

satyendrasingh

From: Pranab Halder <phalder@bhel.in>
Sent: 21 September 2021 11:30
To: 'satyendrasingh'
Cc: 'a mittal'; 'Abhishek Kr Sharma-HEP'; s.meena@bhel.in; Santanu Dutta; mr64@bhel.in; abhijit; 'Shri Akshay Dave-HEP'; skmahajan@bhel.in
Subject: FW: Request for approval of QAP for 315 MVA Spare GT for MTPS DVC

We have received trailing mail from DVC MTPS against our mail dated 13.09.2021 with request to arrange approval of QAP available in NIT for further initiation of manufacturing activities. DVC MTPS has confirmed in trailing mail that the QAP submitted by us is same as QAP approved by DVC during tendering stage and it is attached in NIT. Hence fresh approval of QAP is not required at this stage.

This for kind information and take n/a at your end for further manufacturing activities.
Regards,

P.Halder
DGM
BHEL ROD Kolkata

From: SANTOSHKUMAR T [mailto:santhosh.kumar@dvc.gov.in]
Sent: 20 September 2021 12:43
To: phalder@bhel.in
Subject: Re: Request for approval of QAP for 315 MVA Spare GT for MTPS DVC

dear sir,
The QAP submitted by BHEL is same as QAP approved by DVC during tendering stage and that was attached in NIT. Hence fresh approval of QAP is not required at this stage

Regards


santhosh kumar T

From: phalder@bhel.in
To: "SANTOSHKUMAR T" <santhosh.kumar@dvc.gov.in>
Cc: "JAGDISH PRASAD SINGH" <jagdish.singh@dvc.gov.in>, abhijit@bhel.in, mr64@bhel.in, "TANMAY DHARA" <tanmay.dhara@dvc.gov.in>, "DEBSUNDAR KAR" <debsundar.kar@dvc.gov.in>
Sent: Monday, September 13, 2021 10:39:01 AM
Subject: RE: Request for approval of QAP for 315 MVA Spare GT for MTPS DVC

Dear Sir,

This has reference to the telephonic discussion self-had with you on 10.09.2021 regarding approval of QAP for 315 MVA spare GT for MTPS DVC. As per discussion please find enclosed herewith sealed and signed copy of QAP (available in NIT of DVC MTPS) for 315 MVA Generator transformer. Please refer QAP provided in NIT at page no. 79 to 87 attached above is in line with our proposal and acceptable to BHEL.

It is requested to arrange approval of QAP available in NIT for further initiation of manufacturing activities.
Regards,

DVC/Tender/Head Quarter/ SWS 2/CMM/Supply/00001	DAMODAR VALLEY CORPORATION	MQP
	Design, manufacture, testing at manufacturers works, packing, delivery on FOR destination of 315 MVA, 240 KV/16.5 KV generator transformer main tank for DVC MTPS.	
MANUFACTURING QUALITY PLAN (MQP)		

STANDARD MANUFACTURING QUALITY PLAN (MQP)

QAP FOR : 315 MVA GENERATOR TRANSFORMER

PROJECT: Mejia TPS

Page 1 of 8

Cl. No.	Component/Operation	Characteristics	Clas	Type of Check	Quantum of check	Reference doc/Acceptance norms	Form at of record	Agency			Remarks
								M	C	N	
1	TRANSFORMER TANK AND CONSERVATOR (DURING FABRICATION):										
1.1	Raw material (Steel Plates)	a)Chemical Composition, Mechanical properties, Dimensional Check	M	T,M	Sample/Melt/lot	BHEL Drawing & AA10108/AA10119/IS2062	TC	P	V	V	
1.2	Welding requirement	a)Use of BHEL's Qualified Welders & WPS and PQR	M	RR	100%	WPS based on ASME Sec. IX	TC	P	V	V	
		b)Welding electrodes type	M	RR	100%	WPS based on ASME Sec. II	TC	P	V	V	
1.3	Weld Quality	a)Visual and Dimensional checks of weld joints	M	V	100%	BHEL spec/Drg.	TC	P	V	V	
		b) UT/RT for Butt-Joint on bottom tank	M	T	100%	BHEL spec/Drg.	TC	P	V	V	
		c) Rim flatness of tank	M	M	100%	BHEL Drg.		P	V	V	
1.4	NDT on tank	a) DP test on load bearing members (Jacking pads, Bollard, Haulage lugs) and leakage joints	M	T	100%	BHEL spec/Drg.	TC	P	V	V	
1.5	Final Inspection	a)Visual & Final Dimension	M	M	100%	BHEL /Drg.		P	V	V	
1.6	Leakage test on tank	a)Leakage test (leak proofness at normal pressure plus 35 kpa for tank (for 1 hr minimum) and measurement of permanent deflection of tank	M	T	100%	MTI	TC	P	V	W	CHP
1.7	Leakage test on conservator	a)Leakage test (leak proofness at normal pressure plus 35 kpa for tank (for 1 hr minimum) and measurement of permanent deflection of tank	M	T	100%	MTI	TC	P	V	V	
1.8	Vacuum Test on Tank	a) Vacuum test (vacuum withstand at an internal pressure of 25 torr max. for 1 hr and deflection measurement	M	T	100%	BHEL Spec. TR30007T	TC	P	V	W	CHP
1.9	Surface cleaning & Painting inside and	a) Shot blasting,	M	V	100%	TR10257P/TR10005P	TC	P	V	V	

Category of responsibility: P - Perform, V - Verify, W - Witness, M = manufacturer / sub-contractor, C = contractor/nominated agency, N = customer

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NIT No. DVC/Tender/Head Quarter/SWS 2/CMM/Supply/00001

STANDARD MANUFACTURING QUALITY PLAN (MQP)

QAP FOR : 315 MVA GENERATOR TRANSFORMER

PROJECT: Mejia TPS

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Cl. No.	Component/ Operation	Characteristics	Cl a s s	Type of Check	Quantu m of check	Reference doc/Acceptance norms	Form at of recor d	Agency				Remarks
								M	C	N		
4.3	VITON/ NITRILE GASKET (Stock Item)	Dimension, Hardness, Tensile strength, Compression set, Ageing in Oil (Type test on Nitrile Gasket)	M	M,T	1 sample/l ot	AA59808/AA59807	TC	P	V	V		
4.4	TRANSFORMER OIL (for direct dispatch to site from vendor's works)	a)Appearance, Density at 20 °C, Interfacial tension at 25°C, Kinematic Viscosity at 27 °C, Flash point, Water Content, Pour Point, Dielectric Dissipation factor at 90°C (tan delta), Neutralization value, Total acidity, In-organic acidity/alkalinity, Corrosive Sulphur, Oxidation Stability, Neutralization value after oxidation, Total Sludge after oxidation (by weight) b)Electric Strength (BDV) (i)-As received-unfiltered (ii)-After Filtration c) Resistivity (i)-At 90 deg.C (ii)-At 27 deg.C	M	V,T	Sample as per IS 6855	IS 335 /IEC 296/BS 148/AA27101	TC	P	V	W		CHP (Direct supply from refinery)
							TC	P	V	W		CHP
							TC	P	V	W		CHP
5	<u>WINDING OF COIL</u>											
5.1	Raw material -Coil (CTC/PICC) (Stock Item)	Dimensions & tolerances (Bare & Insulated), Resistivity, Elongation /Tensile Strength, Proof Stress, Break down Voltage, Insulation Test b/n strands for bunched conductors, Copper Purity of CC rod, Oxygen content of CC rod, Flexibility & adherence of enamel covering (only for CTC and Glued CTC)(where applicable)	M	M,T	One Sample/ Lot/Thic kness	BHEL Drawings & AA28125/AA28128 / TRE 078/ TRE 151 and AA 28129/AA 28127/TRE 078/ AA12024/ TRE036	TC	P	V	V		
5.2	Insulated paper used for PICC/CTC (Stock Item)	a)Dimensions, Density & substance, Tensile Strength, Water Absorption, Moisture Content, pH Value, Ash Content, Electrical Strength, Air Permeability, Tear Index	M	M,T	One Sample/ Lot/Thic	BHEL Drgs. & AA21111/AA21116	TC					

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STANDARD MANUFACTURING QUALITY PLAN (MQP)

QAP FOR : 315 MVA GENERATOR TRANSFORMER

PROJECT: Mejia TPS

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5.3	Winding of Coil	a) Brazing procedure & Brazer qualification	M	RR	100%	BP0631199 / ASME Sec IX BP0631199	TC	P	V	V	
		b) Brazed joints- visual check	M	V	100%			P	V	V	
		e) Leads & coil identification/markings, Megger test between strands of bunched conductors, Continuity test b/n conductors	M	V	100%	BHEL Drg	TC	P	V	V	
6	<u>CORE AND WINDING ASSEMBLY</u>										
		a) Visual check for correctness of complete assembly including Terminal gear connections, Smooth operation of OCTC, Electrical clearances on HV & LV Side	M	V	100%	BHEL Drg	TC	P	V	V	
		b) Ratio resistance, magnetic, balance and magnetising current tests	M	T	100%	TR10129I	TC	P	V	V	
		c) ISOLATION test at 2 KV for one minute between i) Core & Yoke Bolts, ii) Core & Clamps, iii) Core Clamps & Yoke Bolts.	M	T	100%	TR10129I	TC	P	V	V	
7 7.1	<u>TRANSFORMER TREATMENT PROCESS</u>										
		a) Drying, oil impregnation soaking - 1st process	M	M,T	100%	BHEL Spec TR 10266P	TC	P	V	V	
		b) Servicing (visual inspection of active part, tightening of all joints, clamping, bracing, etc)					TC	P	V	V	
		c) Drying, oil impregnation- 2nd process					TC	P	V	V	
7 7.1 7.2	<u>FITTINGS AND ACCESSORIES</u>										
	OLTC / OCTC	Routine tests:- Mechanical tests, Sequence tests, Auxiliary circuits insulation test, Pressure and vacuum tests	M	T	100%	BHEL SPECIS- 8488/IEC600214-1 Approved OGA/Drg.		P	V	W	CHP
	OIP Condenser Bushing	Rating and Creepage distance	M	V,M	100%			P	V	V	

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STANDARD MANUFACTURING QUALITY PLAN (MQP)

QAP FOR : 315 MVA GENERATOR TRANSFORMER

PROJECT: Mejia TPS

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								M	C	N	
7.3	Buccholtz Relay (Stock Item)	Routine tests: Measurement of tan delta and capacitance at ambient Temperature, Measurement of partial discharge quantity, Dry power frequency voltage withstand test ,Tests on the test tap insulation, Tightness test for internal leakage Type, Size & Make	M	T	100%	IEC 60137 / IS: 2099 / IS: 12676/Approved OGA/Drg	TC	P	V	W	CHP
						IS:3637 / TR20053B	TC	P	V	V	
7.4	Bushing (Stock Item)	Routine test:- Porosity test, HV and IR test, Dielectric test at 2 kV for 1 minute, Elements test, Loss of oil and surge test, Gas volume test Routine test	M	T	100%	IS:3637 / TR20053B/TR1017 3B	TC	P	V	V	
7.5	WTI/OTI (Local & Remote) (Stock Item)	a) Calibration test, HV test at 2 kV for one minute.	M	T	100%	IS 2705/ IEC 44 - 1 TR10123T	TC	P	V	W	CHP
		b) Accuracy test for indication and switch setting scales, Test for adjustability of switch setting, Test for switch rating.	M	T	1 instrume nt/lot or batch	TR10123T	TC	P	V	V	
7.6	Pressure relief valve (Stock Item)	a) Visual & dimensional check, Leakage test at 75% of operating pressure for 1hr.	M	V,M, T	100%	TR20001 V	TC	P	V	V	
		b) Indication flag operation and switch operation, Dielectric test at 2 kV for one minute, Switch contact testing at 5 A 240V AC.	M	T	100%	TR20001 V	TC	P	V	V	
7.7	Air Cell (Flexible Separator) (Stock Item)	a) Routine test on basic fabric, oil side coating compound, air side under coating compound, air side outer coating compound & coated fabric	M	T	100%	TR 20038 A/ TR 10150 A/ BHEL PO	TC	P	V	V	

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STANDARD MANUFACTURING QUALITY PLAN (MQP)

QAP FOR : 315 MVA GENERATOR TRANSFORMER

PROJECT: Mejia TPS

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								M	C	N	
7.8	MOLG (Stock Item)	b) Surface finish of completed air cell & dimension check	M	T,M	100%	TR 20041 O	TC	P	V	V	
		c) Routine test -Ten times inflation & deflation at 10 K pa & pressure test at 10 K pa for 24 hrs.	M	T	100%		TC	P	V	V	
		B) Type test - Oil side coating air side under coating, air side outer coating & coated fabric.	M	T	1per type		TC	P	V	V	
		Visual & Dimensional check, Calibration check for ¼ 350 C ¾ & full level on gauge, switch operation & 2 KV test for 1 minute between terminals to earth	M	V,M, T	100%		TC	P	V	V	
7.9	Oil Level Indicators (Stock Item)	Test for oil levels, Switch operation for low level alarm, Switch contact test at 5A 240V AC, Dielectric test at 2 kV for 1 minute.	M	T	100%	TR 20068 I	TC	P	V	V	
7.10	Silica gel Breather (Stock Item)	a)Visual check, dimensions,	M	V,M	100%	TR 20040B	TC	P	V	V	
		b)Pressure Test	M	T	100%		TC	P	V	V	
7.11	Oil Pumps and Motor Set (Stock Item)	Cold resistance and IR measurement , Motor efficiency at full load, No load voltage, current, power input, frequency and speed, Locked-rotor readings of voltage, current and power input, Water pressure test for pump casing at 5 kg/cm2 for 10 minutes at ambient temperature, Transformer oil pressure test for the pump set assembly at 2 kg/cm2 for 30 minutes at 80 C, Measurement of head, discharge, current, power input to motor and overall efficiency of the pump set at rated Voltage, GA & Name plate verifications	M	T	100%	TR10023P	TC	P	V	V	
7.12	Cooling Fans and Motor assembly (Stock Item)	Type and Make, IR measurement and HV test at 2 KV for 1 Min, Operation check, Appearance, construction and dimensional check	M	V,T	100%	TR20029F	TC	P	V	V	

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7.13	Radiator/Cooler	Air pressure testing of radiators	M	T	100%	TR10086R		P	V	V	
		Painting adhesion, DFT, Shade and Visual check	M	M	100%	TR10005P/Cust. Spec	TC	P	V	V	
7.14	Marshalling Box	a)Degree of protection (type test)	M	T	1 Per Type	IS2147	TC	P	V	V	
		b)HV test at 2 KV for 1 Min,	M	T	100%	TR10079 I	TC	P	V	V	
		c)Functional test of electrical control operation, interlocks and sequence of operation, Verification of Wiring	M	T	100%	As per applicable scheme	TC	P	V	V	
		d)Mechanical operation of Equip/Switches, Contractor etc	M	T	100%	TR 10079 I	TC	P	V	V	
		e)Painting of inside and outside surfaces (DFT, Shade)	M	T	100%	TR 10005 P	TC	P	V	V	
7.15	Pressure Gauge (Stock Item)	Dimensions, Accuracy check (calibration)	M	T	100%	TR 20007 P	TC	P	V	V	
7.16	Valves - Valves- Gunmetal/ CI (Gate/ Globe) Butterfly (Stock Item)	Dimensional check, Type, Size & Make, Leakage Test (Hydraulic test for Body and Seat)	M	V,M	100%	TR 20036 V/ TR 20037 V/ TR 20034 V/ TR 20020 V	TC	P	V	V	
7.17	Terminal Connector (Stock Item)	Dimensional check, Surface Finish, Acceptance tests	M	V,M, T	100%	IS 5561/ BHEL Drgs	TC	P	V	V	
7.18	Roller Assembly (Stock Item)	Dimensions, Mechanical properties, Chemical Properties	M	V,T	1 sample/l ot	BHEL Drawings & TR 20005R	TC	P	V	V	

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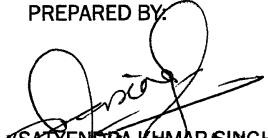
<p align="center">NIT No. DVC/Tender/Head Quarter/SWS 2/CMM/Supply/00001</p> <p align="center">STANDARD MANUFACTURING QUALITY PLAN (MQP)</p> <p>QAP FOR : 315 MVA GENERATOR TRANSFORMER</p> <p>PROJECT: Mejia TPS</p> <p>Page 8 of 8</p>											
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8	FINAL TESTS										
8.1	Routine tests	Routine tests as per customer approved tests schedule.	M	V,M,T	100%	CITS	TC	P	V	W	CHP
8.2	Type tests	Type tests as per customer contractual requirement.	M	V,M,T	100%	CITS or sub- mission of type test Record of Equivalent Job	TC	P	V	W	CHP
9	PRE-SHIPMENT CHECKS	a) Nitrogen gas tightness check	B	T	100%	BHEL Drg./Std.	TC	P	V	V	
		b) Check on completeness of TRFR for shipping, Appearance, Mounting of Nitrogen gas regulator & Regularization of pressure and mounting of impact recorder	B	T	100%	BHEL Drg./Std.	TC				


NOTES:-

1. BHEL BPL WILL SUBMIT DETAILS OF TESTS WHICH ARE 'WITNESS' & 'CHP' CATEGORY AS PER TECHNICAL SPECIFICATION AND CUSTOMER INSPECTION TEST SCHEDULE FOR CUSTOMER.
2. IN CASE OF DIFFERENCE BETWEEN BHEL DOCUMENT (SPEC., STD, DRG) & CONTRACT SPEC. OF THE CUSTOMER, THE LATER SHALL BE BINDING CONSIDERING DEVIATIONS MUTUALLY AGREED BETWEEN BHEL & CUSTOMER
3. THE LATEST REVISION / EDITION / AMENDMENT OF BHEL SPECIFICATIONS, STANDARDS & BHEL DRAWINGS AND NATIONAL / INTERNATIONAL STANDARDS SHALL BE FOLLOWED.
4. THE ITEMS APPEARING IN THIS QA PLAN BUT NOT APPLICABLE TO THE SPECIFIC DESIGN / CONTRACT MAY BE CONSIDERED AS OMITTED.


PREPARED BY:


(SATENDRA KUMAR SINGH)
 DY. ENGINEER/QA-TCB
 गुणक आश्वासन / Quality Assurance -TCB
 बी.एच.ई.एल., भोपाल / BHEL, BHOPAL

REVIEWED BY:



(ASHISH MOHAN TELGOTE)
 SR. ENGINEER / QA-TCB
अभिषेक कुमार शर्मा / Abhishek Kumar Sharma
प्रबंधक/Manager
गुणक आश्वासन टीसीबी/Quality Assurance -TCB
बी.एच.ई.एल., भोपाल/BHEL, Bhopal

APPROVED BY:


(MTK-SHARMA)
AGM (QTR & QIX)
संतोष मीणा / SANTOSH MEENA
अपर महाप्रबंधक / Addl. General Manager
गुणक निबंधन-टी सी बी / Quality Control-TCB
बी.एच.ई.एल., भोपाल / BHEL, BHOPAL


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	<p align="center">BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL STANDARD VENDOR LIST FOR TRANSFORMER</p> <p>VL FOR: 1) 1 X 315 MVA, 240 KV/16.5 KV GENERATOR TRANSFORMER CUSTOMER: M/S DAMODAR VALLEY CORPORATION PROJECT: DAMODAR VALLEY CORPORATION SPARE GT BHEL QAP NO: QA/TCB/24/1507 Rev 00 Dated: 24/06/2021 WORK ORDER NO: 60212A 509 01 DTD. 15.03.2021</p> <p align="right">Page 1 of 2</p>	
SL. NO.	ITEM	VENDOR NAME AND PLACE

1	OIL IMPREGNATED PORCELEIN CONDENSOR BUSHING (OIP)	M/S BHEL, BHOPAL M/S GE T&D INDIA LIMITED, HOSUR M/S GRID SOLUTIONS, A GE AND ALSTOM JOINT VENTURE, ITALY M/S ABB AB COMPONENTS, SWEDEN M/S CG POWER & INDUSTRIAL SOLUTIONS LTD, NASHIK M/S TRENCH HIGH VOLTAGE PRODUCTS LTD., SHENYANG, CHINA
2	PORCELAIN INSULATOR	M/S CJI PORCELAIN PVT. LTD., KHURJA (UP TO 33KV) M/S KHYATI CERAMICS, MAHAL (UP TO 33KV) M/S BHEL ELECTRO-PORCELAIN DIVN: BANGALORE (33 KV AND ABOVE)
3	MARSHALLING BOX / CONTROL CABINET	M/S ASHOKA ELECTRONICS, BHOPAL M/S BHOPAL SWITCHGEARS PVT. LTD., BHOPAL M/S ENTERPRISING ENGINEERS, BHOPAL M/S MIKA ENGINEERS MUMBAI M/S PURNIMA ELECTRICAL INDUSTRIES, BHOPAL M/S R.S.I. SWITCH GEAR PVT LTD., ALWAR (RAJASTHAN) M/S TENCO SYSTEMS & SWITCH GEARS PVT.LTD., INDORE M/S PYROTECH ELECTRONICS PVT. LTD. (UNIT-IV), UDAIPUR
4	OIL PUMP	M/S FLOW OIL PUMPS PVT. LTD., BANGALORE M/S NXL FLOW INSTRUMENTS, BANGALORE M/S SPP PUMPS LIMITED, UK
5	BUCHLOZ RELAY	M/S P&B WEIR ELECTRICAL, UNIT 10, UK M/S SUKRUT ELECTRIC CO.PVT.LTD., PUNE M/S VIAT INSTRUMENTS PVT. LTD., KOLKATA M/S VIAT INSTRUMENTS PRIVATE LIMITED UNIT- II , AHMEDABAD
6	OIL FLOW INDICATOR	M/S SUKRUT UDYOG, PUNE M/S VIAT INSTRUMENTS PRIVATE LIMITED UNIT- II, AHMEDABAD
7	PRESSURE RELIEF VALVE	M/S MESSKO GMBH, GERMANY M/S QUALITROL COMPANY LLC, USA M/S RAJSHI ENGINEERS, JHANSI M/S SUKRUT UDYOG, PUNE M/S VIAT INSTRUMENTS PVT. LTD., KOLKATA M/S VIAT INSTRUMENTS PRIVATE LIMITED UNIT- II, AHMEDABAD
8	MOG	M/S PRESS-N-FORGE, MUMBAI M/S SUKRUT UDYOG, PUNE M/S VIAT INSTRUMENTS PRIVATE LIMITED UNIT- II, AHMEDABAD M/S YOGYA ENTERPRISES, JHANSI M/S MESSKO GMBH, GERMANY M/S QUALITROL COMPANY LLC, USA
9	PRESSURE GUAGE	M/S H. GURUINSTRUMENTS (P) LTD., KOLKATA M/S LORD ELECTRIC CO., BHOPAL M/S MANOMETER(INDIA) PVT.LTD, MUMBAI M/S MICRO PROCESS CONTROLS, GUJARAT M/S NEW SCIENTIFIC REPAIRS TRADING CO, CALCUTTA M/S PROFESSIONALS MKT. SERVICES, Bhopal M/S PRESSURE & TEMPERATURE CONTROL, CALCUTTA
10	OTI/WTI/RTD	M/S PRECIMEASURE CONTROLS (PVT.) LTD., BANGALORE M/S PERFECT CONTROL, CHENNAI
11	COOLING FAN & MOTOR ASSLY	M/S EPC ELECTRICAL PVT.LTD., KOLKATA M/S MARATHON ELECTRIC MOTORS(INDIA)LTD, KOLKATA
12	SILICA GEL BREATHER	M/S PRESS-N-FORGE, MUMBAI M/S SUKRUT ELECTRIC CO.PVT.LTD., PUNE M/S YOGYA ENTERPRISES, JHANSI

Signature

	BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL STANDARD VENDOR LIST FOR TRANSFORMER VL FOR: 1) 1 X 315 MVA, 240 KV/16.5 KV GENERATOR TRANSFORMER CUSTOMER: M/S DAMODAR VALLEY CORPORATION PROJECT: DAMODAR VALLEY CORPORATION SPARE GT BHEL QAP NO: QA/TCB/24/1507 Rev 00 Dated: 24/06/2021 WORK ORDER NO: 60212A 509 01 DTD. 15.03.2021	
SL. NO.	ITEM	VENDOR NAME AND PLACE
13	GATE AND GLOBE VALVE	M/S APEX PIPING SYSTEMS PVT LTD., JALANDHAR M/S LEVCON VALVES PVT.LTD., CALCUTTA M/S LEADER VALVES LIMITED, JALANDHAR M/S MANIXON INDUSTRIAL CORPORATION, AGRA (U.P)
14	BUTTER FLY VALVE	M/S APEX PIPING SYSTEMS PVT LTD., PUNJAB M/S EAPEN JOSEPH & CO., KERALA M/S PRECISION ENGINEERING CORPORATION, KERALA M/S VIAT INSTRUMENTS PVT. LTD., KOLKATA M/S VIAT INSTRUMENTS PRIVATE LIMITED UNIT- II, AHMEDABAD
15	GAS COLLECTING DEVICE	M/S SUKRUT UDYOG, PUNE M/S YOGYA ENTERPRISES, JHANSI M/S VIAT INSTRUMENTS PRIVATE LIMITED UNIT- II, AHMEDABAD

Notes:

- 1) BHEL reserves its right to manufacture of its own any of the above items instead of outsourcing it to vendors approved by customer.
- 2) For BOIs/Raw-material/Components including fittings and accessories and measuring equipment's not covered in customer approved vendor list will be sourced from regular BHEL approved PMD (Product material Directory) vendors.
- 3) Above referred list is of BHEL registered vendor as on date. The list is tentative list & covers items, which may or may not be applicable for the subject equipment.

PREPARED BY:

SATYENDRA KUMAR SINGH
DY. ENGINEER/QA-TCB

REVIEWED BY:

ABHISHEK KUMAR SHARMA
MANAGER / QA-TCB

The vendor list is found in order. Submitted to SE(E), SWS U#1-b for approval.

[Signature]
12.08.21

SE(E), SWS U#1-b

Approved

[Signature]
12/8/21

अभिषेक अभयन्ता (विद्युत)
Superintending Engineer (Elect.)
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