

# NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE APPROVED METER LIST

Rev. 2/19/2025

***DUNCAN/LANDIS + GYR/SIEMENS***

TYPE	CLASS	VOLTS	WIRE	TESTING		APPROVAL	
				APPROVED	ENTITY	SUBMITTED	REVIEW
FOCUS/Focus ALF	10,20,100						
FOCUS E130	200,320,480	120/240 120/240	3 3	03-16-05	L+G	05-4-04	
FOCUS/Hunt ERT	10,20,100	120/240/277	3-4				
	200,320,480	120/240/277 120/240/277	3-4 3-4	10-19-05 07-15-10	L+GN' GRID	09-13-05 11-9-	
09							
FOCUS AX and SD	10,20,100,200						
FOCUS AX/METRUM CARD	FOCUS E330, E350	10320,20,100,200		120-320		3-4	04-16-13 09-
01-17	CNTRL N' GRID HUD	02-23-13 10-25-16					
		120-480	3-4				

FOCUS Axe	10,20,100,200	240	3	10/19/17	MET LAB	8/31/17
FOCUS AXe/RXReL+G S4x	100,200,320	10,20,100,200		<sup>120</sup> 120/240/480	<sup>3</sup> 2-3	12-18-1708-04-59
MET LAB L.I.L.	09-28-60	10-14-60	8/31/17			
MKS	200	120/240/480	2-3	12-28-60	Con-Ed	L.I.L.
MH-IS MQAT-MQST		120/240	2-3	(No Test)		
MQA-MQS	60 10	240/480	3	12-28-60		
MQA-MQS	100	120/240/480	3			
	100	120/240	4			
MQA-MQS						
	200	240	4			
ML2S	100	120	3			
ML2 1/2 S	100	240	3			
ML2S-delta						
MR-IS	100	120/480	3-4	03-11-60	Con-Ed	
MS	60	240	3	03-11-60		
MT	200	240	3	03-11-60		
MSII	10,20,100,200	120/240	3	01-15-63	Con-Ed	
MS-2SE	200	120/277	4	05-05-70	L.I.L.	
MT-12SE	320	120	3	07-31-73	N.M.P.	04-18-73
MT-16SE	320	120/240/277	3-4	03-06-79	L.I.L.	01-16-79
MTNS12S	320 20		2	03-09-82	L.I.L.	06-01-81
SSM				03-09-82	L.I.L.	06-01-81
SSM-II				09-22-83	N.M.P.	02-04-83

## WATTHOUR METERS

MX-2S				12-13-83	Con-Ed	06-15-83
S4				09-20-89	N.M.P.	05-15-89
S4e	Solid State Watthour Meter			10-19-93	L.I.L	
S4/S4e	200	240		03-01-95	RG&E	04-27-94
E650	Solid State Watthour Meter			01-13-97	NMP	08-08-96
				09-27-10		06-02-04
	Solid State Watthour Meter firmware upgrades				N'Grid	09-13-10
	Metrum Communication Module				N'Grid	

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	Altimus	120/208	3	08-03-99	Con-Ed	05-17-99
2410 MAXsys 2510	20 20 2, AL	120/240/277/480	3-4	06-01-01	NMPC	02-09-01
MAXsys 2510	MAXsys10	120/240/277/480	3-4	06-01-01	NMPC	02-09-01
Elite S4x 9S S4x	2,10,20	120/240/277/480	3-4	04-07-05	NMPC	03-13-05
12S, 12SE S4x 16SE	20 200,	120/240/277/480	3-4	06-23-08	L+G	5-30-08
S4x 45S	320 320	120-277 120-277	3-4	12-14-17	L+G L+G	8-31-16
Axe/RXRe kwh/Dmd 1S	320	120-277	3-4	12-14-17	L+G	8-31-17
	100	120-480	3-4	12-14-17	L+G	8-31-17
MAXsysElectronic Meter-Network		120	3-4	12-14-17	L+G	8-31-17
		120, 240	3	12-14-17 12-	L+G	8-31-17 8-31-
		240	3	14-17	L+G	17
Axe/RXRe kwh/Dmd 2S,12/25S - 200		120, 240	3	12-14-17 12-	L+G	8-31-17 8-31-
Axe/RXRe kwh/Dmd 2SE 320		120,240,120/208	2-3	14-17	NatGrid	17
			2-3	10-14-22		3-24-22
Revelo E360 1.2	100,200,320					8-22-23
		120-480	2-4	6-12-24	National Grid	
		120,240,120/208	2-3	10-24-24	NatGrid	

Nexus 1260/1262 20  
1270/1272

### **Electro Industries**

Axe/RXRe kwh/Dmd 3S,4S 20	120-480	3-4	11/25/03	Electro Ind.	8/11/03	NMPC-LOI
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Revelo E360 100,200,320

Revelo E660 w/ Ferrites 20,200,320

# WATTHOUR METERS

**GENERAL ELECTRIC**

TYPE	CLASS	VOLTS	WIRE	TESTING		APPROVAL	
				APPROVED	ENTITY	SUBMITTED	REVIEW
DS-63 Swbd	10	120/240	3				
DS-65 Swbd	10	120/240 240	4				
DS-66 Swbd	10	120/240/480	4				
DS-67 EV@	10		3	01-07-75	CHG&E		
EV	electronic Polyphase Meter with 08/26/93			05-08-91	N.M.P.	11-30-90	
M-90E for demand							
	extension of EV line to include			10-08-93	N.M.P.		
EV-7, 3 element form 17S, self-contained, and 9S, transformer rated for 120/240v delta services							
EV2	extension of EV line to include			10-08-93	N.M.P.		
Class 3 transformer rated and Class 320 self-contained							
Electronic Single Phase and Polyphase							
EV/ES				08-22-92	N.M.P.	08/26/93	
Meter for watthour and Varhours with Phase 3 Registers:							
KM-901 - Demand							
KTC-901 - Demand, T.O.U.							

KRC-901 - Demand, T.O.U., Load Profile

I63-S	60	208	3	04-28-60	Con-Ed		
I-60S Modified	200	240	3	01-15-63	N.M.P.	12-26-62	
I-70A	200	240	3	10-13-88	LILCO	10-03-88	
I-70S+	200	240	3	03-26-68	N.M.P.		03-10-00
I-70 S/2+	200 320 10 all	240 240	3	12-04-73	N.M.P.		03-10-00
I-70S	20,100,200,320	120/240	3	03-09-82	L.I.L.		06-01-81
I-70S	200	120/240	2/3	08-11-82	N.M.P.		
IR-70	20,100,200,320	120/240	3	10-14-86	NYSEG		04-07-86
I-210	20,100,200,320	240	3	2/9/05	GE		10-19-04
I-210 Hunt Airpoint		120/240	3	1/5/11	GE		12-15-10
I-210+ (C) (N)		120/240	3	6/18/08	GE		12-17-08
I-210+ (C) (N)			3	5/11/09	Con Ed/GE	4/27/09	5/5/09
I-210/Itron 52ESS	<b>Modified current sensor on transformer rated meters only.</b>						
	3		6/18/09	CenHud	6/4/09	6/15/09	

**+Modified current coil on self contained meters only.**

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**GENERAL ELECTRIC**

<b>TYPE</b>	<b>CLASS</b>	<b>VOLTS</b>	<b>WIRE</b>	<b>APPROVED</b>	<b>TESTING ENTITY</b>	<b>APPROVAL SUBMITTED</b>	<b>REVIEW</b>
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## WATTHOUR METERS

KM-901	Enhanced application for KQh/KQ,			10-08-93	N.M.P.		
KTC-901	varhour calibration check LED, HV4						
KRC-901	form C and A output option board						
V-61-S	and communications option board						
	60	120		02-14-61	Con-Ed		
V-611S	60	120		05-26-64	Con-Ed		
V-612S+	100	120		05-11-66	N.M.P. Con-		
V-612S+	200	120		09-15-70	Ed N.M.P.		08-27-93
V-62+	100	120/240/480	3	04-12-60	N.M.P.		08-27-93
V-62+	200	120/240/480	3	04-12-60	N.M.P.	04-20-64	08-27-93
V-63#	10	120/240	3	04-12-60	N.M.P.	04-14-66	08-27-93
V-63+	100	120/240	3	04-12-60	N.M.P.	02-17-70	07-08-91
V-63+	200	120/240	3	04-12-60	N.M.P.		08-27-93
V-63-2A#	10-20	120/240	3	01-21-69	N.M.P.		08-27-93
V-63#	20	120/480	3 3	03-12-74	N.M.P.		07-08-91
V-64*	10	120/240	3	03-19-65	N.M.P.		07-08-91
V-64*	20	120/240	3	03-19-65	03- N.M.P.		08-27-90
V-64+	100	120/240	3	19-65	N.M.P.	11-13-68	08-27-90
V-64+	200	120/240	4	03-19-65			08-27-93
V-64-2A*	10-20	120/240	4	01-21-69			08-27-93
V-64*	17	120/240	4 4	Not approved-modified			08-27-90
			4	to class 20 capability			08-27-90
V-64*	20	120/240	4	08-31-79	RG&E		08-27-90
V-65-2A#	10-20	120/240	4	01-21-69	N.M.P.	11-13-68	08-27-90
V-65#	10	120/240	4				07-08-91
V-65+	100	120/240	4	04-12-60	N.M.P.		07-08-91
V-65+	200	120/240	4	04-12-60	N.M.P.	11-13-68	08-27-93
							08-27-93

**+Modified current coil on self contained meters only.**

**#Replacement with Metal Oxide Varistor surge protection.**

**\*Addition of a tertiary winding on the voltage coil.**



# WATTHOUR METERS

## GENERAL ELECTRIC

TYPE	CLASS	VOLTS	WIRE	APPROVED	TESTING ENTITY	APPROVAL SUBMITTED	REVIEW
V-65#	20						07-08-91
V-65S+ Modified	200	120/240	4Y	03-12-74	N.M.P.		08-27-93
V-66#	10	120/240	4		N.M.P.	08-15-80	07-08-91
V-66+	100	240 240	4		N.M.P.		08-27-93
V-66#	20	240 240	4	04-12-60	N.M.P.		07-08-91
V-66S+ Modified	200	240	4D	03-12-74	N.M.P.		08-27-93
V-66S- A+	200	240	4	09-27-60	N.M.P.	08-15-80	08-27-93
			4		(No Test)	05-19-60	07-08-91
V-67#	10	120-480		03-19-65	N.M.P.		01-29-98
KV@	20, 200, 320	120/240	4	08-07-97	N.M.P.		
kVs (Single-Phase)	200	120-480	3-4	09-20-99	N.M.P.	02-04-97	
kVe (Energy Only)	20, 200, 320	120-480	3	09-20-99	N.M.P.		CHGE-LOI
kV2	20, 200, 320	120-480	3-4	11/22/01	GE	08-09-01	CHGE-LOI
kV2c (Encompass)	20, 200, 320	120-480	3-4	11/25/03	GE	08/12/03	5/5/09
kV2c Silver Spring	20, 200, 320		3-4	5/11/09	Con Ed/GE	04/27/09	
kV2c Silver Spring 311, 314 -25S			3-4	6/17/11	GE	11/20/11	
Enhanced Power Supply kV2c							
Trilliant module	20, 200, 300	120-480	3-4	6/30/14	Con Ed	1/2014	
Cell Reader CRDR-1010							
<b>Aclara</b>							
I-210+c/Silver	20,100,200,320	120-480	2-4	1/26/2017	Aclara	4/2016	10/2016
Spring 511 Commercial/Residential							Con Ed
kV2c/Silver	20, 200, 320	120-480	3-4	2/16/2017	Aclara	12/2016	
Spring 511							
kV2c/Metrum 4G	20, 200, 320 kV2c/	120-480	3-4	5/30/2017	Aclara	4/2017	
Synergize RF	20, 200, 320	120-480	3-4	9/10/2018	Aclara	1/2018	

TYPE	CLASS	VOLTS	WIRE	APPROVED	TESTING	APPROVAL	REVIEW
					ENTITY	SUBMITTED Aclara	
I-210+/Synergize	200	240	3	2-4-19	10-16-2018		
I-210+c with FW 6.0 NIC upgraded and renamed "Prion 2"	100,200,320	120,240	2-3	1-22-20	Aclara	07-17-2019	19-E-0508
I-210+c with FW 6.1 w/ enhanced magnetic tamper detection <b>*approval based on similarity to I-210+c with FW</b>	100,200,320	120,240	2-3	5-28-21	Con Ed	1-20-2021	
<b>6.0</b> I-210+cn kv2c GEN 5							
with Itron NIC 511 Prion 2	20, 200, 320	120-480	3-4	3-22-21	Aclara	05-19-2020	
*kv2c GEN 5 without Itron NIC 511 Prion 2 <b>*approval based on similarity to kv2c GEN 5 with Itron NIC 511 Prion 2</b>	20, 200, 320	120-480	3-4	12-01-21	Central Hudson		20-E-0239
kv2c GEN 5 LTE <b>*approval based on similarity to kv2c GEN 5 with Itron NIC 511 Prion 2</b>	20, 200, 320	120-480	3-4	3-27-24 with Metrum Cellular	National Grid		
kv2c GEN 5 Point to Multipoint (P2MP) communications module <b>*approval based on similarity to kv2c GEN 5 with Itron NIC 511 Prion 2</b>	20, 200, 320	120-480	3-4	12-12-24 with Aclara RF	National Grid		20-E-0239
							20-E-0239
<b>INVENSYS</b>					INVENSYS	06/09/03	
iCon iS01,iSA1	200	240,120/208	3	09/17/03	iNO1,iNA1		
<b>POWER MEASUREMENT</b>					POWER MEASUREMENT	08/15/02	NG- LOI
ION 8300,8400,8500	20	57-277	4	12/18/02			
	2, 20	120-480	4	10/12/05			
ION 8600 Modified	2,10,20	120-480	4		POWER MEASUREMENT	9/10/05	
		120-480			POWER	02/10/05	eBid-LOI

Modified

MEASUREMENT

+ Modified current coil on self contained meters only.

# Replacement with Metal Oxide Varistor surge protection. \* Addition of a tertiary winding on the voltage coil.

@ Includes A-base Configuration

**SCHNEIDER ELECTRIC**

ION 8650	2,10,20	120-480	4	4/19/12	Schneider	10/20/12
					Electric	

**PROCESS SYSTEMS**

Quad 4 Plus	20	69-277	4	04-17-96	NYSEG	07-13-95
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**SANGAMO/SCHLUMBERGER**

<b>TYPE REVIEW</b>	<b>CLASS</b>	<b>VOLTS</b>	<b>WIRE</b>	<b>TESTING</b>		<b>APPROVAL</b>
				<b>APPROVED</b>	<b>ENTITY</b>	<b>SUBMITTED</b>
P2	60	120/240/480	3	05-24-60	RG&E	04-27-60
P2	100	120/240/480	3			
P2	200	120/240/480	3			
P2P	10	120/240/480	3			
P2P	100	120/240/480	3			
P2P	200	120/240/480	3			
P2 Delta	10	240 240 240	4			
P2 Delta	100	120/240	4			
P2 Delta	200	120/240	4			
P2 Wye	10	120/240	4			
P2 Wye	100	120/240/480	4			
P2 Wye	200		4			
P20S-P20A	100	120/240/480	3	12-13-60	RG&E	11-18-60
		120/240/480			(No Test)	
P20SP-P20AP	100	120/240/480	3			
P20S-P20A	200	120/240/480	3			
P20SP-P20AP	200	240	3			

P20SP-P20AP	10			3			
P20S-P20A Delta	100			4			
P20S-P20A Delta	200 10 10	240	240	4			
P20S-P20A Delta	100 200	120/240		4			
P20S-P20A Wye	10,100 10	120/240		4			
P20S-P20A Wye	10,100,200	120/240 120		4			
P20S-P20A Wye	10,100,200	240		4			
J3S-J3A J3S-J3A	10,100,200	240		2	12-28-60	RG&E	11-16-60
J3S-J3A J3S-J3A	100,200	480		2			
J3F-Switchboard		120/240/480		3			
J3V-Two Rate		240		2			
2-3							
2-3							

***SANGAMO/SCHLUMBERGER/Itron***

<b>TYPE REVIEW</b>	<b>CLASS</b>	<b>VOLTS</b>	<b>WIRE</b>	<b>APPROVED</b>	<b>TESTING</b>	<b>APPROVAL</b>
					<b>ENTITY</b>	<b>SUBMITTED</b>
P20S	60	120 120	3	06-13-62	Con-Ed	
JNS-1	60	120	3	07-17-62	Con-Ed	
P20S Urban	100	120/240	3	06-09-66	Con-Ed	04-04-66
Ed Transmitter and				07-16-68	Con-Ed	
Transformer				07-16-68	Con-Ed	

ED Receiver	12						
J4S	200	240	3	06-02-7103-14-72	N.M.P.RG&E		
S2S, S2A	100,200		3	03-14-72	RG&E		
S3S, S3A	10,20,100,200		3	03-14-72	RG&E		
S11S	60		3	03-14-72	RG&E		
S12S	100/200 Urban		3	03-14-72	RG&E		
S5S, S5A	10,20,100,200		4 Wye	03-14-72	RG&E		
S6S, S6A	10,20,100,200		4 Delta	03-14-72	RG&E		
S4S, S4A	10,20,100,200		4 Wye	05-18-84	RG&E		
S5 (changed)	2.5 Stator		4 Wye	03-14-72	RG&E	05-03-84	
S3F	10		3	03-14-72	RG&E		
S5F	10		4 Wye	03-14-72	RG&E		
S6F	10		4 Wye	03-14-72	RG&E		
S4F	10		4 Wye		O & R		
J11S Network	60	120	3		O & R	03-29-77	
J12S Network	100	120	3		O & R	03-29-77	
J12S2 Network							
100							
J4SMT		120	3	02-17-93	O & R	10-23-93	
	200		3				
		240		09-24-80			

J5S	100,200	240	3	09-05-85	NMP	NMP12-06-82	06-10-98
J5S1	200 200	240	3	03-12-93	NMP L.I.L.	01-21-93	
J5S2		240	3	03-12-93	NMP NYSEG	01-21-93	
SL				03-28-89	L.I.L.	11-29-88	
FULCRUM	Multi-Function Solid State Watt-hour Meter			08-29-95	L.I.L.	08-01-94	
VECTRON	Multi-Function Solid State Watt-hour Meter			04-17-96	RG&E	07-13-95	
QUANTUM	Multi-Function Solid State Watt-hour Meter			05-17-96	Con-Ed	06-06-95	
VECTRON SVX*	Solid State Meter		3	09-04-97	RGE	02-20-97	
CENTRON (C1S)	20,100,200,320 120/240		3	05-26-00	Itron Inc		
CENTRON (C12/25S)	20,100,200,320 120/208		3	02-01-01	Itron Inc		
CENTRON (C1S)	20,100,200,320 120/240		2/3	08-30-02	Itron Inc.		
CENTRON (C1SR)	20,100,200,320 120/208/240		2/3	05-17-05	Itron Inc.	04-29-02	11-
CENTRON (C1BR)	20,100,200,320 120/208/240		3	11/21/07	Itron Inc.	03-29-05	
CENTRON (C1SR6) (Legacy) FM1S, 2S, 3S, 4S	120/240		3	12/22/15	Itron Inc.	09-07	
CENTRON (C1S6) (Legacy) FM1S, 2S, 3S, 4S	120/240		3	12/22/15	Itron Inc.	07-24-15	
CENTRON (CN1S6) (Legacy) FM12S, 25S	120/240		3/4	12/22/15	ITRON Inc.	07-24-15	07-
CENTRON (CN1SR6) (Legacy) FM12S, 25S	120/240		3	12/22/15	ITRON Inc.	07-24-15	
CENTRON (C1SR6 & CN1SR6) FM1S, 2S, 3S, 12S	120/240 RF Chip			01/27/17		24-15	
CENTRON (C2SRDe, CN2SRDe) FM1S, 2S, 12S	120/240 RIVA			08/17/16		04/10/17	
CENTRON (CP2SRA) FM 9S, 16S	120/277 RIVA			06/22/17		06/22/17	
SENTINEL	Multimeasurement Electricity Meter Line			06/22/17		12/14/17	
SENTINEL	Metrum UtiliWise ECM-SC		33	11-04-02	Schlumberger	07-22-02	
SENTINEL	Trilliant CRDR -1010-SENT-c			11-20-11	Itron Inc	9/23/11	
SENTINEL	Types SS4S1L, SS4S2L, SS4S4L, SS4S1T, CENTRON		2/3	11-20-11	Itron Inc	9/23/11	
CENTRON	SS4S2T			W/ETHERNET 3-16-12	Itron Inc	2/8/12	
	POLY-PHASE Meter Line C & I platform		3				04-07-06
	(CP1S, CP1SR, C1SR, CP1ST, CP1SL)		3				12-22-15
	(CP1SR6) Form 1s, 2s, 3s, 4s, 12s		3				
*Revision 11PCB (Vectron)			3				
CENTRON - Open Way	20,100,200,320 120/208/240		3				
CENTRON Open Way HW 3.0	100, 200 120/240		3				
CENTRON - Polyphase A-based with KYZ	120/240						
CENTRON - Open Way 2.1	120/240						
CENTRON - Open Way 3.1	120/240						
CENTRON - Open Way 3.5 commercial	Auto ranging		3				
CENTRON - Knighthawk technology Form 2S	120/240		3				
CENTRON - Open Way 4G LTE CP2SOAS	120/240						
CENTRON - Open Way 4G CP2SOAS with antenna	120/240						
CENTRON #- CP2 Polyphase Meter Line	120/277						
(CP2SD, CP2ST, CP2SL, CP2SDR3, CP2STR3, CP2SLR3)							

Itron Inc.  
National Grid

RIVA - GEN 5 Residential Meter Line (R2SID,R2SI,RN2SID,RN2SI)	120/240	3	1-20-22	Itron Inc.
RIVA - GEN 5 Polyphase Commercial Meter Line (RP3SIA)	120-480	3	5-12-22	Itron Inc.
CENTRON #- OpenWay CENTRON Polyphase CP3SOAS LTE-M	120/277	3	8-3-23	National Grid

# Approved on the basis of similarity

Schweitzer SEL-735

**SCHWIEITZER ENGINEERING**

	300	3	9/25/19	Schweitzer
APX Stratus IQ	20, 200 20, 200, 320			
				<b>SENSUS</b>
	120/240/277/480	4	06-20-07	N' GRID
	120/240	2-3	11-23-22	Sensus
			Case #21-E-0200	
				11-21-06 4-6-21

**WESTINGHOUSE/ABB/ELSTER**

TYPE	CLASS	VOLTS	WIRE	TESTING		APPROVAL SUBMITTED	REVIEW
				APPROVED	ENTITY		
D2A-D2S	10,100 100 200 All 10						
D2A-D2S	200						
D2S D2A &	10,100,200	120/240/480	2-3	06-14-60	Con-Ed		
D2S D2B8F	60	120/240	2-3	06-14-60			
D2S 5U	200	120/240 All	2-3	06-14-60		05-19-60	

D3S		120/240	120	3-4	4	03-26-63	Con-Ed	Long	
D3SN		120/240	Wye	02-06-68	Island	Con120	3	12-01-70	Ed Con-Ed
D4S		120/240		2-3		03-26-63	Con-Ed		02-26-63
				3	06-27-68	RG&E	05-24-68	2-3	07-16-68
D4 Polyphase D4S	All	All	120	3-4		02-06-73	RG&E		11-28-72
5U D4S	60,100,200	120/240		3		03-12-74	Con-Ed		12-11-73
Modified D4S	200 All	All		2-3		07-31-80	RG&E		07-24-80
Modified	320 200	240		3-4		03-22-83	RG&E		10-13-81
Polyphase	200	120/240		3		03-09-82	L.I.L.		06-01-81
D4S	2.5,5	240		3		06-15-83	O & R		12-14-82
D5S Single Phase	2.5,5	120		3		4/11/05	Con-Ed		03-20-88
D5S-5N	10	120		3		12-28-60	Elster		01-26-05
AB1R/D5	All	120/240/480		4		12-28-60	O & R		09-27-60
RK-2	200	All				07-18-61	NYSEG		
RK-3	200	120/240				11-05-87	2- RG&E		
CBF	20,200,320	120/240		3-4-6-8	12-20-88		O & R		07-29-87
D5	20,200,320	96 - 528		3-4		09-11-92	O & R		08-29-88
D5S/1*	20,200,320	96-528		3		06-30-95	Con-Ed		08-31-92
D5S/2	20,200,320	96-528		3		03-30-98	3-4 03-	Con-Ed	07-07-94
Alpha	20,200,320	96-528		30-98			NYSEG		02-06-98
Alpha Plus #		57-277		3-4		07-16-98	Elster		12-02-97
Alpha Plus #		120-480		3-4			POWER		
Alpha		120 480		3-4			MEASUREMENT		8-15-02
Alpha Plus modified				3-4		02-16-05			
ABB/ION 8300,8400,8500 20				4		12-18-02			
A3 Alpha #	20,200,320			3-4		02-12-03			
A3 Alpha #	(with Itron 50ESS ERT)								eBid-LOI

**REVIEW**

• Approved on the basis of similarity (elimination of an aluminum shield)  
 # Approved on the basis of similarity

ELSTER 12-9-02

*WESTINGHOUSE/ABB/ELSTER*

<b>TYPE</b>	<b>CLASS</b>	<b>VOLTS</b>	<b>WIRE</b>	<b>APPROVED</b>	<b>TESTING ENTITY</b>	<b>APPROVAL SUBMITTED</b>
REX	Electronic	120/240	3	6-20-05		
		<i>SCIENTIFIC COLUMBUS INC./ AMETEK</i>				
					Elster	12-27-05
JEM-I 6406	Electronic	DC		06-30-82 06-26-85		
					N.M.P. Con-Ed	10-16-84

202P-D	Solid State	25HZ		04-10-86	09-09-85
JEM-II	Electronic	55530VAC		04-05-88	12-01-88
JEMStar	Electronic	55-530	3-4	11-22-01	08-13-01
Ci20	Electronic	55-530	3-4	11/21/05	11-07-05
JEMStar II	Electronic			07/13/15	10-29-15

Con-Ed  
Con-Ed  
Con-Ed  
AMETEK  
AMETEK

**ROBINTON PRODUCTS**

K&L				06-13-86	02-04-86
Intellimeter	Solid State				

**TEMPO**

Con-Ed

36DD007				05-14-93	
	Electronic DC				
	Watthour Meter				

**TRANSDATA**

Mark V				10-01-96	10-01-95
	Multifunction Solid State	Watthour Meter			

Con-Ed  
N.M.P.

## CONTACT DEVICES

<b>TYPE</b>	<b>WIRE</b>	<b>DATE</b>	<b>TESTING ENTITY</b>
<b>GENERAL ELECTRIC</b>			
D-41 Impulse Generator	3 3 3 3 3	02-26-63	N.M.P.
D-51 Impulse Generator	3	02-17-70	L.I.L.
D-52 Impulse Generator	3W in, 2-3W out	07-17-73	N.M.P.
D-53 Impulse Generator		12-22-75	Con-Ed
D-72 Pulse Initiator		09-26-83	N.M.P.
D-73 Pulse Initiator		09-26-83	N.M.P.
MR-3 Isolation Relay		07-17-73	N.M.P.
<b>SANGAMO/SCHLUMBERGER</b>			
MPS Pulse Generator	3	10-19-71 01-24-	RG&E
SPI Pulse Initiator	3	80	RG&E
EPI Pulse Initiator		03-28-89	L.I.L.
<b>WESTINGHOUSE/ABB</b>			
CD-11 Photo Pulse Initiator	3	03-07-69	Con-Ed
CD-21 Photo Pulse Initiator	3		RG&E
CDI-12 Photoelectric Pulse Initiator 12 A & B	3	03-18-75	RG&E
22 AR, 22 A & B	3	03-18-75	RG&E
<b>DUNCAN/LANDIS &amp; GYR</b>			
PG-6MT, PG-6 MTL	3	07-17-73 07-17-	N.M.P.
PG-6MS, PG-6 MSL	3	73	N.M.P.
SPG-8 Electronic Pulse Generator		04-06-82	O & R
<b>PROCESS SYSTEMS, INC</b>			

Sentry 30 Isolation Relay 3  
Sentry Isolation Relays Models 30-E, 50, 70

07-14-82  
08-30-06

RG&E  
RG&E

**GENERAL ELECTRIC**

<b>TYPE</b>	<b>VOLTAGE</b>	<b>CIRCUIT</b>	<b>DATE</b>	<b>TESTING ENTITY</b>
MC-63	120/240 240/240 120/120	30-3W 30-3W 30-4W Wye	02-28-60	L.I.L.
MC-65	240/277:240/277 240/240	30-4W Wye 30-4W Delta		
MC-67				

**SUPERIOR SWITCHBOARD AND DEVICES**

1391	120/240	30-3W Delta	10-21-59	NYSE&G
1397	240 120	30-4W Delta 1415 240 30-4W Wye		
1392	120	30-4W Delta	08-01-72	NYSE&G
1395		30-4W Wye		

**PHASE-SHIFTING TRANSFORMERS**

**GENERAL ELECTRIC**

<b>TYPE</b>	<b>SCALE</b>	<b>VOLTAGE</b>	<b>DATE</b>	<b>TESTING ENTITY</b>	<b>REVIEW</b>
M-51 T-76	1, 2, and 6 TOU	120,240,480	09-01-70	N.M.P.	
TM-80	TOU, Demand		02-20-79	L.I.L.	
TM-80P	TOU		12-16-80	O & R	
TM80/1	TOU, Demand		06-09-82	N.M.P.	
TM80/P/1	TOU, Demand		01-00-85	N.M.P.	
M51/1(T)	1, 2, and 6		01-00-85	N.M.P.	
TM-81	TOU, Demand	Con-Ed Pat. Pend.	05-23-83	Con-Ed	
M-90	Demand		09-14-84	RG&E	
TMR-82	TOU, Demand, Load Profile		04-24-85 09-15-85	NYSEG	
T-90*	TOU		09-24-86 02-24-88	O & R	
TM-91	TOU, Demand			L.I.L.	
M-90-P	Demand			RG&E	
TM-91-P	TOU, Demand		07-08-88	N.M.P.	
TMR-92	TOU, Demand, Load Profile		11-14-88	N.M.P.	5/14/93
TM-900	TOU		03-28-89	O & R	
TMR-900	TOU, Demand, Load Profile		09-19-90	L.I.L.	
M-90E	Demand (EV Polyphase Meter)		06-13-91	L.I.L.	
KM-901	Demand (EV 1P & 3P watt-hours, var-hours)		05-08-91	N.M.P.	
KTC-901**	Demand, TOU (EV 1P & 3P watt-hours, varhours)		08-22-92	N.M.P.	
KRC-901**	Demand, TOU, Load Profile (EV 1P & 3P		08-22-92	N.M.P.	
M-90AE***	Watthours, varhours) Electronic demand		08-22-92	N.M.P.	
TM-900E	register for EV line T.O.U. register for EV		10-08-93	N.M.P.	06/10/94
TMR900E	line		10-08-93	N.M.P.	06/10/94
	T.O.U. recording register for EV line		10-08-93	N.M.P.	07/12/95

\* Logic board modification

\*\* Internal telephone modem

\*\*\* Programming enhancement

**REGISTERS**

**SANGAMO/SCHLUMBERGER**

<b>TYPE</b>	<b>TESTING ENTITY</b>	<b>REVIEW</b>
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	<b>SCALE</b>	<b>VOLTAGE</b>	<b>DATE</b>		
CD MCD-	1, 2, and 6	120/240	09-01-70	Con Ed	
6,7&8 ED5	Cumulative Demand		11-14-79	Con Ed	
MTR-20	Meter Dial Extension System		05-15-85	Con Ed	
MTR-30			09-24-80	O & R	
MTR-21C			09-24-80	O & R	
ST-D101			09-24-80	O & R	
ST-MT100	Demand		01-13-88	RG&E	
ST-D101R	TOU, Demand		05-23-88	RG&E	
ST-MT100R	TOU, Demand		12-06-88	RG&E	
ST-DS120	TOU, Demand		12-06-88	RG&E	03-05-90
I200	TOU, Demand, Load Profile				
T200*	Encoded Register		11-13-91	N.M.P.	03-05-90
T300*	Encoded Register		08-25-93	N.M.P.	03-05-90
R200	Encoded Register w/ Modem		08-25-93	N.M.P.	03-05-90
D200**	Itron ERT Encoder		05-17-95	Con Ed	
MT200**	Electronic Register, Demand		95	RG&E	
MTR200**	Electronic Register, TOU w/Demand		10-20-95	RG&E	12-07-95
	Electronic Register, mass memory,		10-20-95	RG&E	12-07-95
	TOU w/Demand				06/25/96
					06/25/96
					06/25/96

**WESTINGHOUSE/ABB**

Mark II	1, 2, and 6	120	05-26-64	Con-Ed	
Mark II	8	120	05-07-74	RG&E	
EMF 2110	Demand		09-06-88	Con-Ed	
EMF 2410	TOU Register		09-05-90	Con-Ed	
EMF 3410	TOU Register (single phase only)		12-03-92		01-03-90

\* Telephone Modem Interface

\*\* LCD Modification

**DUNCAN/LANDIS & GYR**

**REVIEW**

<b>TYPE</b>	<b>SCALE</b>	<b>VOLTAGE</b>	<b>DATE</b>	<b>TESTING ENTITY</b>
	1, 2, and 6 TOD Demand	120/240/277/480		
		07-17-73		
Type B	Demand		04-06-82	N.M.P.
RTD	Demand		06-26-85	O & R
PDR	TOU		01-13-88	N.M.P. Con-
PDR-J	TOU, Demand		01-27-88	Ed N.M.P.
PDR-A	TOU, Demand, Load Profile		11-14-90	L.I.L.
DT	TOU, Demand		11-14-90	L.I.L.
DC			11-14-90	N.M.P.
DCR			09-16-93	
DX				

**DOMESTIC AUTOMATION**

	Electronic Register		02-27-89	NYSEG	
SM101	Solid State Multi-Function		12-03-92	RG&E	<b>REVIEW</b>
SM-3200					

**GENERAL ELECTRIC**

<b>TYPE</b>	<b>CHANNELS</b>	<b>COUNTS</b>	<b>VOLTAGE</b>	<b>DATE</b>	<b>TESTING ENTITY</b>
	1	999/Interval	120	02-26-63	N.M.P.
	1	999/Interval	120	02-17-70	L.I.L.
PD55F	4	6000/Hour	120 18/Second 120	12-10-74	N.M.P.
PD57F	20			12-22-75	Con-Ed
PDM-70	Solid State	7200/Hour		12-22-75	Con-Ed
SST-3	2 or 4	120/240/277		09-06-88	NYSEG
PDM-75	2 or 4	7200/Hour		09-06-95	NYSEG
PDM-76	1 to 4	electronic	120/240/277		
DR-87	1 to 4	electronic	120/240/277		
DR-87/2		120/240/277			

**SANGAMO/SCHLUMBERGER**

				02-01-72	RG&E
DPR 215,230,260	2	4095/Interval	120	02-19-75	RG&E
DPR 415,430,460	4	4095/Interval		07-11-84	RG&E
SR1	2	1800/our	120/240	11-24-87	O & R

MBR-90 Solid State Recorder ST-DS 101  
 Solid State Recorder

### DEMAND RECORDERS/TOTALIZERS

ST-DS 111	Solid State Recorder		11-24-87	O & R
<b><i>FERRANTI ELECTRIC, INC.</i></b>				
CE MK II	Impulse Totalizer	120	06-16-70	Con-Ed
CE MK II	(Model R/C)			

<b>WESTINGHOUSE/ABB</b>				<b>DATE</b>	<b>REVIEW</b>
<b>TYPE</b>	<b>CHANNELS</b>	<b>COUNTS</b>	<b>VOLTAGE</b>		
				03-07-69	
				02-03-70	
WR-2	2	4000/Hour	120/240		<b>TESTING</b>
WR-4	4	4000/Hour	120/240	02-03-70	<b>ENTITY</b>
WR-2C	1	6000/Hour	120		Con-Ed
WR-4C	3	6000/Hour	120		
Dem Pulse Relay and Master and Slave Pulse Syn. Circuit for WR-2C and WR-4C				03-07-69	N.M.P.
				03-07-69	
				06-21-77	N.M.P.
W-3 Isolation Relay		3 wire in, 2-3 wire out			
	Con-Ed	22 wire in, 2-2 wire out wire in, 3 wire out			
W-2 Interval Tripping Relay Con- Ed					Con-Ed
W-4 Polarized Relay				08-17-72	Con-Ed
W-5 Power Supply 2 wire in, 3 wire out				01-06-77	O & R
WR-31	1, 2 or 4	6000/Hour	120/240/277/480		
				03-05-80	
					<b>DUNCAN/LANDIS &amp; GYR</b>
				03-03-81	Con-Ed
				08-10-82	NYSEG
BTR	2,4	6000/Hour		01-12-83	
STR	2,4	7200/Hour	120/240	06-01-85	
				05-03-88	
					<b>PROCESS SYSTEM, INC.</b>
				03-04-94	Con-Ed
Sentry 1540					Con-Ed
Sentry 1545A Demand Pulse Totalizer					Con-Ed
Sentry 100 Solid State Recorder					L.I.L. Con-
Sentry 210 Solid State Pulse Totalizer					Ed
Sentry 1545B Totalizer					Con-Ed
Sentry S1610 Totalizer					Con-Ed
S200-EXP (DSUII) Demand Recorder with on site display and Totalized output					

**TESTING**

*FAIRCHILD SPACE AND ELECTRONICS CO.*

## DEMAND RECORDERS/TOTALIZERS

TYPE	CHANNELS	COUNTS	VOLTAGE	DATE	ENTITY	REVIEW
PDSU	Solid State			12-16-80	Con-Ed	
<b><i>EMAX INCORPORATED</i></b>						
EMAX Solid State				06-30-82	NYSEG	
<b><i>ROBINTON PRODUCTS, INC.</i></b>						
LPR Solid State 4 Recorder		1500/15 min. int.	120/240	02-14-83	Con-Ed	
LPR-II Solid State Recorder				07-01-88		
<b><i>CONTROL DEVICES</i></b>						
System 10	Pulse Recording Transponder Solid State			07-24-85	RG&E	
<b><i>TELOG INSTRUMENTS</i></b>						
8506	Pulse Recording Transponder (3 Channel System 10)			09-09-87	RG&E	
<b><i>APPALACHIAN TECHNOLOGY</i></b>						
SST-2430	Electronic Totalizer			01-13-89	Con-Ed	
<b><i>DUNCAN/LANDIS &amp; GYR 2</i></b>						
DG-100	or 4 Solid State Demand Recorder			06-09-92	RG&E	10-25-89

**DOMESTIC AUTOMATION**

<b>TYPE</b>	<b>CHANNELS</b>	<b>COUNTS</b>	<b>VOLTAGE</b>	<b>DATE</b>	<b>TESTING ENTITY</b>	<b>REVIEW</b>
Linc	4		Electronic Recorder	6/9/92	RG&E	
			<b>METRETEK</b>			
SIP AC-II	2		Solid State	12/04/92	RG&E	
SIP AC-IV	4		Solid State	12/04/92	RG&E	
			<b>SUMATRON</b>			
Model 600			Solid-State Totalizing Relay	4/30/93	LILCO	
			<b>TRANSDATA</b>			
SSR-6000	12		Solid State	6/18/09	Con Ed	
			<b>ENETICS</b>			
LD1110	1S,2S, 12S, 25S		Solid State Load Monitoring Equipment	4/21/16	N' GRID	

**INSTRUMENT TRANSFORMERS****GENERAL ELECTRIC**

<b>TYPE</b>	<b>PRIMARY AMPS</b>	<b>VOLTS</b>	<b>SEC. AMP.</b>	<b>DATE</b>	<b>TESTING ENTITY</b>	<b>APPROVAL SUBMITTED</b>
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JCX-0	200, 400, 600, 800	600	5	06-29-65	L.I.L.	
JCR-0	Indoor and Outdoor	600	5	06-29-65		
JKL-3	200 and 400	5,000	5	09-27-60	L.I.L.	
JKL-4	5 to 4000	8,700	5	09-27-60	NIMO	
JKL-5	5 to 4000	15,000	5	09-27-60	NIMO	
JKM-3	5 to 4000	5,000	5	06-27-51	NIMO	
JKM-95	5 to 800	15,000	5	03-13-70	L.I.L.C.O.	
JKM-5	5 to 200	15,000	5	07-12-60	NIMO	
JKM-3C	5 to 800	8700	5	10-24-14	08- NIMO	
JKM-3C	5 TO 800	5000	5	20-03	NGRID	
JKM-4C	5 to 800	8700	5	08-20-03	08- G.E.	
JKM-5C	5 to 800	15000	5	20-03	G.E.	
JKM-4	5 to 800	8700	5	04-12-60	G.E.	
JCD-0	10 to 800	600	5	08-09-60	N.M.P.	
JCD-0	2000-3000-4000-8000	600	5	06-16-52	L.I.L.	
JKP-0	1000/2000-2000/4000	600	5	09-21-55		
JKP-0	5 to 600	15000	5	09-13-60	L.I.L.CO	
JKS-5	5 to 800				L.I.L.CO	
JCM-2	40-100-150-200-300				Con-Ed	
JCB-3	400-600-800 (Approved only where high short circuit duty required. See approval)				RG&E	
JCB-3	1200-1500-2000-3000	2500	5	12-28-60		11-13-14
JCB-4		5000	5	06-13-62	N.M.P.	12-19-03
JCB-5	4000	8700	5			12-19-03
JCB-3a*	1200-1500-2000-3000-4000	15000	5			12-19-03
JCB-3a	" " " " "	5000	5		KEG GE	06-22-60
JCB-4a*	" " " " "	5000			KEG	06-22-60
Jcb-5a*	" " " " "				KEG	06-16-52
JCD-3	" " " " "	8700		02-9-04	N.M.P.	09-21-55
JCD-4	1000 " " " "	15000	5	06-07-10		06-20-60
JCD-5						
JCM-3	"	5000	5	02-9-04		11-11-60
JCM-4	" " " " "					
JCM-5	"	8700	5	02-9-04		05-17-62
	" " " " "					
	"	15000	5	06-13-62		
	" " " " "					02-12-04
	" " " " "	5000	5			06-08-10
	"					02-12-04
	"	8700	5			02-12-04
	" " " " "					05-17-62

"		15000	5
"	" " " "		
"	" " " "		5
"	" " " "		5

				<b>SEC .</b>			
<b>TYPE</b>	<b>PRIMARY AMPS</b>	<b>VOLTS</b>	<b>AMP .</b>	<b>DATE</b>	<b>TESTING ENTITY</b>	<b>APPROVAL SUBMITTED</b>	
JCB-3a	600/1200	5kv	5	4/16/19	Cricket Energy	4/18/19	
JCW-3	" " " " "	5000	5				
JCW-4	" " " " "	8700	5				
JCW-5	" " " " "	15000	5				
JCW-0	200-400 10/20, 25/50, 50/100, 75/150,	600	5	02-13-63	N.M.P.	01-10-63	
KG-150	100/200, 150/300, 200/400, 300/600, 400/800, 500/1000, 600/1200, 800/1600 1000/2000 See KG-150	25kv 34.5kv 46kv 69kv	5	02-16-65	NYSEG	01-14-65	
KG-200	See KG-150						
KG-250	See KG-150						
KG-350	Extended Range						
JCT-OS	Extended Range Extended Range	600V	5	02/23/16	NYSEG	7/22/16	
JCK-OS	Extended Range	600V	5	02/23/16	NYSEG	7/22/16	
JAD-OS		600V	5	02/23/16	NYSEG	7/22/16	
JAB-OS				02/23/16		7/22/16	

			<b>SEC.</b>			<b>APPROVAL</b>
* Approved on similarity to JCB-3, JCB-4, JCB-5.	600V		5	2/17/2022	NYSEG	2/17/2022
JBW-5ER 7200/8400:120	15 kV		5	8/24/2024	Natl. Grid	8/24/2024
Model 780 200:5 (Combined CT/VT Transformer)			5	8/24/2024		8/24/2014
Model 785 50:5-1,200:5 & 2,000:5			5			
1,500:5-1600:5, 2,500:5-3,500:5						
50:5-1,200:5 & 2,000:5						
EJOF 123 Combined CT/PT High Accuracy Instrument Transformer	<b>PFIFFNER</b> 123 kV			8/24/2024		8/24/2024
	<b>ARTECHE</b>					
CRH-36 5-1200				1/21/16		12/4/14
CRF-36 5-1200	34.5kV		5	7/13/16	ARTECHE	10/29/15
CRB-17 5-1200	34.5kV		5	6/2/17	ARTECHE	1/26/18
IRH-1 50-1200	15kV		5	5/23/18	ARTECHE	3/20/19
	600v		5		ARTECHE	

**CURRENT TRANSFORMERS**

IRH-5 50-1200	600v		5	5/23/18	ARTECHE	3/20/19
IRH-7 100-4000	600v		5	5/23/18	ARTECHE	3/20/19
IRH-10 100-4000	600v 5 600v		5	5/23/18	ARTECHE	3/20/19
IRH-12 1000-6000* *Similarity				10/12/22	Con Edison	10/17/22
Case 18-E-0324	34.5kV		5			
CRF-36 200,600,1200				12/5/24	Con Edison	1/22/24
*extended range; see Case 16-E-0119					Similarity	

**GENERAL ELECTRIC**

<b>TYPE</b>	<b>PRIMARY AMPS</b>	<b>VOLTS</b>	<b>AMP.</b>	<b>DATE</b>	<b>TESTING ENTITY</b>	<b>SUBMITTED</b>
JCD-0	5000-6000 200-400-600 200-400 50/100,	600	5	08-04-70	N.M.P.	
JCM-0	75/150, 100/200 150/300, 200/400,	600	5	06-29-65	N.M.P.	
JCR-0	300/600, 400/800, 600/1200, 800/1600 See	600	5	05-29-65	N.M.P.	
KW-450	KW-450 1000/2000, 1500/3000 See KW-450	92kv	5	04-26-66	N.M.P.	03-03-66
KW-550	See KW-450	115kv	5	04-26-66	N.M.P.	03-03-66
KW-550*	See KW-450	115kV	5	08-19-03	GE	07-01-03
KW-650	800, 1000, 1200, 1500, 2000, 3000	138kv	5	04-26-66	N.M.P.	03-03-66
KW-750	4000, 1000/2000, 1500/3000, 2000/4000	161kv	5	04-26-66	N.M.P.	03-03-66
KW-900	25/50, 50/100, 75/150, 100/200,	230kv	5	04-26-66	N.M.P.	03-03-66
JAD-0	150/300, 200/400, 300/600, 400/800,	600	5	06-09-66	Con-Ed	05-16-66
JKW-150	500/1000, 600/1200, 800/1600, 1000/2000, 1500/3000 See JKW-150 See JKW-150 See JKW- 150 1200, 1500, 2000, 3000, 4000 200, 400, 500, 600, 800, 200/400,	25kv	5	06-09-66	N.M.P.	05-05-66
JKW-200	300/600, 400/800	34.5kv	5	06-09-66	N.M.P.	05-05-66
JKW-250	200, 400, 600, 800	46kv	5	06-09-66	N.M.P.	05-05-66
JKW-350	1500	69kv	5	06-09-66	N.M.P.	05-05-66
JCL-0 JAK- 0	300, 400, 500, 600, 800, 1000, 1200, 1500, 2000, 3000	600v 600v	5 5	11-14-67 06-05-69	RG&E RG&E	09-25-67 04-30-69
JCT-0	5, 10, 15, 20, 25, 50, 75, 100,	600v	5	08-20-69	N.M.P.	07-30-69
JCD-0 JAB- 0	150, 200, 300, 400, 600, 800	600v 600v	5 5	08-04-70 01-26-71	N.M.P. L.I.L.	06-30-70
JKW-110		15kv	5	07-20-71	N.M.P.	

\* Approved on similarity to KW-550 115kv 800/1600

**GENERAL ELECTRIC**

TYPE	PRIMARY AMPS	VOLTS	SEC.	AMP.	DATE	TESTING ENTITY	APPROVAL SUBMITTED
JKM-95	5 through 200	JCK-3**	5	15kv 5kV	03-12-74	N.M.P.	12-26-73
800	5 -	8.7kV	5	15kv	08-19-03	GE GE	07-08-03
JCK-4**	800	92/115kv	5	115/138kv	08-19-03	N.M.P. 04-15-75	07-08-03
JCK-5,	JCJ-5CER 10 through 800	138/161kv	5	151/196kv	N.M.P.		02-27-75
KH-450	37.5 x 75 through 300 x 600	196/230kv	5	34.5kv	09-07-78		05-01-78
KH-550	400/800 through 1000/2000	600	5	34.5kv	12-28-78	N.M.P.	
KH-650		34.5kv	5	34.5kv	03-06-87	N.M.P.	12-15-86
KH-750		600	5	15kv 15Kv	10-30-87	RG&E	07-27-87
KH-900		15Kv	5	25Kv 15Kv	Note: PSC Case #279		02-13-97
JKW-7	10/5 through 800/5	600	5	15Kv	12-04-97	NYSEG	02-13-97
JAB-0	200:5	600	5	600	1-03-96	NYSEG	02-13-97
BM	600	600	5	600	12-04-97	NYSEG	12-26-01
JKW-5, JWK-5c	10 through 1200	600	5	600	12-04-97	NYSEG	12-26-01
JKW-5A	All Ratios	600	5	600	08-19-98	Cen Hud	12-26-01
JKW-6	All Ratios	600	5	600	01-25-02	GE	03-26-02
JKW-6A	All Ratios	600	5	600	01-25-02	GE	03-26-02
JKM-5A, JCK-5c	JKM-5AC All Ratios	600	5	600	01-25-02	GE	03-26-02
JAG-0	600:5	600	5	600	04-16-02	GE	03-26-02
JAB-0C	JAB-OW 200:5 through 3000:5	600	5	600	04-16-02	GE GE	03-26-02
1200:5	JCL-0C# through 3000:5	600	5	600	04-16-02	GE	02-11-10
200:5	JCM-0C# through 400:5	600	5	600	04-16-02	GE	12-19-03
JCT-0C	JCT-OW 200:5 through 800:5	600	5	600	04-16-02	GE	
JAD-0C	JAD-OW 200:5 through 4000:5	145	120	5000	04-16-02	GE	
JAK-0C	JAK-W 200:5 through 800:5	5000			04-16-02	GE	
JCD-0C%	1500:5 through 8000:5	JCP-0C%			04-16-02	GE	
	600:5 through 4000:5				04-16-02	GE	
JCR-0C	JCR-OW 100:5 through 400:5				04-16-02	GE	
200:5	JCW-0C% through 400:5				10-14-09	GE	
					8-20-03		

3,00017-1200-14  
2400:120PT-7 to 34500:120  
\*\*Approved on similarity to the JCK-5

# Aprv'd on similarity to JAB-0, JCL-0, JCM-0, JCT-0 respectively; insulation material change; manf'd at GE Clearwater Fl  
 % Aprv'd on similarity to JAD-0, JAK-0, JCD-0, JCP-0, JCR-0, JCW-0 respectively; insulation change; manf'd in Clearwater  
 Fl \* Approved on similarity of the CTM-115, No longer manufactured

<b>GENERAL ELECTRIC</b>				<b>SUBMITTED</b>	
<b>TYPE</b>	<b>PRIMARY AMPS</b>	<b>VOLTS</b>	<b>AMP.</b>		
JV6-SUPERBUTE Outdoor Voltage T155-CT	3000 Case #23-E-0668	12 kV - 24kV 362kV	5		2/17/2021 11/9/2023
	<b>PRIMARY AMPS</b>			<b>DATE</b>	<b>TESTING ENTITY</b>
		<b>GEC ALSTHOM</b>			<b>APPROVAL SUBMITTED</b>
			<b>SEC. AMP.</b>	8/15/2022 5/20/2024	Natl. Grid GE
<b>TYPE</b>		<b>VOLTS</b>			10-18-94 10-18-94 10-18-94 01-19-99
CTM-069		69kv	5		
CTM-115		115kv	5		
CTM-138		138kv	5		
CTH-115*		115kv	5		
				<b>DATE</b>	<b>TESTING ENTITY</b>
		<b>GEC DURHAM INDUSTRIES</b>		09-11-95 09-11-95 09-11-95	L.I.L. L.I.L. L.I.L.

			<b>SEC.</b>			<b>APPROVAL</b>
				03-29-99	CEN-HUD	07/25/02
AD						07/25/02 10/16/07
ACL	300, 300, 400, 500, 600, 800, 1000, 1200, 1500					10/16/07
TAB	2000, 3000, 4000, 5000, 6000, 600/1200, 800/1600					
AB	1000/2000, 1500/3000, 2000/4000	600	5			
	800, 1000, 1200, 1500, 2000, 3000, 4000, 1000/2000, 1500/3000, 2000/4000	600	5	12/18/02	ConEd	04/25/06
	200, 300, 400, 600, 800	600	5	12/18/02	ConEd	
	100, 200, 300, 400, 600, 600, 800, 1200, 1500, 2000, 3000, 4000, 200/400, 300/600, 400/800, 1000/2000,			6/13/07	GEC Durham	
UB-R	1500/3000, 2000/4000	600	5	6/13/07	GEC Durham	

**HITACHI**

	3000-2500-2000	345kV/63kA switchgear	5	6/20/06	HVB/AE	
		<b>SCHNEIDER ELECTRIC</b>				
		765kV		9-19-07	N' Grid	7-7-07
Current/Voltage Transformer Verification		500kV Current/Voltage		9-19-07	N' Grid	7-7-07
Transformer Reclassification						
Schneider Electric ION8650						

**NXTPHASE OPTICAL TRANSFORMERS**

	69-765kV		5	06/05/04	NGRID	10/20/05
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**RITZ INSTRUMENT TRANSFORMERS**

				2-9-05	RITZ	10-5-04
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NXCT	1 to 3000	15.5kV	5	2-9-05	RITZ	10-5-04
		15.5kV	5	8-21-23	National Grid	10-5-04
		15 kV	5	2-9-05	RITZ	
		25kV	5	8-21-23	National Grid	10-5-04
GIFU 15.01	5 to 1200 A	25 kV	5	2-9-05	RITZ	10-5-04
GIFU 15.01L	A 5 to 1800 A	36kV	5	2-9-05	RITZ	10-5-05
GIFU 15-03	5 to 1200 A	48kV	5	2-9-05	RITZ	10-5-05
GIFU 25-01	5 to 1800 A	72kV	5	2-9-05	RITZ	10-5-04
GIFU 25-03	5 to 3000 A	35kV	5	2-9-05	RITZ	3-21-06
GIF 36	5 to 3000 A	123-765kV		7-19-06	7- RITZ	3-21-06
GIF 48	5 to 3000 A	72.5-765kV		19-06	RITZ	3-21-06
GIF 72	5 to 3200 A	550kV		7-19-06	RITZ	12-20-11
GIFS 36-55	Extended Current Range	36.5-550kV		5-27-11	RITZ	12-20-11
OSKF	EM Voltage Transformer	10kv		5-27-11	RITZ	12-20-11
OTCF	IM Voltage Transformer	600v	5	5-27-11	RITZ	1-9-2023
OTCF	SM Voltage Transformer	600v	5	1-13-22	Con Edison	10-5-04
OTCF	Voltage Transformer	600V	5	2-9-05	RITZ	10-5-04
DVE6/DVF6	100 to 1200		Oil	2-9-05	RITZ	2-9-05
DCAW, DCBW	100 to 1200		SF6	10-5-04	RITZ	
DCAB, DCBB	100 to 1200			8-21-23	National Grid	
DCAB*				8-21-23	National Grid	
*extended range; approved based on similarity; see Case #11-E-0303				8-21-23	National Grid	
KOTEF	72-362kV	115		8-21-23	National Grid	
KSKEF	123-765kV	115		8-21-23	National Grid	2-9-05
VEF 72.5	5.5kV to 72.5kV	69kV		10-5-04	RITZ	2-9-05
VEF 15-09	Single Pole Voltage Transformer	2400V - 14400V		10-5-04	RITZ	
VZF 15-09	Double Pole Voltage Transformer	2400V - 14400V				
VEF 36-10	Single Pole Voltage Transformer	20124V - 34500V				
VZF 36-10	Double Pole Voltage Transformer	20124V - 34500V				
VEF 15-10	5.5kV to 72.5kV	15kV				
VZF 15-10	5.5kV to 72.5kV	15kV				

VEF 15-20	5.5kV to 72.5kV	15kV 15kV	10-5-04	RITZ	2-9-05
VZF 15-20	5.5kV to 72.5kV	25kV 25kV	10-5-04	RITZ	2-9-05
VEF 25-10	5.5kV to 72.5kV	48kV 69kV	10-5-04	RITZ	2-9-05
VZF 25-10	5.5kV to 72.5kV	245kV-765kV	10-5-04	RITZ	2-9-05
VEF 48-01	5.5kV to 72.5kV	600v	10-5-04	RITZ	2-9-05
VEF 72.5	5.5kV to 72.5kV	600v	10-5-04	RITZ	2-9-05
OTEF	72.5kV to 765kV		10-5-04	RITZ	2-9-05
DCCW			5-11-11	RITZ	12-11-11
100-3000 A					
DCDW			5-11-11	RITZ	12-11-11
100-4000 A					
DCEB, DCEW			5-11-11	RITZ	12-11-11
DCCB	200-6000 A	600v	5-11-11	RITZ	12-11-11
	100-3000 A	600v			
GIFS-36-55	200,1000A	36kV	12/5/24	Con Edison	2/27/24
<b>*extended range; see Case 04-E-1159</b>				Similarity	

***SANGAMO/SCHLUMBERGER***

BH-6	200, 400, 600, 800, 200/400, 400/800		08-04-59	N.M.P.N.M.P.	02-20-61
S-6	200, 400, 600, 800		02-28-61	Con-Ed	10-05-62
WH-6	800, 1200, 1500, 2000, 3000, 1000/2000		10-23-62	Con-Ed	11-27-63
SK-6	200		01-07-6412-08-65	Con-Ed	11-05-65
S-6A	200, 400, 600		11-14-67	L.I.L.	
WH-6A	800, 1000, 1200, 1500	15kV	09-23-69	L.I.L.	08-27-69

SMC-150	10, 15, 20, 25, 30, 40, 50, 75, 100, 150, 200, 300, 400, 600, 800	5	5			
600						
B6SA,B6S	200 through 2000	600	5			
B6BA,B6B	200/400 through 400/800	600	5	12-20-74	Con-Ed	
B6M,B6P	All ratios	600	5			
R6*	100, 200	600	5	12-23-86	Con-Ed	11-19-86
R6M*		600	5	01-24-90	Con-Ed	10-16-89
R6/Santoprene	All ratios		5	11-09-10	Itron	12-02-10

\* 100:5 and 200:5 thermal rating increased from 3 to 4.

**MWB MESSWANDLER / HAEFELY TRENCH**

<b>TYPE</b>	<b>PRIMARY AMPS</b>	<b>VOLTS</b>	<b>SEC. AMP.</b>	<b>DATE</b>	<b>TESTING ENTITY</b>	<b>APPROVAL SUBMITTED</b>
SAS	115-765kv	SF6 Gas Insulated		09-18-95	N.M.P.	01-21-94

**SQUARE "D" COMPANY/HAEFELY TRENCH**

IK	All ratios			08-11-86	N.M.P.	01-24-86
IH	All ratios			08-11-86	N.M.P.	01-24-86

**KONAR**

ANB-0.72	800:5			2-22-19	Cricket	6-19-19
		Dry Type	5			

**NWL TRANSFORMERS**

31422	1200, 1600:5			09-26-86	Con-Ed	06-25-86
31426	2400:5		5	03-09-88	Con-Ed	11-04-87
			5			

**WESTINGHOUSE/ABB**

EMC	800, 1200, 1500, 2000, 3000, 4000, 1000/2000, 1500/3000, 2000/4000			04-25-60	Con-Ed	03-24-61
ACT-550	600/1200	600	5	12-28-60	N.M.P.	09-21-60
CTOM-15	10, 15, 20, 25, 30, 40, 50, 75, 100,	11500	5	05-09-61	L.I.L.	10-27-64
CTOM-5	150, 200, 300, 400, 600, 800	15000	5	10-27-64	L.I.L.	
CTOM-15	5, 10, 15, 20, 25, 30, 40, 50, 75,	5000	5	03-30-65	08- Cen-Hud	
CLA-10	To include 5 amp rating	15000	5	23-67	N.M.P. Con-	03-02-65
CLA-10	800	5 600	5	05-11-65	Ed	08-04-67
RTM-10	1000, 1200, 1500, 2000, 3000, 4000, 1000/2000, 1500/3000, 2000/4000	600	5	04-04-67	Con-Ed	03-03-67
CTR	200, 400, 600, 800	600	5	03-15-68	N.M.P.	08-04-67
CT-25	200, 400, 600, 800, 200/400,	600	5	06-06-68	Con-Ed	
CTR	300/600, 400/800	25000	5	07-21-70	N.M.P.	
CRA-10	400	600	5	09-23-71	RG&E	09-30-70
	400/5 4.0 T.F.	600	5			09-07-71
	400, 600, 800, 1000, 1200, 1500, 2000	600	5			

**WESTINGHOUSE/ABB**

TYPE	PRIMARY AMPS	VOLTS	SEC. AMP.	DATE	TESTING ENTITY	APPROVAL SUBMITTED
	200, 400, 600 100, 200 10/20 through					
CSB-10	1500/3000 200, 400, 500, 600, 800,					
ACT-200	200/400, 300/600, 400/800	600	5	09-12-72	Cen-Hud Con-	
ACT-350	200, 300, 400, 500, 600, 800	34500	5	09-12-72	Ed	
CMF*	200, 300, 400, 600	69000	5	04-01-75	Cen-Hud	
CBT	200, 300, 400, 600, 800, 1000,	600	5	02-06-80	Cen-Hud	
CSF	1200, 1500, 2000, 3000	600	5	03-05-80	N.M.P.	
CMV*	800, 1000, 1200, 1500, 2000, 3000,	600	5	03-05-80	Cen-Hud	
CLC*	4000, 600/1200, 800/1600, 1000/2000,	600	5	03-05-80	N.M.P.	
	1500/3000, 2000/4000 5 through 800	600	5	03-05-80	N.M.P.	
	25 through 800 5 - 800 5 - 800 10800	600	5	03-05-80	N.M.P.	
	5-1200					
	10-1200					
KOR-60	25-1000	4800	5	03-09-82	N.M.P.	
KON-11		15000	5	01-12-83	N.M.P.	03-30-81
KOR-75**		8.32kV	5	09-02-03	ABB	08-19-03
KOR-11**		13800	5	09-02-03	ABB	08-19-03
KOR-15**		25000	5	09-02-03	ABB	08-19-03
KOR1-15C**		25000	5	09-02-03	ABB	08-19-03
KOR-20**		34.5kV	5	09-02-03	ABB	08-19-03
KOR-20ER		34500	5	12-21-23	Con Ed Cen-	
^See 22-E-0708^					Hud	12-22-22
KIR-11	25 through 800	13800	5	10-24-83	National Grid	
KIR-11ES	5 through 1200					
CBT/1	200 through 800	600	5	08-21-23	N.M.P.	02-21-92
CBT-H	200 through 800	600	5	10-26-92	N.M.P.	02-21-92
BCT	400 through 3000	600	5	10-24-01	RGE	05-04-01
SAB-2	1600:5	600	5	05-08-09	Huntley	06-08-09
ABB CN14	300-560	4000	5	06-19-19	Cricket	02-22-19

\*\*Approved on similarity to the KOR-60 and KON-11

ABB CBT-S 600 600 5 08-23-21 Similarity 03-23-21

\*based on similarity to CBT/1 and CBT-H approved in Case 92-E-0112



**ASTRA CORPORATION**

TCB*	200, 400, 600, 800		600	5	03-18-66	Con-Ed	01-17-66	04-14-92
TCW	200, 400, 600, 800 300, 400,		600	5	09-05-68	Cen-Hud	05-31-68	
AP	500, 600, 800, 1000 1200,		600	5	08-29-77	RG&E	11-22-78	<b>APPROVAL</b>
APN	1500, 2000, 3000 200, 300,		600	5	06-16-86	RG&E	11-04-85	<b>SUBMITTED</b>
APNE	400, 500 200 100 100		600	5	06-16-86	RG&E	11-04-85	
TCB	600 5 01-22-87 RG&E 09-05-86	TCW	600 5 01-22-87 RG&E 09-05-86					12/4/14

\* Molding change due to the use of a superior steel core, added 600:5 ratio on a similarity basis.

12/4/14  
 12/4/14  
 12/4/14  
 12/4/14  
 12/4/14  
 06/02/17  
 10/29/15

BCT			<b>Meramec</b>			11-08-06	10/29/15
	5- 8,000	600	5,1	08-08-06	Meramec		06/02/17
							10/29/15
							06/02/17

<b>ARTECHE</b>					<b>TESTING ENTITY</b>	
<b>TYPE</b>	<b>PRIMARY VOLTS</b>	<b>SEC. VOLT</b>	<b>INSULATION LEVEL</b>	<b>APPROVED DATE</b>		
VRU-52					Arteche	
URS-36					Arteche	
URU-52	240:1 - 400/666.66:1	115-115/69	1500-3000	1/21/16	140:1 - 175/300:1 Marked	Arteche
VRS-36	Ratio 34.5kV	120-115/67.08	1/21/16	240:1 - 400:1	Marked Ratio 46.0kV 115/115/69	Arteche
VRJ-17	1/21/16	69.25/166:1 - 300/500:1	Marked Ratio	34.5kV 115/67.08-120	1/21/16 20:1	Arteche
UCE-7	- 70/121:1	Marked Ratio 15kV	120	7/13/16	20:1 - 40:1 Marked	Arteche
UCE-17	Ratio 5Kv	120 1/24/18	60:1 - 120:1	Marked Ratio 15kV	120 7/13/16	Arteche
URL-17	20:1 - 66.67:1	Marked Ratio 15kV	120	7/13/16		Arteche
URJ-17	20:1 - 70:1	Marked Ratio 15Kv	120	1/24/18		Arteche
VCE-17	60:1 - 120:1	Marked Ratio 15kV	120	7/13/16		Arteche
VCE-17	35:1 - 40:1	Marked Ratio 15Kv	120	1/24/18		Arteche

<b>GENERAL ELECTRIC</b>						
<b>TYPE</b>	<b>PRIMARY VOLTS</b>	<b>SEC. VOLT</b>	<b>INSULATION LEVEL</b>	<b>APPROVED DATE</b>	<b>TESTING ENTITY</b>	<b>APPROVAL SUBMITTED</b>
JVW-3	2400, 4200, 4800	120	5000	08-04-59	L.I.L.	05-03-71
JVW-4	2400, 4200, 4800, 7200 Modification	120	8700		N.M.P.	
JVW-5 JVW-5C	7200, 8400, 12000, 14400	120	15000			

JVM-3	2400, 4200, 4800	120	5000	12-22-59	L.I.L.	05-03-71
JVM-4	4200, 4800, 7200	120	8700		N.M.P.	
	Modification					
	7200, 8400, 12000, 14400					10-19-60
JVM-5	115000	120	15000			
ET-11	240	115	115000	09-27-60		
JVPO	288	120	416	12-28-60	RG&E	
JVPO	300	120	480			
JVPO	480	120	480			06-10-87
JVPO	600	120	480			03-14-63
JVPO	34500	120	600			
ES-200	69000	115		09-09-87	RG&E	
EW-450	69000	69/115	115000	04-09-63	NYSEG	
EW-550	80500	69/115	115000			
EW-650	92000	67.08/115	138000			
EW-750	13800	67.71/115	161000			03-14-63
EW-900	207000	69/115	230000			
EW-1175	207000	69/115	345000			
EW-1300	24000	69/115	345000	04-23-63	NYSEG	
ET-150	27600	120	24000			
ET-200	34500	115	34500			
ET-200	46000	115	34500			
ET-250	69000	115	46000			
ET-350	25000	115	69000	05-24-66	N.M.P.	
JVS-150	34500	72/120	150000	05-24-66	N.M.P.	
JVS-200		67/115	200000			

***NxTPhase***

TYPE	PRIMARY VOLTS	SEC. VOLT	INSULATION LEVEL	APPROVED DATE	TESTING ENTITY	APPROVAL SUBMITTED
NXVT	115-765kV	5/120		06/05/04	NGRID	10/20/05

***Nissen Electric***

SVR-34C	207kV	69/115	345	8-30-06	HVB Power	3-7-06
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***KUHLMAN ELECTRIC***

POF	34.5 - 138kV			9-19-07	Kuhlman	9-19-07
UTF	138-230kV			9-19-07	Kuhlman	9-19-07
UTF	345kV			2-20-09	Kuhlman	1/30/09

***GENERAL ELECTRIC***

TYPE	PRIMARY VOLTS	SEC. VOLT	INSULATION LEVEL	APPROVED DATE	TESTING ENTITY	APPROVAL SUBMITTED
JVT-150	25000 Modification	120	150000	05-24-66	N.M.P.	05-04-71
JVT-200	34500	115	200000	05-24-66	N.M.P.	"
JVT-200	27600	115	200000	05-24-66	N.M.P.	"

JVS-250	27600 40250 46000 69000	69/115	250000	09-13-67	N.M.P.	
JVS-350	120,240,288,300,480,600	67/115	350000	09-13-67	N.M.P.	
JVT-250	160	115 115	250000	09-13-67	N.M.P.	
JVT-350		120 120	350000	09-13-67	N.M.P.	
JVA-0		25n 120	600	09-13-67	N.M.P.	
JE-27		115	2500	06-06-68	CON ED	
JVW-110	JVW-110C 7200, 8400, 12000, 14400	120	15000	07-20-71	N.M.P.	
EW-900Y	138000	120		08-31-72	N.M.P.	
JVM-95	7200, 8400, 12000, 14400	120	15000	03-12-74	N.M.P.	
JVW-110	60-70/1 Revised design	120	15000	09-75	N.M.P.	
JVW-7	27.6 and 34.5kv,	120	150kv	12-28-78	N.M.P.	05-13-68
JVW-4A	175/1, 240/1, 300/1	120	8700	12-04-97	NYSEG	
	2400, 7200	120	15000	12-04-97	NYSEG	12-24-73
		120	8700	12-04-97	NYSEG	
JVW-5A	JVW-SAC 7200, 14400	120	15000	12-04-97	NYSEG	
JVM-4A	2400, 7200 7200, JVM-5A 14400	120	10000	02/19/03	GE	02-13-97
	120 - 600	120	10000	02/19/03	GE	02-13-97
JVA-0C	69.3 - 600	120	60000	02/19/03	GE	02-13-97
JVM-0C		120	75000	02/19/03	GE	02-13-97
	2400 - 4800	120	75000	02/19/03	GE	
JVM-3C	4200 - 7200	120	110000	02/19/03	GE	
JVM-4C	4200 - 7200	120	110000	02/19/03	GE	
JVM-4AC	7200 - 14400	120	125000	02/19/03	GE	
JVM-5C	7200 - 14400	69/115	150kV	08-29-03	GE	
JVM-5AC	12000 - 24000		200kV	08-29-03	GE	
JVM-6C	24000, 27600, 34500		1300kV	05-20-2024	GE	
PT7-2-150*	24000, 27600, 34500					
PT7-2-200*						

**NxTPhase**

* Approved on similarity to JVM series						08-20-03
T155-VT3	362000	120	350-2100kV			08-20-03
Case #23-E-0672				06/05/04	NGRID	11-10-2023

**WESTINGHOUSE/ABB**

NXVCT	69-765kV range 0-4000amps					10/20/05
		<b>APPROVED VOLT</b>	<b>TESTING LEVEL</b>	<b>APPROVAL DATE</b>	<b>ENTITY</b>	

**SEC. TYPE**      **INSULATION PRIMARY VOLTS**

**SUBMITTED**

EMPL						
EMPL	240	120	600-1200			
EMPL	288	120	600-1200	05-10-60	RG&E	04-18-60
EMPL	300	120	600-1200			
EMPL	480	120	600-1200			
APT-550	600	120	600-1200			
Tertiary	69000	69/115	115000			
Tertiary				12-13-60	N.M.P.	09-21-60
APT-150		69/115				
APT-200	14400 (1-Bushing)	72/120	24000			
APT-250	20125 (1-Bushing)	67.08/115		01-15-63	NYSEG	10-29-62
APT-350	27600 (1-Bushing)	69/115	34500			
APT-150	40250 (1-Bushing)	67.08/115	46000			
APT-200	24000 (2-Bushing)	69.3/120	69000			
APT-250	34500 (2-Bushing)	66.4/115	24000			
APT-350	46000 (2-Bushing)	66.4/115	34500	01-15-63	NYSEG	
APT-200	69000 (2-Bushing)	66.4/115	46000			
PTM5	27600	115	69000			
	2400/4160Y	120	27600	04-09-63	Con-Ed	03-12-63
	through		5000	07-21-64	Con-Ed	06-16-64
PTM15	14400/14400Y	120	through			
PTOM5	2400/4160Y	120	15000			
PTOM15	through	120	5000	08-11-64	Con-Ed	07-09-64
APT-150	14400/14400Y	120	through			
PTM and	24000/14400V	69.3/120	15000			
PTOM-75	25 cycle		25000	06-06-68	Con-Ed	05-24-68
PTM and	4200/7280Y	120				
PTOM-110	through		75kv	12-19-68	L.I.L.	
PPM	14400/14400Y		through			
VOG-11	240, 288, 300, 480, 600	120	110kv			
	7200, 7620, 8400	120	10kv	03-09-82	N.M.P.	03-30-81
			15kv	02-07-83	N.M.P.	

**WESTINGHOUSE/ABB**

TYPE	PRIMARY VOLTS	SEC. VOLT	INSULATION LEVEL	APPROVED DATE	TESTING ENTITY	APPROVAL SUBMITTED
VOY-60	2400-4800 7200-14400 7200-14400	120	60kv	03-09-82	N.M.P.	03-30-81

VIZ-11	Indoor 2400-4800	120	110kV	09-22-83	Cen-Hud	03-03-83
VOZ-11		120	110kV	10-07-83	Cen-Hud	03-03-83
VIY-60*	Indoor 2400-7800	120	60kV	12/02/03	ABB	11/10/03
	Indoor 12000-24000					
VIZ-75*	Outdoor 2400-7200 (2 Bushing)	120	75kV	12/02/03	ABB	11/10/03
VIZZ-15*	Outdoor 7200-14400 (2 Bushing)	120	150kV	12/02/03	ABB	11/10/03
VOZ-75*	Outdoor 12000-24000 (2 Bushing)	120	75kV	12/02/03	ABB	11/10/03
VOY-11*		120	110kV	12/02/03	ABB	11/10/03
	Outdoor 12000-24000 (1 Bushing)					
VOY-12*	Outdoor 12000-24000 (2 Bushing)	120	125kV	12/02/03	ABB	11/10/03
VOG-12*	120 125kV 12/02/03	ABB	11/10/03	VOY-15*	Outdoor 12000-24000 (1 Bushing)	120 150kV 12/02/03
					ABB	11/10/03
VOY-15G*	Outdoor 12000-24000 (2 Bushing)	120	150kV	12/02/03	ABB	11/10/03
	Outdoor 21000-34500 (2 Bushing)					
VOZ-15*	Outdoor 21000-34500 (1 Bushing)	120	150kV	12/02/03	ABB	11/10/03
VOHD-200*	Outdoor 21000-34500 (2 Bushing)	120	200kV	12/02/03	ABB	11/10/03
VOHD-200G*	Outdoor 21000 (1 Bushing)	120	200kV	12/02/03	ABB	11/10/03
VOZZ-20*	Outdoor 21000-34500 (2 Bushing)	120	200kV	12/02/03	ABB	11/10/03
VOZZ-20G*	Outdoor 21000 (1 Bushing)	120	200kV	12/02/03	ABB	11/10/03
	11/10/03	VOY-20G*	Indoor, 60Hz	120	200kV	12/02/03
			ABB	11/10/03		
PTM-75	11-19-68 L.I.L.	PTM-110	11-19-68			

\* Approved on similarity to VOG-11, VOY-60, VIZ-11 and VOZ-11 (approved in 1980s)

**SANGAMO/SCHLUMBERGER**

T-6	240 288 480 600	120	600	05-22-62	N.M.P.	
T-6	120, 240, 288, 300, 480, 600	120				
T-6		120				
T-6		120				
T-6A		120	600	07-08-80	NYSEG	02-20-80

**ASTRA**

DB	120, 240, 288, 300, 480, 600	120	600	08-29-77	RG&E	11-22-78
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**ASSOCIATED ENGINEERING COMPANY/KUHLMAN ELECTRIC CORP**

<b>TYPE</b>	<b>PRIMARY VOLTS</b>	<b>VOLT</b>	<b>SEC. INSULATION LEVEL</b>	<b>APPROVED DATE</b>	<b>TESTING ENTITY</b>	<b>APPROVAL SUBMITTED</b>
SPOF-200	34,500 AND 27,600	115	34,500	03-06-87	Con-Ed	12-29-86
SPOF-200-2	34,500 AND 27,600	115	34,500	08-01-00	Con-Ed	

**SQUARE "D" COMPANY/HAEFELY TRENCH / TRENCH LTD.**

U2				08-11-86	N.M.P.	01-24-86
U3				08-11-86	N.M.P.	01-24-86
UT				08-11-86	N.M.P.	01-24-86
U2H				08-11-86	N.M.P.	01-24-86
U3H				08-11-86	N.M.P.	01-24-86
UH				08-11-86	N.M.P.	01-24-86
115U3-550-				12-23-88	N.M.P.	06-07-89
115 kV				12-23-88	N.M.P.	06-07-89
115U3H-550-				11-14-90	N.M.P.	12-28-89
115 kV				11-14-90	N.M.P.	12-28-89
69UT3-350-				11-14-90	N.M.P.	12-28-89
69kV				11-14-90	N.M.P.	12-28-89
69UT3H-350-				10-20-95	N.M.P.	09-08-95
69kV				10-20-95	Trench	09-08-95
115UT3-550-				9-3-03	Trench	2-18-03
115kV				9-3-03 9-3-	Trench	2-18-03
UT3H-550-115 115kV				03	Trench	2-18-03
115kV			900	9-3-03	Trench	2-18-03
UT5115kV		115	900	2-8-06	ABB/Trench	6-14-05
UT5H		115	1050	7-18-12	Cricket	2-9-12
UT5-900-230* 230kV		115	1050	6-19-19		2-22-19
UT5H-900-230* 230kV		115				
UT5-1050-230* 230kV		115				
UT5H1050-230* 230kV		120	420kV			

N5 and N5H 69kV-230kV Upgrade core  
 SU 362..550 345kV  
 SU 420/B83T

\* Approved on similarity to UT3 and UT5 69kV and 115kV models

		<b>GEC ALSTHOM</b>		<b>APPROVED DATE</b>	<b>TESTING ENTITY</b>	<b>APPROVAL SUBMITTED</b>
<b>TYPE</b>	<b>PRIMARY VOLTS</b>	<b>SEC. VOLT</b>	<b>INSULATION LEVEL</b>			
						10-18-94
UXT-069	69000			09-11-95	L.I.L.	10-18-94
UXT-115	115000			09-11-95	L.I.L.	10-18-94
UXT-138	138000	115		09-11-95	L.I.L.	
		115				
		115				
SVS	115-765kV			09-18-95	N.M.P.	01-21-94

**MWB MESSWANDLER/HAEFELY TRENCH**  
 SF6 Gas Insulated

		<b>GENERAL ELECTRIC</b>		<b>APPROVED DATE</b>	<b>TESTING ENTITY</b>	<b>APPROVAL SUBMITTED</b>
<b>TYPE</b>	<b>PRIMARY VOLTS</b>	<b>SEC. VOLT</b>	<b>INSULATION LEVEL</b>			
				09-30-75	O & R	02-20-74
MB-150	10/20, 25/50, 100/200, 200/400	34.5kv	5		GE	03-28-80

		<b>KUHLMAN ELECTRIC CORP</b>		<b>APPROVED DATE</b>	<b>TESTING ENTITY</b>	<b>APPROVAL SUBMITTED</b>
<b>TYPE</b>	<b>PRIMARY VOLTS</b>	<b>SEC. VOLT</b>	<b>INSULATION LEVEL</b>			
MVCT-200	34,500			08-18-87	RG&E	06-02-87
		115	up to 400			

50/100,

*FERRANTI PACKARD*

34,500

**VOLTS**

115

5

07-07-89

RG&E

03-02-89

*MWB MESSWANDLER/HAEFELY TRENCH*



	Multifamily	120/240	4 wire	4/22/15	UL LABS	2/4/2015
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**ELECTRO-INDUSTRIES/GAUGETECH**

Shark200	Indoor Single Family	120/240	4 wire	1/16/18	MET LABS	1/20/16
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**HONEYWELL**

X-Mon	Indoor Multifamily	120/208/240 277/480	2-4 wire	2/28/2024 Case #22-E-0179	Similarity	10/20/2023
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**INTECH21**

PM2104	Indoor Single family	120/240	4 wire	11/20/13 9/8/14	MET LABS	8/27/2013
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**LEVITON**

Mini-Meter Series 8000	Indoor Single Family Indoor	120/240	4 WIRE	11/20/13	MET LABS	8/23/2013
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(V2.04) Series 8000	Multifamily Indoor	120/240	4 wire	5/20/15	MET LABS	3/3/2014
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(V2.05) VerifEye	Multifamily Indoor	120/240 120/208/240 277/480	4 wire	8/14/18 10/5/2023 #22-E-0179	Similarity Similarity Case	7/31/2018 2/14/2023
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Series 7000	Multifamily	120/208/240 277/480	2-4 wire	12/5/24	Similarity	6/14/24
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VerifEye Series 8000	Indoor Multifamily		2-4 wire		Similarity Case 23-E-0548	<u><b>QUADLOGIC</b></u>
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**CONTROLS**

Mini-Closet	Indoor					
miniQcloset	Multifamily					

5N	Multifamily	120/208	4 wire
S10T	Indoor		
	Single family	120/208	4 wire
	Indoor	120/208	4 Wire
S10N	Single family		
	Indoor	120/208	4 wire
Mini Closet	Multifamily		
MC-5N-JQ	Indoor	120/208	4 wire
QBrick6	Multifamily		
	Indoor	120/208	4 wire
QBrick4	Multifamily		
*based on similarity to QBrick6			4 wire
QBrick	Indoor	120/240	
	Case #23-E-0220		

GRIDGEAR SOLUTIONS LTD.

GG Model 120 single phase 2 wire, 120/240 single phase 3 wire, 120/208 3 phase 4 wire wye 10/21/2020 UL Labs 11/26/2019  
Multifamily, Commercial

SATEC

BFM-136	Indoor					
	Multifamily	120/240				
EM-133	Indoor	120/240	4 wire	3/4/2015	UL Labs	6/3/2014
	Single family		4 wire	10/15/2015	UL Labs	9/9/2014
BFMII	Indoor	120/240				
	Multifamily		4 wire	2/28/2018	UL Labs	7/5/2017
EM-133-SPDR	Indoor	120/240	4 wire	8/28/2018	Similarity	8/7/2018

Multifamily

SIEMENS

SEM3	Indoor Multifamily	120/240	4 wire	12/17/2015	UL Labs	12/22/2014
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TRIACTA

6103 6112 (V2.05)	Indoor Multifamily	120/240 100mA	4-wire	6/10/2015	Similarity Leviton Data	3/3/2015
6103 6112	Indoor Multifamily	120/240	4-wire	6/10/2015	Similarity	3/3/2015
6303 6312 (V2.05)	Indoor Multifamily	120/240 80mA	4-wire	8/14/2018	Similarity	7/31/2018
6103 6112 (V2.08)	Indoor Multifamily	120/240 100mA	4-wire	3/20/2024 Case 23-E-0548	Eurofins	9/28/2023
6303 6312	Indoor Multifamily	120/240 80mA (V2.08)	4-wire	3/20/2024	Eurofins	9/28/2023
			Case 23-E-0548			

## **Schneider Electric PowerLogic**

EM4880 (V2.05)	Indoor Multifamily	120/240 80mA	4-Wire	10/3/16	Similarity Leviton	6/30/2016
EM4880 (V2.05)	Indoor Multifamily	120/240 80mA	4-Wire	8/14/18	Similarity Leviton	7/31/2018

**METRETEK**

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TYPE	CHANNELS	VOLTAGE	DATE	TESTING ENTITY	APPROVAL SUBMITTED
SIP-AC	4	120 w/12V DC Power Supply	04/23/90	NYSEG	
SIP-B	4	w/12V DC Power			
CMU	2	Supply			

TYPE	CLASS	VOLTS WIRE APPROVED	TESTING ENTITY	APPROVAL SUBMITTED
	<b>FORM</b>	<b>ConnectDER</b>		
Smart	100	2S/12S 120/240 3	9/28/2020	UL Labs 9/18/2019 Con Edison
ConnectDER *Not for use with Durham UG-H4213B-CC ringless meter pans, or any physically incompatible meter pan.				
Solar Collar		2S/12S 120/240 3	4/5/2024	Similarity 2/14/2024 Con Edison

**Tesla**

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Tesla Backup Switch For PowerWall	Form 2S 200 Amps	11/29/2023	Intertek/ National Grid	3/8/2023
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## AUTOMATIC METER READING DEVICE

### *CONSERT COMMUNICATE CONTROL*

<b>TYPE</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>TESTING ENTITY/ENTITY</b>
Tru Smart Energy Gateway	Retrofit module for GE I210 C1200, 240Vac	4/21/11	Central Hudson
	GE I210+ cn Form 25S	9/8/11	Con Edison
	SEG Card with Gobi Modem	12/13/11	Con Edison
	GE kV2c-SEG card & Gobi Modem	11/26/12	Con Edison

### *ITRON*

<b>TYPE</b>	<b>DESCRIPTION</b>	<b>DATE</b>	<b>TESTING ENTITY/ENTITY</b>
40E ERT Module	Retrofit Transmitter Module	10-13-95	RG&E
40ER-1	Retrofit Module, single-phase GE, ABB and L&G meters	10/10/96	RG&E
40EN	Retrofit Module, Polyphase meters	10/10/96	RG&E
41ER-1	Retrofit Module	2/24/99	JBPU
45ERT Series	Retrofit Module 45ER-1 ABB, GE, Siemens; 45ES-1 Schlumberger; 45EN-1 ABB Polyphase Meters.	9/18/02	ITRON
52ESS	Net metering capabilities as Delivered - Received	6/18/09	Central Hudson
53ESS	For GE kV2c capable in Delivering - Received data	3/26/12	National Grid
54ESS	For GE I-210+ series to Store and transmit data	7/18/12	National Grid

55ESS	For GE I-210+ series to Store and transmit data	7/18/12	National Grid
56ESS	For GE I-210+ series to Store and transmit data	7/18/12	National Grid
57ESS	For GE I-210+c series to Store and transmit data	7/18/12	National Grid

**SCHLUMBERGER**

R300	Radio Frequency Meter Interface Unit Single Phase Version	6/11/01	Based on Similarity
R300C	Radio Frequency Meter Interface Unit Centron Version	6/11/01	Based on Similarity
R300V	Radio Frequency Meter Interface Unit Vectron Version	6/11/01	Based on Similarity

**HUNT Technologies**

TS1 and TS2	RF Power Line Carrier Automatic Meter Reading Device	4/11/06	Hunt Technologies
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**Landis+Gyr**

Comverge	Landis+Gyr Comverge Maingate AMR Module	4/20/06	National Grid
Metrum	Landis + Gyr Metrum OV2000IP	9/27/10	National Grid
Metrum	Utiliwise External Module	6/18/12	National Grid

## AUTOMATIC METER READING DEVICE

### **SILVER SPRING/ITRON**

I-210+, GE Kv2c with remote disconnect	6/18/09	Con Edison Con
Socket AP - APPROVED WITH LIMITATIONS REFER TO CASE 16-E-0376	7/24/2017	Edison Con
Socket Access Point (ringless version) <i>*approved based on similarity, and with limitations, refer to Case 16-E-0376</i>	3/17/2022	Edison/O&R

### **TRILLIANT NETWORKS**

Trilliant SecureMesh Communication Card GE I-210+, Itron Centron, L+G Focus, Itron Sentinel	10/19/09	Central Hudson
Trilliant Cell Reader communication Card GE kV2c+	3/28/11	National Grid

