol/ IEC, Bhopal/ Modern, Abu Road/ Sarvana, Cuddalore/ WSI, Chennai	
5	Bus Post Insulator (220kV)	Aditya Birla, Halol/ IEC, Bhopal/ Modern, Abu Road/ Sarvana, Cuddalore/ WSI, Chennai	
6	Bus Post Insulator (132kV)	Aditya Birla, Halol/ IEC, Bhopal/ Modern, Abu Road/ Prathmesh Ceramics, Nashik/ Sarvana, Cuddalore/ WSI, Chennai	
7	Bus Post Insulator (33kV)	Aditya Birla, Halol/ IEC, Bhopal/ Modern, Abu Road/ Prathmesh Ceramics, Nashik/ Sarvana, Cuddalore/ WSI, Chennai	
8	Circuit Breaker (400kV)	ABB, Vadodara/ Alstom, Chennai/ BHEL, Jhansi/ CGL, Nashik/ Siemens, Aurangabad	
9	Circuit Breaker (220kV)	ABB, Vadodara/ Alstom, Chennai/ CGL, Nashik/ Siemens, Aurangabad	
10	Circuit Breaker (132kV)	ABB, Vadodara/ Alstom, Chennai/ CGL, Nashik/ Siemens, Aurangabad	
11	Circuit Breaker (33kV)	ABB, Vadodara/ CGL, Nashik/ Easun Reyrolle, Hosur/ Megawin Switchgear, Salem/ Schneider, Chennai/ Siemens, Aurangabad/ Vijai Electricals, Hyderabad	
12	Ceiling Fans	Bajaj/ Crompton/ Khaitan/ Orient/ Usha	
13	Clamps & Connectors	Dharia, Pune/ Electromech&Transtech, Kolkata/ Exalt, Mumbai/ Klemmen, Chennai/ National Refra/ Ramelex, Pune/ TM Power Line, Kolkata/ Varad Engineering, Pune/ Vensun Techno Links, Chennai/ Vinayak, Mumbai	
14	Conductor (AAAC)	Apar, Silvassa/ Cabcon India, Kolkata/ Dynamic Cables, Jaipur/ Galada, Silvassa/ Galaxy Transmission, Silvassa/ Gammon (formerly Transrail), Silvassa/ Gupta Power Infrastructure, Bhubaneshwar/ Hind Aluminium, Silvassa/ ICOMM, Hyderabad/ JSK Ind., Sayli, Silvassa(valid upto 30.04.2018)/ KJV Alloy, Boregaon (M.P.)/ Lumino Ind. Ltd., Kolkata/ Sterlite, Rakholi&Piparia (Silvassa)/ Shashi Cables, Lucknow	
15	Conductor (ACSR Zebra (Z), ACSR Panther (P) and ACSR Moose (M))	Achyuta Electricals, Hyderabad/ Apar, Silvassa/ Cabcon India, Kolkata/ CMI Energy, Baddi (only Z & P)/ Diamond Power, Vadodara (only Z & P)/ Dynamic Cables, Jaipur/ ERI Tech, Kolkata/ Galada, Silvassa/ Galaxy Transmission, Sangli & Silvassa/ Gammon (formerly Transrail), Silvassa/ Gupta Power Infrastructure, Bhubaneshwar/ Hind Aluminium, Silvassa/ Hindustan Vidyut Product Ltd., Gwalior/ JSK Ind., Rakholi & Sayli, Silvassa(valid upto	

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		30.04.2018)/ Jyoti Power, Gondal/ Kalpesh, Dhule/ KJV Alloy, Nagpur/ Kataria Ind., Ratlam (only Z & P)/ Lumino Ind. Ltd., Kolkata/ Lunkad Alu., Jalgaon (only Z & P)/ Mahavir Transmission, Dehradun/ MMP, Bhandara/ Prem Cables, Pali (Raj.)/ Prem Conductors, Gandhinagar/ Rajasthan Cables & Cond., Jaipur (only Z& P)/ Rajputana Cables & Cond., Korba (C.G.) (only Z& P) Sterlite, Rakholi&Piparia (Silvassa)/ Shashi Cables, Lucknow/ Vardhman Cables & Conductors, Kolhapur (only Z & P)/ Venkateshwara Wires, Jaipur	
16	Conductor HTLS	ZTT, China/ Hind Aluminium, Silvasa (upto 220kV & ACSS Type)/ Apar Industries, Silvasa (ACCC, Invar, Gap, ACSS, AL59)	
17	Conventional C&R Panel for Augmentation/ Bay extension (400kV)	ABB/ Alstom/ CG-ZIV/GE, Bengaluru/ NR Energy Solution India Pvt. Ltd., Panvel/ Schneider/ Siemens/ Sifang Automation India Pvt. Ltd., Bangalore	
18	Conventional C&R Panel for Augmentation/ Bay extension (220kV)	ABB/ Alstom/ Amara Raja, Tirupati/ Ashida/ Avana/ C&S, Noida/ CG-ZIV/ CTR, Nashik (with ROCON, Bulgaria)/ GE, Bengaluru/ Goenka Switchgear Pvt. Ltd., Nagpur/ NR Energy Solution India Pvt. Ltd., Panvel/ Schneider/ SCOPE T&M Pvt. Ltd., Pune/ Siemens/ Venson/ Sifang Automation India Pvt. Ltd., Bangalore	
19	Conventional C&R Panel for Augmentation/ Bay extension (132kV)	ABB/ Alstom/ Amara Raja, Tirupati/ Ashida/ Avana/ C&S, Noida/ CG-ZIV/ CTR, Nashik (with ROCON, Bulgaria)/ GE, Bengaluru/ Goenka Switchgear Pvt. Ltd., Nagpur/ NR Energy Solution India Pvt. Ltd., Panvel/ Schneider/ SCOPE T&M Pvt. Ltd., Pune/ Siemens/ Venson/ Sifang Automation India Pvt. Ltd., Bangalore	
20	Conventional C&R Panel for Augmentation/ Bay extension (33kV)	ABB/ Alstom/ Amara Raja, Tirupati/ Ashida/ Avana/ C&S, Noida/ CG-ZIV/ CTR, Nashik (with ROCON, Bulgaria)/ Electrocare/ GE, Bengaluru/ Goenka Switchgear Pvt. Ltd., Nagpur/ MCPPL Maktel/ NR Energy Solution India Pvt. Ltd., Panvel/ Popular Switchgear/ Schneider/ SCOPE T&M Pvt. Ltd., Pune/ Siemens/ S. S. Controls Systems Pvt. Ltd., Aurangabad/ Venson/ Vinayak/ Sifang Automation India Pvt. Ltd., Bangalore	
21	C. I. Pipe Earthing Set (for Substation)	KapilanshDhatu, Nagpur/ Nagpur Foundries, Nagpur/ R. S. Valves, Hyderabad/ Universal Earthing Systems Pvt. Ltd. (UES), Chennai (only for Hard Soil Strata & GIS substations)	
22	Current Transformer (CT) (400kV)	ABB, Vadodara/ Alstom, Chennai/ CGL, Nashik/ Lustre Engineering Corporation, Rabale, Navi Mumbai/ Mehru, Bhiwadi/ Toshiba, Hyderabad	
23	Current Transformer (CT) (220kV)	ABB, Vadodara/ Alstom, Hosur/ CGL, Nashik/ ITC, Boisar/ Lustre Engineering Corporation, Rabale, Navi Mumbai/ Mehru, Bhiwadi/ Toshiba, Hyderabad	

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Sr. No.	Item Description	Vendor's Name	Remark
24	Current Transformer (CT) (132kV)	ABB, Vadodara/ Alstom, Hosur/CGL, Nashik/ ITC, Boisar/ Lustre Engineering Corporation, Rabale, Navi Mumbai/ Mehru, Bhiwadi/ Pragati Electricals, Thane/ Toshiba, Hyderabad/ Vidyut Control Systems Pvt. Ltd., Secunderabad	
25	Current Transformer (CT) (33kV)	CGL, Nashik/ ITC, Boisar/ Mehru, Bhiwadi/ Pragati Electricals, Thane/ Toshiba, Hyderabad/ Vidyut Control Systems Pvt. Ltd., Secunderabad	
26	Capacitor Voltage Transformer (CVT) (400kV)	ABB, Vadodara/ Alstom, Chennai/ CGL, Nashik	
27	Capacitor Voltage Transformer (CVT) (220kV)	ABB, Vadodara/ Alstom, Chennai/ CGL, Nashik/ Mehru, Bhiwadi	
28	Capacitor Voltage Transformer (CVT) (132kV)	ABB, Vadodara/ Alstom, Chennai/ CGL, Nashik/ Mehru, Bhiwadi	
29	DC Supply Systems:		
	(a) LMLA Battery Set	AJCO, Kolhapur/ EXIDE, Kolkata/ HBL, Hyderabad/ Manesh Enterprises/ PALSAI Batteries, Pune/ Union Batteries, Pune	
	(b) Battery Charger with DCDB (For LMLA Battery Set)	Armo, Nagpur/ Caldine, Kolkata/ Chhabi, Jalgaon/ HBL, Hyderabad/ Panva, Nashik	
	(c) VRLA Battery Set	Amara Raja, Tirupati/ HBL, Vizianagaram, Secunderabad (A.P.)/Exide Industries Limited, Hosur/Enersys India Batteries (P) Ltd, Hyderabad	
	(d) Micro-Controller Based Battery Charger (For VRLA)	Amara Raja, Tirupati	See Note (2)
	(e) DCDB for Micro-Controller Based Battery Charger	Amara Raja, Tirupati	See Note (2)
30	Earthwire HDG (7/3.15mm and 7/3.66mm)	Bedmutha Industries, Nashik/ Bharat Wires, Atgaon/ Geekay Wires, Hyderabad/ Jyoti Power Transmission, Ahmedabad/ Millenium Structural, Dhar (M.P.)/ Ramasarup Ind., Kolkata/ Ratlam Wires, Ratlam/ UIC Udyog, Kolkata	
31	Exhaust Fans	Bajaj/ Crompton/ Khaitan/ Orient/ Usha	
32	Fasteners & Washers:		
	(a) Nut & Bolts	Anand Bolts, Ludhiana/ Anshika Fasteners, Nagpur/ ASP Pvt. Ltd., Howrah/ A. V. Forgings, Mohali/ Bharat Ind., Howrah/ BRK Ind., Ludhiana/ Deepak Fasteners, Ludhiana/ Gulf Fasteners(valid upto 19.09.2017)/ Garg Fasteners, Ludhiana/ H. R. Steel Ind., Kolkata/ Himalaya Engg. Works, Hyderabad/ Ishitva Fasteners Pvt. Ltd., Hyderabad/ Kadevi, Hyderabad/ Karamtara Fasteners, Tarapur/ Kavcon, Bangalore/ Maheswari Fasteners, Hyderabad/ MilleniumStructurals, Indore/ Nexo Industries, Ludhiana/ Panchsheel Fasteners,	

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		Ludhiana/ Paramhari, Nagpur/ R. A. Engineering Industries, Nagpur/ Ravi Engineers, Amritsar/ Remax India, Ludhiana/ Roshan Impax, Ludhiana/ Sagar Fasteners, Ludhiana/ Techman (India), Chandigarh (Nuts from M/s Techman Enterprise, Panchkula	
	(b) Plain Washers	BRK Ind., Ludhiana/ Deepak Fasteners, Ludhiana/ Garg Fasteners, Ludhiana/Kavcon, Bangalore/ Maheswari Fasteners, Hyderabad/MillenniumStructurals, Indore/Nexo, Ludhiana/ Pura-Auto, Aurangabad/ R. A. Engineering Industries, Nagpur/ Remax India, Ludhiana/ Sagar Fasteners	
	(c) Spring Washers	Chempromech Engineers, Nagpur/ Forbes & Gokak, Mumbai/ Forex Fasteners, Ludhiana/ Garg Fasteners, Ludhiana/ Maheswari Fasteners, Hyderabad/ Naveen Metal, Kolkata/ Om Fasteners, Nagpur/ Pura-Auto, Aurangabad/ Springlock, Vadodara/ R. A. Engineering Industries, Nagpur/ Remax, Ludhiana	
33	Fire Fighting Equipments	Kanadia, Bhavnagar/ Swastik Synergy Engineering Pvt. Ltd., Khalapur/ safex Fire, Mumbai/Minimax/Zenith	
34	Gantry and Equipment Support Structures/ Lighting Masts/ Lightning cum Lighting Masts	Aarati Structures Pvt. Ltd., Nasik (upto220kV)(valid upto 13.11.2017)/A.K. Power Industries Pvt. Ltd., Kolkata (upto 220kV)/ Akshar Engineering, Vadodara (upto 220kV)/ Amitasha Enterprises Pvt. Ltd., Nagpur (765kV)/ Archon EgiconPvt. Ltd., Gandhinagar (upto 400kV)(valid upto 04.09.2015)/ Associated Transrail Structures, Vadodara/ Aster, Raipur/ B. G. Shirke, Pune(valid upto 07.05.2018)/ B. S. Transcomm, Hyderabad/B.K. Ind., Raipur (upto 220 kV)(valid upto 07.05.2018)/ ECI Infra., Hyderabad (upto220kV)/ Elektrolite, Jaipur (upto 400kV)/ Electrotherm India Ltd., Vadodara (400kV)/ EMCO (formerly Urja), Vadodara/ Encorp, Tarapur (upto 400kV)(valid upto 10.10.2020)/ Gammon India, Nagpur (formerly Transrail)/ Global Towers, Pune/ Goodluck Fabricators, Ghaziabad (400kV)/ ICOMM Tele. Ltd., Hyderabad (765kV)/ Inabensa Bharat, Halol(upto400kV)(valid upto 20.04.2018)/ IVRCL, Nagpur/ JHT Power Engg., Gondal (upto 220kV)/ Jyoti Structures, Nashik/ K. R. Structures, Wada (400kV)(valid upto 06.08.2019)/ Kaytx Industries Pvt. Ltd., MandiGobindgarh, Punjab (upto 220kV)(valid upto 15.11.2017)/Kadevi Ind. (P) Ltd., Hyderabad (upto 220kV)/ Kalpataru Power, Gandhinagar/ Karamtara Engg., Mumbai (upto 765kV)/ Kavcon, Bangalore/ KEC, Nagpur/ KPTL, Raipur (765kV)(valid upto 05.06.2018)/Linkson	

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		<p>International Ltd., Nagpur (upto 220kV) (valid upto 12.11.2017)/Maheshwari Structures (only Equipment support structures upto 33kV)/Meghraj Industries, Supa (220kV Line - 100MT)/Matrix Grating Pvt. Ltd., Sangli (upto 132 kV & upto 150 MT)(valid upto 24.02.2018)/Maharashtra Power Transmission Structures Pvt. Ltd. (upto 400kV)/ Nandan Steel & Power Ltd., Raipur (upto220kV)/ NEXO Structures, Ludhiana (upto 220kV)/ Novelty Power & Infratech, Mumbai/Phoenix Structural & Engg. Pvt. Ltd., Nagpur (upto 220kV)/ Powerdeal Energy System, Nashik (upto400kV)(valid upto 11.02.2015)/ Prabhune Fab. & Galv., Sangli & Karad (upto 400kV) (valid upto 17.02.2020)/Prasad Electrical Engg. Pvt. Ltd., Dombivali (200MT) (upto 220kV) (valid upto03.07.2019)/ Premier Power, Kolkata (upto400kV)/Richardson & Cruddas, Nagpur/Rounak, Nagpur (upto 220kV for Qty. upto 200MT)/ Rukmini Electricals, Raipur (upto 220kV for Qty. upto 200MT)/ Sawaria Pipes Pvt. Ltd., A.P. (upto 220kV)/ Sanvijay, Nagpur (upto400kV)(valid upto 25.02.2020)/Shah Infra Towers (P) Ltd., Davangere (upto400kV)/ Supreme, Kolkata (upto 220 kV)/Shanz Power, Wada (upto 220kV)/ Shilpa Re Rollers, Nagpur/ Shree Vaishnav Industries Pvt. Ltd., Wada (upto 220kV) (valid upto 13.02.2017)/ Shri Harikrishna Industries, Chennai (upto 220kV)/ Smitwin, Bangalore (upto 220kV)/ Sunrise Structures, Nagpur (upto 400kV) (valid upto 25.05.2020)/ Shri Krsna, Jaipur (400 kV) (upto 06.05.2018)/Techno Craft Industries (I) Ltd., Murbad (400kV) (valid upto 25.05.2020)/ Telecom Network Solution, Sikanderabad, UP (765kV)/ TKG Industries, Nagpur (upto 220kV)(valid upto 22.12.2018)/ Unique Structural & Towers Ltd. (upto 400kV)/ Unitech Power Transmission, Nagpur/ United Industries, Jaysingpur (upto 400kV)/ Vatco, Navi Mumbai (upto 765kV)/ Varrsana Ispat, Gandhidham (Gujarat) (upto 400kV)(valid upto 06.10.2020)/ Vijay Transmission, Raipur (765kV)/ VinfabEngrs. India Pvt. Ltd. (formerly V. K. Engineers), Mumbai (upto 220kV)/ Vir Electro Engineering, Nashik (upto 220kV)</p>	

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Sr. No.	Item Description	Vendor's Name	Remark
35	G. I. Cable Trays	CSR Industries, Pune/ Elcon, Pune/ Goenka Switchgear, Nagpur/ Hylite Galvanisers Pvt. Ltd., Chakan, Pune/ Indiana Gratings, Mumbai/ MKSD Industries, Mumbai/ Om Ind., Nagpur/ Omkareshwar Engg., Thane/ Parmar, Rajkot/ Pentex Ferro Incorporate, Thane/ Premier Power Products, Kolkata/ Rajasthan Metal Smelting Co., Jaipur/ Rukmani Electricals, Kolkata & Raipur/ S. N. Electricals Ltd., Pune/ Vatco, Navi Mumbai/ Universal Engg., Thane/ R. K. Engineering, Ambarnath (E) (Valid up to 31.01.2021)	
36	Horn Gap Fuse	Electrolites (Power) Pvt. Ltd., Jaipur/ Kiron Electrotechnic, Thane/ Universal Isolators, Indore/Hightension Electrical Equipments Pvt Ltd., Howrah/Ultima Switchgears Private Limited, Noida/Faraday Electricals Pvt Ltd., Jaipur/Raychem RPG Limited, Pune/Kiron Textile, Thane	
37	HT Cables upto 33kV	Apar Industries Ltd., Valsad (Gujarat)/ Diamond, Vadodara/ Dynamic Cables, Jaipur/ Gloster Cables, Secunderabad/ Havells India Ltd., Bhiwadi (Rajasthan)/ Hindustan Vidyut Products, Ghaziabad/ KEC International/ KEI Ind. Ltd., Alwar/ Krishna Cables, Gwalior/ Paramount Communication, Khushkhera/ Polycab Wires, Silvassa/ Ravin, Pune/ Sriram Cables, Bhiwadi/ Teracom Ltd., Goa	
38	Insulator Hardware and Earthwire Accessories	Aumni, Vadodar (upto 400kV) / A. K. Power, Kolkata (upto 220kV) / ASBESCO, Kolkata/ EMI, Mumbai/ IAC, Kolkata/ ITP, Bhandup/ Krsna Transmission, Vadodara (upto 220kV) / MML, Kolkata/ Mosdorfer India Pvt. Ltd., Nashik (upto 765kV) / National Refractories, Morbi (upto 220kV) / Nike Industries, Varanasi (upto 220kV) / Ramelex Pvt. Ltd. (upto 220kV) / Rashtra Udhyog, Kolkata/ Sicame India Connectors, Chennai (Spacer damper only) / Swamiji Transmission, Kolkata (upto 220kV) / TLP, Kolkata (upto 400kV) /TAG Corporation, Chennai (upto 765kV) / Legion Energy, B'lore (upto 220kV) / Supreme, Kolkata (upto 400kV) /Jainco, Kolkata (upto 220kV) / Electromech & Transtech, Kolkata (upto 400kV) / Rajasthan Transmat, Jaipur (upto 220 kV)	
39	Insulator Hardware & Conductor Accessories for HTLS type conductor	Ramelex, Pune (upto 220kV & ACSS Type) / Dervaux S.A. France (upto 220kV)	See Note (2)
40	Insulators (Porcelain):		
	(a) Disc Type	Aditya Birla Insulators, Rishra/ Allied Ceramics, Kolkata (70KN (N) & (AF), 120KN (N) upto 220kV only)/ BHEL, Jagdishpur (Bangalore)/ Bikaner Ceramics, Bikaner (upto 220kV) / IEC, Bhopal/ WSI, Chennai	

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	(b) Long Rod Type	Modern Insulators, Abu Road/ Saravana Global Energy Ltd., Cuddalore (upto 220kV)/ BHEL, Bangalore/BHEL, Sultanpur/W. S. Industries (I) Ltd, Chennai/Aditya Birla Insulators, Hooghly (W)/CYG Insulator Co Ltd, China	
41	Insulators (Polymer Long Rod Type)	Deccan Ent. Hyderabad/ G. K. Xianghe Elect. Pvt. Ltd., Bhopal (upto 220kV)/ Goldstone Infratech Ltd., Hyderabad/ LAMCO, Hyderabad (upto 220kV)/ Shree Radhe Ind., Vadodara (upto 220kV)/ Yamuna Power, Haryana (upto 220kV)/ Spark Insulator, Hyderabad (upto 400 kV)	
42	Insulators (Glass Type)	Global Group Co. Ltd., Yibin, Sichuan, China/ Sediver, China (Shanghai Unit)/ Shandong Ruitai Glass Insulator Co. Ltd., China/Zigong Sediver, Zigong City, Sichuan Province, China	
43	Isolators (400kV)	Alstom T&D India Ltd., Chennai/ Bimco, Hyderabad/ Electrolyte, Jaipur/ Engineers Enterprises, Jaipur/ GR Power, Hyderabad/ Siemens, Hyderabad/ Switchgear and Structural, Hyderabad	
44	Isolators (220kV)	Alstom T&D India Ltd., Chennai/ Bimco, Hyderabad/ CGL, Nashik/ Electrolite, Jaipur/ Engineers Enterprises, Jaipur/ Faraday Ele., Jaipur/ GK Electricals, Bhopal/ G. Nandy, Howrah/ GR Power, Hyderabad/ J. D. Ele., Howrah/ KironElectrotech, Thane/ Maktel Power Ltd., Vadodara/ Siemens, Hyderabad/ Switchgear and Structural, Hyderabad/ Trittech, Nashik/ Universal Isolator, Indore	
45	Isolators (132kV)	Bimco, Hyderabad/ CGL, Nashik/ Electrolite, Jaipur/ Engineers Enterprises, Jaipur/ Faraday Ele., Jaipur/ GK Electricals, Bhopal/ G. Nandy, Howrah/ GR Power, Hyderabad/ J. D. Ele., Howrah/ KironElectrotech, Thane/ Maktel Power Ltd., Vadodara/ Siemens, Hyderabad/ Switchgear and Structural, Hyderabad/ Trittech, Nashik/ Universal Isolator, Indore	
46	Isolators (33kV)	CGL, Nashik/ Elektrolites, Jaipur/ Engineers Enterprises, Jaipur/ Faraday Electricals, Jaipur/ GK Electricals, Bhopal/ G. Nandy, Howrah/ GR Power, Hyderabad/ KironElectrotech, Thane/ Maktel Power Ltd., Vadodara/ Siemens, Hyderabad/ Switchgear and Structural, Hyderabad/ Trittech, Nashik/ Universal Isolator, Indore	
47	Lighting Fixtures	Bajaj/ Crompton/ GEC/ Philips/ Shakti Fixtures, Mumbai	
48	Lightning Arrester (400kV)	CGL, Nashik/ Lamco, Hyderabad/ Oblum, Hyderabad(Porcelain Type)/ Oblum, Hyderabad(Polymer Type) (valid upto 31.05.2020)	
49	Lightning Arrester (220kV)	CGL, Nashik/ Elektrolite, Jaipur/ Lamco, Hyderabad Oblum, Hyderabad(Porcelain Type)/ Oblum, Hyderabad(Polymer Type) (valid upto	

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		31.05.2020)/ Raychem-RPG, Halol (Gujarat) (Polymer Type)	
50	Lightning Arrester (132kV)	CGL, Nashik/ Elektrolite, Jaipur/ Lamco, Hyderabad/ Oblum, Hyderabad(Porcelain Type)/ Oblum, Hyderabad(Polymer Type) (valid upto 31.05.2020) / Raychem-RPG, Halol (Gujarat) (Polymer Type)	
51	Lightning Arrester (33kV)	CGL, Nashik/ Elektrolite, Jaipur/ Lamco, Hyderabad/ Oblum, Hyderabad(Porcelain Type)/ Oblum, Hyderabad(Polymer Type) (valid upto 31.05.2020)	
52	LT Cables	Anaraj Cables, Salem (H.P.)/ Apar Industries Ltd., Valsad (Gujarat)/ Cabcom Cables/ Chandresh Cables, Ahmedabad/ Colt Cables, Pen (Raigad)/ Daksha Cable Ind., Kandivali/ Dashmesh Cables, Ulhasnagar/ Diamond, Vadodara/ Dynamic Cables, Jaipur/ Gloster Cables Ltd., Secunderabad/ Grid India, Manesar (Haryana)/ Gupta Power Infrastructure Ltd., Bhubaneshwar/ Havells India Ltd., Bhiwadi (Rajasthan)/ Hindustan Vidyut Products, Ghaziabad/ Kanha Cables, Jaipur/ KEC International/ KEI Ind. Ltd., Alwar/ Ketan Enterprises, Mumbai/ KNG Wires & Cable Ltd., H. P./ Krishna Cables, Gwalior/ LASER Cable, Kolkata/ Marco, Sinner/ Paramount Communication, Khushkhera/ Paragon Cable, Delhi/ Polycab Wires, Silvassa/ Revin, Pune/ Satelite Cables, Bhiwadi/ Sriram Cables, Bhiwadi/ Suyog, Panchmahal/ Teracom, Kundaim (Goa)/ Tirupati Plastomatic, Jaipur/ Vardhman cables & Conductors, Kolhapur/ Vishal Cables, Ambernath/ Zenium Cables, Valsad	
53	Marshalling Boxes	Amara Raja, Tirupati/ Electrocure, Shahapur/ Goenka Switchgear, Nagpur/ Ideas Engineering & Constructions, Aurangabad/ KMG A to Z, Noida/ Maktel, Vadodara/ Panva, Nashik/ Power Control System, Sangli/ Tushar, Jalgaon	
54	M. S. Flat/ G. I. Flat	Agarwal Structures, Raipur/ Premier Power, Kolkata/ Pushpak Steels, Pune/ Swastika Steel, Howrah/ Vatco, Navi Mumbai/ Vijay Tr. Pvt. Ltd., Raipur/ Vithal Ind., Raipur/Matrix, Sangli/Shri. Krsna, Jaipur/ Rajasthan Metal Smelting Co., Jaipur	
55	OPGW (Upto 48 Fibre)	ZTT, China/Sterlite, Piparia, Silvassa/ ZTT, Chennai/Taihan, China/Fujikura Hengton, China/TG Group, China/LS Cable, Korea/SDGI, China	
56	OPGW Accessories	ZTT, China (upto 400 kV)/TAG Corporation, Chennai (upto 765 kV)/ Ribe, China/ Supreme, Kolkata (upto 400 kV)/ Sicame	
57	PLCC Equipments:		
	(a) Wave Trap	Alstom, Hosur/ BPL, Palghat/ Gyro, Hosur/ Quality	

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LIST OF APPROVED VENDORS (FOR SUBSTATIONS) AS ON: 23/01/2018

Sr. No.	Item Description	Vendor's Name	Remark
		Power Electrical Equipments Pvt. Ltd., Sangli	
	(b) Coupling Capacitors	ABB, Vadodara/ Alstom, Hosur/ CGL, Nashik/ Mehru/ Siemens, Aurangabad (for Specific projects only)	
	(c) H. F. Cables	Delton, Delhi/ Techno, Hyderabad	See Note (2)
	(d) Coupling Device	ABB, Andheri/ Alstom, Delhi (for Specific projects only)/ CG-ZIV/ Patson, Nashik	
	(e) PLCC Terminal with Protection Coupler	ABB, Andheri/ Alstom, Delhi (for Specific projects only)/ CG-ZIV	
	(f) EPAX	ABB (Matrix), Vadodara/ Intellicon Pvt. Ltd., Ahmedabad (Karel Make)	See Note (2)
58	Power Transformer 765kV ICT & Reactors	Alstom, Vadodara/ TBEA Energy (India) Pvt. Ltd., Vadodara/ ABB India Limited, (Gujarat)/ABB Power Technologies, Sweden/ ZTR, Ukraine/Crompton Greaves Ltd, Mandideep (MP)/Siemens Ltd., Airoli (Navi Mumbai)/Hyosung Corporation, Korea/ CG Electric Systems, Hungary/Transformers & Rectifiers (I) Ltd., Ahmedabad/Baoding Tianwei Baobian Electric Co. Ltd., China/Toshiba T&D Systems (I) Pvt. Ltd., Medak (A.P.)	
59	Power Transformer 400kV ICT& Reactors	ABB Ltd., Vadodara/ ABB Power Technologies, Sweden/Aditya Vidyut, Bhivandi/ Alstom, Allahabad & Vadodara/ Bharat Bijlee, Thane/ BHEL/ CGL/ EMCO/ Hyosung Corporation, Korea/ IMP/ Kanohar, Merrut/ Prime Meiden Ltd./ T&R/ Siemens Ltd., Airoli (Navi Mumbai)/TBEA Energy (India) Pvt. Ltd., Vadodara/ Vijai Electricals, Hyderabad/ ZTR, Ukraine/ CG Electric Systems, Hungary/ Baoding Tianwei Baobian Electric Co. Ltd., China/ Toshiba T&D Systems (I) Pvt. Ltd., Medak (A.P.)	
60	Power Transformer 220kV Class (a) 200MVA, 220/132/11kV (b) 200MVA, 220/132-110/11kV (c) 200MVA, 220/100/22kV (d) 100MVA, 220/132kV (e) 100MVA, 220/132-110kV (f) 100MVA, 220/132-100kV	ABB, Vadodara/ Aditya Vidyut Appliances, Bhivandi/ Alstom, Allahabad & Vadodara/ Bharat Bijlee, Thane/ BHEL, Jhansi & Bhopal/ CGL, Mumbai/ EMCO Ltd., Thane/ IMP, Silvassa/ Indotech Transformers Ltd., Kanchipuram/ Kanohar, Merrut/ Prime Meiden Ltd./Siemens, Kalwa/ Technical Associates, Sitarganj/ Transformers & Rectifiers, Ahmedabad/ TBEA Energy (India) Pvt. Ltd., Vadodara/ Victory Transformers, Chennai/ Vijai Electricals, Hyderabad/ Voltamp Transformers Ltd., Vadodara (100MVA)	
61	Power Transformer 220kV Class (a) 50MVA, 220/33kV (b) 50MVA, 220/22kV (c) 50MVA, 220/33/22kV (d) 25MVA, 220/33kV (e) 25MVA, 220/22kV	ABB Ltd., Vadodara/ Aditya Vidyut Appliances, Bhivandi/ Alstom, Allahabad/ Bharat Bijlee, Thane/ BHEL, Jhansi & Bhopal/ CGL, Mumbai/ EMCO Ltd., Thane/ IMP, Silvassa/ Kanohar, Merrut/ Prime Meiden Ltd./Siemens, Kalwa/ Technical Associates, Sitarganj/ Tesla Transformers Pvt. Ltd., Bhopal/ Transformers & Rectifiers, Ahmedabad/ TBEA Energy (India) Pvt. Ltd., Vadodara/ Victory	

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LIST OF APPROVED VENDORS (FOR SUBSTATIONS) AS ON: 23/01/2018

Sr. No.	Item Description	Vendor's Name	Remark
		Transformers, Chennai/ Vijai Electricals, Hyderabad/ Voltamp Transformers Ltd., Vadodara	
62	Power Transformer 132kV Class (a) 50MVA, 132/33kV (b) 50MVA, 132-110/33kV (c) 50MVA, 132/22kV (d) 50MVA, 100/22kV (e) 25MVA, 132/33kV (f) 25MVA, 132-110/33kV (g) 25MVA, 132/22kV (h) 25MVA, 132/11kV (i) 25MVA, 132-100/22kV	ABB Ltd., Vadodara/ Aditya Vidyt Appliances, Bhivandi/ Alstom, Allahabad/ Bharat Bijlee, Thane/ BHEL, Jhansi/ CGL, Mumbai/ EMCO Ltd., Thane/ IMP, Silvassa/ Indotech Transformers Ltd., Chennai & Kanchipuram/ Kanohar, Merrut/ Prime Meiden Ltd./Schneider/ Siemens, Kalwa/ Technical Associates, Sitarganj/ Tesla Transformers Pvt. Ltd., Bhopal/ Transformers & Rectifiers, Ahmedabad/ TBEA Energy (India) Pvt. Ltd., Vadodara/ Victory Transformers, Chennai/ Vijai Electricals, Hyderabad/ Voltamp Transformers Ltd., Vadodara	
	Power Transformer Accessories:		
	(i) Tap Changer Controller cum Transformer Monitoring Unit	a.eberleGmbh/ Dynamic Rating/ Easun - MR (type TAPCON) / Pradeep Sales & Services	
	(ii) Digital Tap Position Indicator	Pradeep Sales & Services (type TDC - 2001)/ Precimeasure	See Note (2)
	(iii) Remote Temperature Indicator	Perfect Control/ Pradeep Sales & Services (type OTC2003/WTC2002) / Precimeasure	
	(iv) Microprocessor Based Annunciator	Minilec/ Pradeep Sales & Services (type P350/P400) / Precimeasure	
	(v) RTD or Winding/ Oil Temperature Indicator	Perfect/ Pradeep Sales & Services (type RTD2000/RTD2001) / Precimeasure/ Qualitrol (AKM Brand), Noida	
	(vi) Current Convertor Unit (CCU)/ Transducer for 4 - 20mA output	Pradeep Sales & Services (type CCU T-203/CCUPT-203) / Precimeasure	See Note (2)
63	(vii) OLTC	CTR (upto 400kV) / Easun - MR/ HMG (SHPEL), China/ OLG (upto 132kV)	
	(viii) 400kV Condenser Bushing	Alstom/ BHEL/ CGL/ Trench	
	(ix) 145kV & 245kV Condenser Bushing for EHV Transformer	ABB, Vadodara/ Alstom/ CGL/ BHEL/ Trench, France/ Yash High Voltage, Vadodara (upto 72.5kV Class)	
	(x) Optic Fibre Based Transformer Winding & Oil Temperature Measurement System	FISO, Canada/ Lumasense Technologies (type Thermoset)/ Opsense, Canada make/ Qualitrol (Neoptix brand), Noida	
	(xi) Explosion and Fire Prevention System for Transformer - Transformer Protector (TP)	Sergi, France (valid upto 30.07.2019)	See Note (2)
	(xii) Fire Protection System for EHV Transformer	CTR Manufacturing Industries Ltd., Pune/ Vendere, Aurangabad/ G. K. Power, Nagpur	
	(xiii) Multigas On-Line Dissolved Gas	Qualitrol, Mumbai (Serveron Corporation, USA) (Model: TM8/TM8-F) /PCI Ltd. (GEGrid), UK/	

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LIST OF APPROVED VENDORS (FOR SUBSTATIONS) AS ON: 23/01/2018

Sr. No.	Item Description	Vendor's Name	Remark
	Monitoring System (9 Gas)	A-Eberle, Germany	
(xiv)	On-Line Dissolved Gas Monitoring System (2 Gas)	a.eberle (Hydrocal-1003) / Avaco (Callisto)/ BPL Global {model Serveron TMI (optional)} / Macht {Model Messko Msense@MR. Germany} / PCI Ltd. {model HYDRAN-M@of GE Syprotec (Canada)}	
(xv)	Buchholz (Gas Operated) Relay for EHV Power Transformer	Press-N-Forge, Mumbai/ VIAT Instruments Pvt. Ltd./Instruments &Control, Vadodara/A.J. Services (Prayog), Bombay/Weir Electric, UK/VEB, Germany/ASPE, Italy/Sukrut Electric Co. Pvt. Ltd., Pune/Shenyang Yinhai Electrical Co., Ltd, China/EMB Control AB, Sweden/CEDESPE, Italy/ETI, Italy	
(xvi)	Radiator Valve (Throttle/ Butterfly) for EHV Power Transformer	Press-N-Forge, Mumbai/ Petson Valves , Coimbatore (Butterfly)/VIAT Instruments (Butterfly)/Bimal Techno Industries, Bhiwani (Butterfly)/Xianjiang TBEA Group Co. Ltd., Henyang Electrical Company, China (Butterfly)/Maier, Germany (Butterfly)	
(xvii)	Magnetic Oil Level Gauge (MOG) for EHV Power Transformer	Press-N-Forge, Mumbai/ Sukrut Udyog, Pune/Yogya Enterprises, Jhansi/ MESSKO, Germany/Shenyang Yinhai Electrical Co., Ltd. China/Comem, Italy/Taijin Industries, South Korea/ Qualitrol, USA	
(xviii)	Silica Gel Breather (Regenerative Type) for EHV Power Transformer	Macht, Mumbai (Model: Messko MTrab@MR Germany) / Qualitrol, Mumbai (Model: STB 100/200 Series) / ZTR, Ukraine/Shenyang Ming Yuan Electric Equipment Co., Ltd., China/ Taijin Industries, South Korea/ Comem, Italy	
(xix)	Silica Gel Breather (Air Dehumidifier) for EHV Power Transformer	Press-N-Forge, Mumbai/ Yogya Enterprises, Jhansi/ZTR, Ukraine/Shenyang Ming Yuan Electric Equipment Co., Ltd., China/ Taijin Industries, South Korea/ Comem, Italy	
(xx)	Oil Surge Relay for EHV Power Transformer	Press-N-Forge, Mumbai	See Note (2)
(xxi)	Pressure Release Valve (PRV) for EHV Power Transformer	Press-N-Forge, Mumbai/ Qualitrol, Noida/ Sukrut Udyog, Pune/ Messko, Germany/ VIAT Instruments Pvt. Ltd.	
(xxii)	Sudden Pressure Relay (SPR)/ Rapid Pressure Rise Relay (RPRR) for EHV PowerTransformer	Qualitrol, Noida/ VIAT Instruments Pvt. Ltd.	See Note (2)
(xxiii)	HV Porcelain Bushings upto 36kV Class for EHV Power Transformer	Yash High Voltage, Vadodara/ CJI Porcelain Pvt Ltd, Khurja/Bikaner Porcelain Pvt. Ltd. Bikaner/Samrakshana Electricals Hyderabad/Jaipur Glass Potteries, Jaipur/Baroda Bushing & Insulators, Vadodara	
(xxiv)	RTCC Panel for EHV Power Transformers	Transformer Manufacturers (OEMs)/ Pradeep Sales & Services, Mumbai	
(xxv)	Marshalling Box (Cooling Control	Transformer Manufacturers (OEMs)/ Pradeep Sales & Services, Mumbai	

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<u>Sr. No.</u>	<u>Item Description</u>	<u>Vendor's Name</u>	<u>Remark</u>
	Cubicle)		
64	Potential Transformer (PT) (220kV)	CGL, Nashik/ ITC, Boisar/ Mehru, Bhiwadi/ Toshiba, Hyderabad	
65	Potential Transformer (PT) (132kV)	CGL, Nashik/ ITC, Boisar/ Mehru, Bhiwadi/ PragatiElectricals, Thane/ Toshiba, Hyderabad/ Vidyut Control Systems Pvt. Ltd., Secunderabad	
66	Potential Transformer (PT) (33kV)	CGL, Nashik/ ITC, Boisar/ Mehru, Bhiwadi/ Pragati Electricals, Thane/ Toshiba, Hyderabad/ Vidyut Control Systems Pvt. Ltd., Secunderabad	
67	Relay Panels with Bay Controller and SCADA (400kV)	ABB, Bengaluru/ Alstom, Chennai/ CG-ZIV/ GE, Bengaluru/ NR Energy, Panvel/ Schneider/ Siemens, Mumbai/ Sifang Automation India Pvt. Ltd., Bangalore	
68	Relay Panels with Bay Controller and SCADA (220kV)	ABB, Bengaluru/ Alstom, Chennai/ CG-ZIV/ CTR, Nashik (with ROCON, Bulgaria)/ GE, Bengaluru/NR Energy, Panvel/ Schneider/ Siemens, Mumbai/ Sifang Automation India Pvt. Ltd., Bangalore	
69	Relay Panels with Bay Controller and SCADA (132kV)	ABB, Bengaluru/ Alstom, Chennai/ CG-ZIV/ CTR, Nashik (with ROCON, Bulgaria)/ GE, Bengaluru/NR Energy, Panvel/ Schneider/ Siemens, Mumbai/ Sifang Automation India Pvt. Ltd., Bangalore	
70	Relay Panels with Bay Controller and SCADA (33kV)	ABB, Bengaluru/ Alstom, Chennai/ CG-ZIV/ CTR, Nashik (with ROCON, Bulgaria)/ GE, Bengaluru/NR Energy, Panvel/ Schneider/ Siemens, Mumbai/ Sifang Automation India Pvt. Ltd., Bangalore	
71	SCADA system for remote monitoring of consumer/ IPP substation	ABB/ Alstom/ Ashida/ CGL/ Chemtrols/ GE, Bengaluru/Goenka Switchgear Pvt. Ltd., Nagpur/NR Energy, Panvel/ Kalkitech/ Schneider/ Siemens/ Synergy	
72	Station Transformer:		
	(i) 500KVA for 33kV & 22kV Class	Esennar, Hyderabad/ Star-Delta, Bhopal/ T&R, Ahmedabad/ Telawne, Navi Mumbai/ Tesla, Bhopal/ Vijai Electricals, Hyderabad	
	(ii) 200KVA for 33kV & 22kV Class	Esennar, Hyderabad/ Kanohar Electricals, Meerut/ Star-Delta, Bhopal/ T&R, Ahmedabad/ Telawne, Navi Mumbai/ Tesla, Bhopal/ Trans Fab, Pune/ Vijai Electricals, Hyderabad	
73	Transformer Oil (Uninhibited, Naphtha Base)	Apar Industries Ltd., Silvassa/ Raj Petro, Mumbai/ Savita Oil Technologies Ltd., Mumbai	
74	Transformer Oil (Paraffin base)	Anamica Oil Pvt. Ltd./ Apar Industries Ltd., Silvassa/ Columbia Petrochem Pvt. Ltd., Mumbai/ Gandhar Oil Refinery India Ltd., Mumbai/ Raj Petrospecialities Ltd., Silvassa/ Savita Oil Technologies Ltd., Mumbai	

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