TECHNICAL SPECIFICATION

MAKERS' LIST

(UPDATED ON JAN'2020)

(SUB-STATION)

CHIEF ENGINEER (ENGINEERING)

WEST BENGAL STATE ELECTRICITY TRANSMISSION COMPANY LIMITED

(A)

MAKERS'LISTOF GISFOR SUBSTATION

Note :

1. This Makers List for GIS is valid till further notification.

Sl.No.	Name of Equipment with makers
1	**420 KV GIS**
a)	*M/s ABB India Ltd. (Model No. ELK 3)*
b)	*M/s Siemens Ltd. (Model No. 8DQ1)*
c)	*M/s GE T&D India Ltd. (Model No. T 155)*
d)	*M/s HYOSUNG T&D India Ltd. (Model No. HSG426C)*
e)	*M/s TOSHIBA T&D Systems India Ltd. (Model No. G1D-b)*
2	**245 KV GIS**
a)	*M/s ABB India Ltd. (Model No. ELK 14)*
b)	*M/s Siemens Ltd. (Model No. 8DN9)*
c)	*M/s GE T&D India Ltd. (Model No. B 105)*
d)	*M/s HYOSUNG T&D India Ltd. (Model No. HSG305B)*
e)	*M/s TOSHIBA T&D Systems India Ltd. (Model No. G1B-b)*
3	**145 KV GIS**
a)	*M/s ABB India Ltd. (Model No. ELK 04)*
b)	*M/s Siemens Ltd. (Model No. 8DN8)*
c)	*M/s GE T&D India Ltd. (Model No. F 35)*
d)	*M/s HYOSUNG T&D India Ltd. (Model No. HSG144D)*
e)	*M/s TOSHIBA T&D Systems India Ltd. (Model No. G3A-b)*

(B)

MAKERS'LISTOF EQUIPMENTANDMATERIALSFOR SUBSTATION

Note :

1. Equipment and Accessories shall be Type tested within 5 Years from the date of NIT, manufactured and supplied as per relevant technical specification and subsequent amendment/clarification, if any.
2. For items not covered in the following list, suppliers approved by PGCIL during last five years shall be considered subject to fulfillment of Technical Specification requirement and relevant Standards, and approval by WBSETCL.

Sl.No.	Name of Equipment with makers
1	**400 KV SF6 Breaker**
a)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
b)	M/s ABB India Ltd. (Formerly known as M/s Asea Brown Boveri Ltd.)
c)	M/s Siemens Ltd.
d)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
2	**245 KV & 145 KV SF6 Breaker**
a)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
b)	M/s ABB India Ltd. (Formerly known as M/s Asea Brown Boveri Ltd.)
c)	M/s Siemens Ltd.
d)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
3 (i)	**36 KV SF6 Breaker**
a)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
b)	M/s ABB India Ltd. (Formerly known as M/s Asea Brown Boveri Ltd.)
3 (ii)	**36 KV Vacuum Circuit Breaker**
a)	M/s Siemens Ltd.
b)	M/s ABB India Ltd.
c)	M/s Schneider Electric
d)	M/s Stelmec Ltd. (for 36 KV Outdoor VCB only)
e)	M/s Toshiba T&D Systems (India) (for 36 KV Outdoor VCB only)
f)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
4	**400 KV HCB & Pantograph Isolator**
a)	M/s Siemens Ltd.
b)	M/s ABB India Ltd. (only HCB)
c)	M/s Switchgear & Structural Ind. Pvt. Ltd., Hyderabad
d)	M/s GR Power (only HCB)
5	**245 KV Isolator**
a)	M/s Siemens Ltd.
b)	M/s ABB India Ltd.
c)	M/s Switchgear & Structural Ind. Pvt. Ltd., Hyderabad
d)	M/s GR Power
6	**145 KV HCB & DB Isolator**
a)	M/s Siemens
b)	M/s ABB India Ltd.
c)	M/s Switchgear & Structural Ind. Pvt. Ltd., Hyderabad
d)	M/s GR Power

e)	M/s. Electrolities (Power) Pvt. Ltd.
f)	M/s G Nandy & Co
g)	M/s P R Engineering Works
h)	M/S JDE Switchgear Pvt. Ltd. (only DB type) (Provisional)
7	**36 KV Isolator**
a)	M/s G Nandy & Co
b)	M/s GK Electricals
c)	M/s Switchgear & Structural Ind. Pvt. Ltd., Hyderabad
d)	M/s Bharat Electrical Industries
e)	M/s Siemens
f)	M/s GR Power
g)	M/s. Electrolities (Power) Pvt. Ltd.
h	M/s P R Engineering Works
i)	M/s JDE Switchgear Pvt. Ltd. (Formerly known as M/s JD Electricals Ltd.)
8	**C&R Panels**
a)	M/s Siemens Ltd.
b)	M/s ABB India Ltd. (Formerly known as M/s Asea Brown Boveri Ltd.)
c)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
d)	M/s Easun Reyrolle Ltd.
e)	M/s ZIV Automation India Limited.
f)	M/s Schneider Electric Infrastructure Ltd.
g)	M/s System Control & Automation Pvt. Ltd.
h)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
9	**Main Protective Relays (Numerical)**
a)	M/s Siemens Ltd.
b)	M/s ABB India Ltd. (Formerly known as M/s Asea Brown Boveri Ltd.), (Peenya)
c)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
d)	M/s ZIV Automation India Limited.
e)	M/s Easun Reyrolle Ltd.
f)	M/s Schneider Electric Infrastructure Ltd.
g)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
10	**Auxiliary Relays**
a)	M/s Siemens Ltd.
b)	M/s ABB India Ltd. (Formerly known as M/s Asea Brown Boveri Ltd.), (Peenya)
c)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
d)	M/s Easun Reyrolle Ltd.
e)	M/s ZIV Automation India Limited
f)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
11	**PLCC Equipment**
i)	**Line Trap**
a)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
b)	M/s BPL
c)	M/s Quality Power Electrical Equipments Pvt. Ltd.
ii)	**Coupling Capacitor & CVT**
a)	M/s ABB India Ltd. (Formerly known as M/s Asea Brown Boveri Ltd.)
b)	M/s Bharat Heavy Electrical Ltd.
c)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)

d)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
e)	M/s Siemens Ltd.
iii)	**PLC Terminals**
a)	M/s ZIV Automation India Limited.
b)	M/s ABB India Ltd. (Formerly known as M/s Asea Brown Boveri Ltd.)
c)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
d)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
iv)	**EPAX**
a)	M/s BPL
b)	M/s Matrix Telecom Pvt. Ltd., Vadodora
c)	M/s Siemens Ltd.
12	**CT (400 KV & 220 KV – Oil Type)**
a)	M/s ABB India Ltd. (Formerly known as M/s Asea Brown Boveri Ltd.)
b)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
c)	M/s Bharat Heavy Electrical Ltd.
d)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
e)	M/s TELK
f)	M/S Mehru Electrical & Mechanical Engineers(P) Ltd.(up to 220KV)
g)	M/s Toshiba T & D India Ltd. (up to 220 KV)
13	**CT (132 KV – Oil Type)**
a)	M/s ABB India Ltd. (Formerly known as M/s Asea Brown Boveri Ltd.)
b)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
c)	M/s Bharat Heavy Electrical Ltd.
d)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
e)	M/s TELK
f)	M/s Indian Transformer Co. Ltd.
g)	M/s Vidyut Control System (Pvt.) Ltd.
h	M/S Mehru Electrical & Mechanical Engineers(P)
i)	M/s Toshiba T & D India Ltd.
j)	M/S Pragati Electricals Pvt. Ltd.
14	**PT (220 KV& 132 KV)**
a)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
b)	M/s Bharat Heavy Electrical Ltd.
c)	M/s TELK
d)	M/s Indian Transformer Co. Ltd. (for 132 KV only)
e)	M/s Vidyut Control System (Pvt.) Ltd.(for 132 KV only)
f)	M/S Mehru Electrical & Mechanical Engineers(P)
g)	M/s Toshiba T & D India Ltd.
h)	M/S Pragati Electricals Pvt.Ltd. (upto 132 KV)
15	**33 KV CT & 33 KV PT**
a)	M/s S.G Electricals
b)	M/s Laxmi Engineering
c)	M/s Indian Transformer Company Ltd.
d)	M/s Pragati Electrical Pvt. Ltd.

e)	M/s Vidyut Control System (Pvt.) Ltd.
f)	M/s. Modern Electronic
g)	M/s. Adhunik Yantra Udyog Pvt. Ltd.
h)	M/S Mehru Electrical & Mechanical Engineers(P)
16	**1500 KVA, 630KVA & 315 KVA Station Service Transformer & 33 KV Earthing Transformer**
a)	M/s ABB Ltd.
b)	M/s. Kanohar Ltd.
c)	M/s Eastern Transformer & Equipment
d)	M/S Marsons Ltd.
e)	M/s Raychem RPG Ltd.
f)	M/S Kotia Transformers Pvt. Ltd. (Provisional)
	New entry in 2019
g)	M/S TBEA Energy (India) Ltd (New for Station Service Transformer)
17	**Lightning Arrestor**
a)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
b)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
c)	M/s. Elpro Ltd.
d)	M/s. Oblum Ltd.
e)	M/S Lamco Ltd.
18	**ACDB ,DCDB**
a)	M/s. Control and Switchgear
b)	M/s. Maktel System
c)	M/s. Electro Allied Product
d)	M/s. Unilec Engineers Ltd.
e)	M/s. Vikas Engg. Associates
f)	M/s L&T
g)	M/s Siemens Ltd.
h)	M/s Schneider Electric
i)	M/s. Bose Corporation
j)	M/s Dekem Engineering (P) Ltd.
k)	M/s Control Devices
l)	M/s RNG Associates
m)	M/S PCE Projects Pvt Ltd
	New entry in 2019
n)	M/S Aim Engineering Industries. (Shed no. D/4, Behala Industrial Estate, 620, Diamond Harbour Road, Kol-700034, Ph-03323971883,24071028
19	**Battery**
a)	M/s. Exide
b)	M/s Amara Raja
c)	M/s HBL Power System Ltd.
20	**Battery Charger :**
a)	M/s Caldyne
b)	M/s Statcon
c)	M/s. Dekem Engineering (P) Ltd.
d)	M/s S M Creative Electronics
e)	M/S Power Electronics Engineers
	New entry in 2019
f)	M/S Amara Raja Power System Ltd
21	**Post Insulator**
a)	M/s. Aditya Birla Insulators Ltd.
b)	M/s. Modern Insulator

c)	M/s. Saravana Insulator
d)	M/s. WSI
e)	M/s. IEC
22	**Disc Insulator**
a)	M/s. Aditya Birla Insulators Ltd.
b)	M/s. BHEL
c)	M/s. IEC
23	**Aluminium Pipe Bus**
a)	M/s. Hindalco
b)	M/s. Century Extrusion.
c)	M/s. Balco
d)	M/s Sudal Industries Ltd.
e)	M/s Alom Extrusions Ltd.
24	**ACSR Conductor**
a)	M/s. Apar Industries
b)	M/s. Saravathi Conductor
c)	M/s. Sterlite Industries
d)	M/s. Smita Conductor
e)	M/s Cabcon India Pvt. Ltd.
f)	M/s Mehra Electric Co.
g)	M/s. Lumino Industries Ltd.
h)	M/s Shashi Cables. Ltd.
i)	M/s Gupta Power Infrastructure Ltd.
j)	M/S Hindustan Urban Infrastructure Ltd.
k)	M/S JSK Industries Pvt. Ltd.
l)	M/S Anvil Cables Pvt Ltd., Kolkata, CIN no. U25199WB2001PTC92922, Tel:03330586222/6336
m)	M/S Prateek Wires Pvt Ltd., Kolkata, CIN no.U31300WB1991PTC052378, Tel: 03366224848
25	**400 KV Clamps, Connectors and Bundle Spacer.**
a)	M/s. IAC
b)	M/s Klemmen
c)	M/s Megha
d)	M/s. Rashtraudhyog Ltd.
e)	M/s. Electromech &Transtech
f)	M/s Premier Power Product (Kolkata) Pvt. Ltd.
g)	M/S Supreme & Company Pvt Ltd., Howrah, CIN no.U24116WB1978PTC031466,Tel:0332651670105
26	**Clamps Connector and Bundle Spacer (220 KV, 132 KV & 33 KV)**
a)	M/s. Electromech &Transtech
b)	M/s. IAC
c)	M/s. Rashtraudhyog Ltd.
d)	M/s Industrial Spare Product
e)	M/S Supreme & Company Pvt Ltd., Howrah, CIN no.U24116WB1978PTC031466, Tel:0332651670105
f)	M/s D.N Industrial Equipments (27/F, Lansdowne Place, kol-700029, Ph-03324753498)
27	**Hardwares Fittings upto 400 KV**
a)	M/s. IAC
b)	M/s. EMI
c)	M/s Tag Corporation, Chennai
d)	M/s Tyco Electronics, Bangalore
e)	M/s. Rashtraudhyog Ltd.
f)	M/s EMC Limited

g)	M/s. Electromech &Transtech
h)	M/s Mosderfer India Pvt.Ltd.
i)	M/s. Asbesco India Pvt.ltd.
j)	M/s Transmission Line products Ltd
k)	M/S Karamtara Engineering Pvt. Ltd.
l)	M/S Krsna Transmission Hardware Mfg. Pvt. Ltd. (Provisional)
m)	M/S Supreme & Company Pvt Ltd., Howrah, CIN no.U24116WB1978PTC031466, Tel:0332651670105
28	**Hardwares Fittings (220 KV, 132 KV & 33 KV)**
a)	M/s. Electromech &Transtech
b)	M/s. IAC
c)	M/s. DN Industries
d)	M/s. EMI
e)	M/s. Rashtraudhyog Ltd.
f)	M/s Tag Corporation, Chennai
g)	M/s Tyco Electronics, Bangalore
h)	M/s Industrial Spare Product
i)	M/s KSE Electricals Ltd.
j)	M/S Supreme & Company Pvt Ltd., Howrah, CIN no.U24116WB1978PTC031466, Tel:0332651670105
29	**1.1KV Power Cable**
a)	M/s. KEI
b)	M/s. VIKAS Cable Co.
c)	M/s. Polycab Wires Pvt. Ltd.
d)	M/s GEMSCAB
e)	M/s Gloster, Hyderabad
f)	M/s Cable Corporation of India
g)	M/s Torrent
h	M/s Crystal Cable
ij)	M/s. Laser Cables Pvt. Ltd.
j)	M/S Insucon Cables & Cond. (P) Ltd.
k)	M/S Gupta Power Infrastructure Ltd.
l)	M/S Paramount Communications Ltd.
	New entry in 2019
m)	M/S Zenium Cables Ltd
30	**Control Cable**
a)	M/s. KEI
b)	M/s. VIKAS Cable Co.
c)	M/s. Polycab Wires Pvt. Ltd.
d)	M/s GEMSCAB
e)	M/s Gloster, Hyderabad
f)	M/s Cable Corporation of India
g)	M/s Torrent
h	M/s. Laser Cables Pvt. Ltd.
i)	M/s Crystal Cable
j)	M/S Insucon Cables & Cond. (P) Ltd.
k)	M/S Gupta Power Infrastructure Ltd.
	New entry in 2019
l)	M/S Zenium Cables Ltd
31	**Sub Station Lighting Equipment**
a)	M/s. Philips

b)	M/s. Bajaj
c)	M/s. CGL
d)	M/s Havells
32	**Air Conditioning System (Split type)**
a)	M/s. Carrier Aircon
b)	M/s. Blue Star
c)	M/s. Amtrex – Hitachi
d)	M/s Voltas
33	**Bay Marshalling Kiosk, Junction Box, Marshalling Box,**
a)	M/s. Maktel
b)	M/s. Electro Allied Products
c)	M/s. Vikas Engg. Associates
d)	M/s. Bose Corporation
e)	M/s Control & Switchgear
f)	M/s Control devices
g)	M/s Unilec Engineers Ltd.
h)	M/s RNG Associates
i)	M/s Aim Engineering Industries. (Shed no. D/4, Behala Industrial Estate, 620, Diamond Harbour Road, Kol-700034, Ph-03323971883,24071028
j)	M/s G. Deco (41/2/3, Serpentine Lane, Kol-700014, Ph-0332278667/9836343731)
34	**400 KV 80 / 63 / 50 MVAR Shunt Reactor**
a)	M/s Bharat Heavy Electricals Limited
b)	M/s CG Power & Industrial Solution Limited. (Formerly known as M/S Crompton Greaves Ltd.)
c)	M/s ABB Limited
d)	M/s GE T&D India Ltd. (Formerly known as M/s Alstom T&D Ltd.)
e)	M/s Siemens Ltd.
f)	M/S TBEA Energy (India) Pvt. Ltd.
35	**132 KV Indoor dry type termination**
a)	M/s Raychem RPG
b)	M/s Nexan
c)	M/s NKT
d)	M/s. Brugg Cables, Switzerland.
e)	M/S 3M Electro & Communication India Pvt. Ltd.
f)	M/S Pfisterer Ixcosil Ltd. (Provisional)
g)	M/S G&W Electric Company, New Delhi-110017, Tel: 01141459264/240
36	**220 KV Indoor dry type termination**
a)	M/s Raychem RPG
b)	M/s Nexan
c)	M/s. Brugg Cables, Switzerland.
d)	M/S Pfisterer Ixcosil Ltd. (Provisional)
e)	M/S G&W Electric Company, New Delhi-110017, Tel: 01141459264/240
37	**132 KV / 220 KV outdoor oil type termination**
a)	M/s Raychem RPG
b)	M/s Nexan
c)	M/s NKT
d)	M/s ABB Kabeldon
e)	M/s G&W
f)	M/S Pfisterer Ixcosil Ltd.
g)	M/s. Brugg Cables, Switzerland.
h)	M/S 3M Electro & Communication India Pvt. Ltd. (for 132 KV only)
38	**132 KV outdoor dry type termination for composite tower**
a)	M/s Raychem RPG
b)	M/s NKT
c)	M/s G & W
d)	M/S Pfisterer Ixcosil Ltd. (Provisional)