

Table of Contents: Electric Service Requirements

Table of Contents

General Information

District Service Area Map	R-DSAM
ESR Change Recommendation Form	R-SB
Work Order Drawing Symbols	RD-1
Reference Information	R-REF

Electric Service Requirements

Table of Contents: Electric Service Requirements	ESR-INX
Underground Service: General Requirements	RT-G
Overhead Electric Service: Residential	RR-2
Pole Riser Installation	RR-1

Trenching

Table of Contents: Trenching	RT-INX
Power Trench Sand and Backfill Requirements	RT-1
Trench Sand: Power Type, Approved Suppliers	RT-2
Main Trench Detail: Residential or Commercial	RT-5
Trench: Residential Service Location	RT-6
Trench Detail – Sidewalk, Residential or Commercial	RT-7
Trench Detail – Residential Service	RT-8
Right-of-Way and Staking Requirements: Residential Service	RT-9
Trench Detail: Residential/Commercial	RT-12
Trenching – Steel Sleeve Encased Boring Requirements	RT-13

Conduit and Cable

Table of Contents: Conduit and Cable	RC-INX
Conduit: Material Requirements	RC-1
Conduit: Installation Requirements	RC-2
Conduit Encasement: Concrete Requirements	RC-3
Cable Replacement Requirements (For Maintenance Only)	RC-9
Cable Marking Requirements	RC-10

Concrete Structures: General Requirements

Table of Contents: Concrete Structures: General	RSG-INX
Handhole: Non-Concrete Structures	RS-G1
Precast Concrete Structure Requirements	RS-G2
Pads Precast Concrete Structures	RS-G3
Precast Concrete Boxes	RS-G4
Identification Marking: Precast Concrete Structures	RS-G5
Concrete Slabs: Cast-In-Place Structures	RS-G6

Drawn:	Eng:	Appr:	Date:	Electric Service Requirements		R-TOC
				Table of Contents: Electric Service Requirements		
JER	MP	-	07/22			Revision: 7 Page 1 of 5

Table of Contents: Electric Service Requirements

Enclosure: Non-Concrete Structures	RS-G7
Enclosure: Pour-In-Place Structures	RS-G8

Clearances

Table of Contents: Clearances	RSC-INX
Clearances to Wood Poles	RS-4
Clearances to Equipment Pad.....	RS-5
Clearances to Vehicular Protection Barriers	RS-6

Equipment Pads

Table of Contents: Equipment Pads.....	RSP-INX
12kV Capacitor Bank Pad Placement: Adjacent to Sidewalk.....	RS-7
25kV Capacitor Bank Pad Placement: Adjacent to Sidewalk.....	RS-8
Residential Transformer Pad: One 1 Ph, 12 or 25kV, Phase to Neutral	RS-13
Residential Transformer Pad: Two 1 Ph, 12 or 25kV, Phase to Neutral	RS-14
Secondary Meter Pad: Commercial/Residential, 1 Ph, 12 or 25kV.....	RS-18
Commercial Transformer Pad: One 1 Ph, 12 or 25kV.....	RS-19
Commercial Transformer Pad: Two 1 Ph, 12 or 25kV.....	RS-20
Commercial Transformer Pad: Three 1 Ph, 12 or 25kV.....	RS 21
Residential Transformer Pad: 1 Ph, 12kV, Phase to Phase	RS-28
Transformer Pad: 3 Ph, 12/25kV, 75-750KVA	RS-35
Transformer Pad: 3 Ph, 12/25kV, 500-2500KVA	RS-37
Transformer Pad: 3 Ph, 12kV to 4kV Step Down	RS-40
Transformer Pad: 3 Ph, 25kV to 12kV Step Down	RS-41
Cabinet Pad: Fuse, 15kV.....	RS-45
Cabinet Pad: Fuse/Meter and 12kV Capacitor Bank.....	RS-46
Cabinet Pad: Capacitor Bank, 25kV	RS-58
Service Pedestal Pad: Mobile Home	RS-70

Vaults and Boxes

Table of Contents: Vaults and Boxes	RSV-INX
Handhole: Secondary Junction.....	RS-1
Enclosure: 1/0 Cable Splice Enclosure	RS-3
Handhole: Tracer Wire	RS-10
Splice Box: 30" x 48" x48"	RS-80
Splice Box: 30" x 48" x20" (Maintenance Only).....	RS-80M
Regular or Intercept Box: 36" x 72" x 48" (Maintenance Only).....	RS-81
Pull Box: 30" x 84" x 48"	RS-82
Intercept Pull Box: 72" x 72" x 75"	RS-83
Intercept Splice Box: 30" x 48" x 48"	RS-84
Intercept Box: 36" x 84" x 48"	RS-85

Drawn:	Eng:	Appr:	Date:	Electric Service Requirements		R-TOC
				Table of Contents: Electric Service Requirements		
JER	MP	-	07/22			Revision: 7 Page 2 of 5

Table of Contents: Electric Service Requirements

Manhole: Feeder Cable Splice	RS-94
Manhole: Switch/Fuse Cabinet, 25kV.....	RS-96
Manhole: Switch/Fuse Cabinet, 12 or 25kV	RS-97
Manhole: Switch/Fuse Cabinet, Joint Customer	RS-97C
Manhole (Maintenance): Switch/Fuse Cabinet, 12 or 25kV	RS-97M
12kV Manhole Pad: Adjacent to Public R.O.W.	RS-98
12kV Manhole Pad: Not Adjacent to Public R.O.W.	RS-99
12kV Manhole Pad and Capacitor Pad: Adjacent to Public R.O.W.	RS-100
12kV Manhole Pad and Capacitor Pad: Not Adjacent to Public R.O.W.	RS-101
25kV Manhole Pad: Adjacent to Public R.O.W	RS-110
25kV Manhole Pad: Not Adjacent to R.O.W.....	RS-111
25kV Manhole Pad and Capacitor Pad: Adjacent to Public R.O.W	RS-112
25kV Manhole Pad and Capacitor Pad: Not Adjacent to Public R.O.W.....	RS-113
Manhole Pad for Switch, Fuse, Meter Cabinet.....	RS-116
Subsurface Switch Vault, 15kV	RS-117
Manhole: IntelliTEAM Switch.....	RS-118
Lid: Box and Vaults.....	RS-H

Metering Equipment: Installation Requirements

Table of Contents: Metering Equipment Installation Requirements	RPI-INX
Metering and Service Installation: General Requirements	RPI-G
Temporary Service Installation: 120/240 Volt, Single Phase, U.G.....	RPI-1
Single Family Residential Meter Location	RPI-2
Temporary Panel Stand.....	RPI-3
Single Phase Multi Family Residential Meter Location	RPI-4
Combination Meter Panel: Residential, 225A maximum	RPI-8
400 Amp Residential Meter Main Service Equipment	RPI-9
Commercial Meter Panel with Factory Installed Test Bypass Facilities 100/200 A Max.....	RPI-11
Service Panel Termination Section (Customer Owned Services Only)	RPI-12
Labeling Requirements for 480 Volt Self-Contained Services	RPI-13
Current Transformer Cabinets.....	RPI-14
Commercial Meter and Service Equipment Location	RPI-15
Cable Risers, Residential Single Meter, CIC, Underground	RPI-23
Cable Risers, Commercial Multi-meter, NVE Cable, Underground.....	RPI-24
Typical Meter Arrangement	RPI-28
Instrument Transformer Cabinet w/Panel & Test Switch.....	RPI-30

Metering Equipment: Material Requirements

Table of Contents: Metering Equipment Material Requirements	RPM-INX
General Requirements: Metering and Service Installation	RPM-G
NVE Approved EUSERC Drawings.....	RPM-EUSERC
Single Phase Pedestal	RPM-A

Drawn:	Eng:	Appr:	Date:	Electric Service Requirements	R-TOC
				Table of Contents: Electric Service Requirements	
JER	MP	-	07/22		Revision: 7 Page 3 of 5

Table of Contents: Electric Service Requirements

Residential Combination Meter Panel: 225A Maximum	RPM-1
Residential/Commercial Meter Panels w/Manual Test Bypass Studs.....	RPM-2
Commercial Meter Panel w/Bypass 100A Maximum	RPM-4
Commercial Meter Panel w/Bypass 200A Maximum	RPM-5
Self-Contained Meters Installed In Switchboards: 0-200 Amps	RPM-6
Typical UG Service & Meter Post for Mobile Home or Non-Commercial Use	RPM-7
Non-Residential Service Pedestal: 0-200 Amps	RPM-8
Test Bypass/Disconnect Block: 100 and 200A.....	RPM-11
Bypass/Disconnect Block Bussed and/or Cable Terminations	RPM-12
Combination CT Cabinet/Meter Socket for Overhead Service.....	RPM-13
Combination CT Cabinet/Meter Socket for Underground Service	RPM-14
Combination Disconnecting Device & Terminating Enclosure: 1200 Amps.....	RPM-15
Current Transformer Cabinet: 400A Maximum	RPM-16
Current Transformer Cabinet: 1Ø, 3-Wire, 600A Max.....	RPM-17
Current Transformer Cabinet: 3Ø, 4 Wire, 800A Max.....	RPM-18
Instrument Transformer Compartment for Switchboards: 0-600 Amps, 1Ø, 3-Wire	RPM-19
Instrument Transformer Compartment for Switchboards: 0-1000 Amps, 3Ø, 4-Wire	RPM-20
Instrument Transformer Compartment for Switchboards: 1001-3000 Amps, 3Ø, 4-Wire	RPM-22
Instrument Transformer Compartment for Switchboards: 3Ø, 4-Wire, 3001 Amps & Up	RPM-24
Standard Switchboard Service Section with Instrument Transformer Compartment (ITC).....	RPM-25
Standard Switchboard Service Section with ITC and Filler Panel.....	RPM-26
Combo Switchboard Service Section Pull Section: 2000A Maximum.....	RPM-27
Current Transformer Mounting Base 1Ø, 3-Wire, 600A Max	RPM-28
Current Transformer Mounting Base 1Ø, 3-Wire, 600A Max	RPM-28A
Current Transformer Mounting Base 3Ø, 4-Wire, 800A Max	RPM-29
Current Transformer Mounting Base 3Ø, 4-Wire, 800A Max	RPM-29A
Removable Link & Ct Support for Instrument Trans. With 4" Bus	RPM-30
Removable Link & Ct Support for Instrument Trans. With 5" Bus	RPM-31
15" Hinged Meter Panel.....	RPM-32
Instrument Rated Meter Panel with Test Switch Provisions.....	RPM-39
Combo Terminating Enclosure/Multi Meter1Ø, 3 Wire, 600A Max	RPM-42
Enclosure for Underground Service Termination: 0-1200 Amps.....	RPM-43
Underground Service Termination: Standard Switchboard Service Section	RPM-45
Underground Service Terminating Facilities in Pull Boxes or Pull Sections	RPM-47
Residential Multiple Metering Sections.....	RPM-53
Outdoor Raintight Enclosure for Switchboards	RPM-54
High Voltage Metering Enclosure: 2,400-27,000 Volts.....	RPM-401
Mounting Pattern for Instrument Transformers: 2,400-27,000 Volt Service.....	RPM-402
Hinged Meter Panel w/ Single Socket for 2,400-27,000 V Service	RPM-403
Hinged Meter Panel w/ Double Socket for 2,400-27,000 Volt	RPM-404
Indoor CT Dimensions for Metering Purposes: 5kV through 15kV	RPM-408

				Electric Service Requirements	R-TOC
				Table of Contents: Electric Service Requirements	
Drawn:	Eng:	Appr:	Date:		Revision: 7
JER	MP	-	07/22		Page 4 of 5

Table of Contents: Electric Service Requirements

Voltage Transformer (VT) Dimensions: 5kV through 15kV Outdoor	RPM-410
U.G. Service Terminating Pull Section: 3Ø, 4-Wire, 2400-4800V & 7200-17000V	RPM-411
Busway Servicehead: 3 or 4-Wire 750-34,500V	RPM-412
HV Metering Enclosure: 3Ø, 4-Wire 4160V, 0-800 Amps	RPM-413
HV Metering Enclosure: 3Ø, 4-Wire 4160V, 801-3000 Amps	RPM-414

Engineering Requirements

Table of Contents: Engineering Requirements	RE-INX
Design Standard for Parallel Generation of 10 MW or Less	RE-1
Design Standard for Parallel Generation Larger than 10 MW.....	RE-2
Net Metering Systems	RE-3
Equipment Room Requirements	RE-4
Bridge and Overpass Conduit Support System Guidelines	RE-5
Separate Standby or Emergency Generation Transfer Systems	RE-6
Telecommunication Antenna Attachment to Wood Distribution Pole.....	RE-7
Top Antennas on Wood Distribution Poles.....	RE-8
Temporary Overhead Service Pole	RE-9
Fault Current Levels: Secondary Terminals	RE-10
Conduit Sealing	RE-11

 NV Energy	Electric Service Requirements				R-TOC
	Table of Contents: Electric Service Requirements				
Drawn:	Eng:	Appr:	Date:		Revision: 7
JER	MP	-	07/22		Page 5 of 5