

Scenic Rivers Energy Cooperative
Wiring/Service Specifications and Recommendations

Meter Locations

- The clear working space in front of meter panels shall be a minimum of 4 feet and a vertical clearance of 6 feet 6 inches. Two feet of horizontal clearance on either side shall also be provided. Free space in front of instrument transformer cabinets shall be 2 feet beyond the cover in the extended position or a minimum of 4 feet whichever is greater.
- If changes are made on the member's premises making the existing meter location unsafe or inaccessible for reading and testing, the member shall be required to make changes in the wiring so that the meter may be located to comply with these rules and codes. Failure of the member to correct his or her wiring within a reasonable length of time after written notification shall be considered as noncompliance with these rules. SREC reserves the right to discontinue electric service until the member has changed his wiring as outlined above.
- The member shall be responsible for providing protection for the meter(s) from damage caused by falling ice, snow or other objects. In locations where the meter is not protected, the member shall provide a protective shield. (see [Appendix 12](#)) for structure specs.

The service specifications and diagrams for individual service requirements are as follows:

Specifications and Diagrams

The information in this section addresses questions most commonly asked by our members when applying for electric service. While this information covers Scenic Rivers Energy Cooperative's requirements for the electrical service entrance, it is **not** meant to replace state or national codes. For a copy of either code book, please contact:

National Electric Code

National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471
(800) 344-3555

Wisconsin State Electric Code

Madison, WI 53702

NOTE: Per State law and code you must contact a Wisconsin licensed master electrician to perform any electrical work.

Scenic Rivers Energy Cooperative
Wiring/Service Specifications and Recommendations

Conductor Types and Sizes

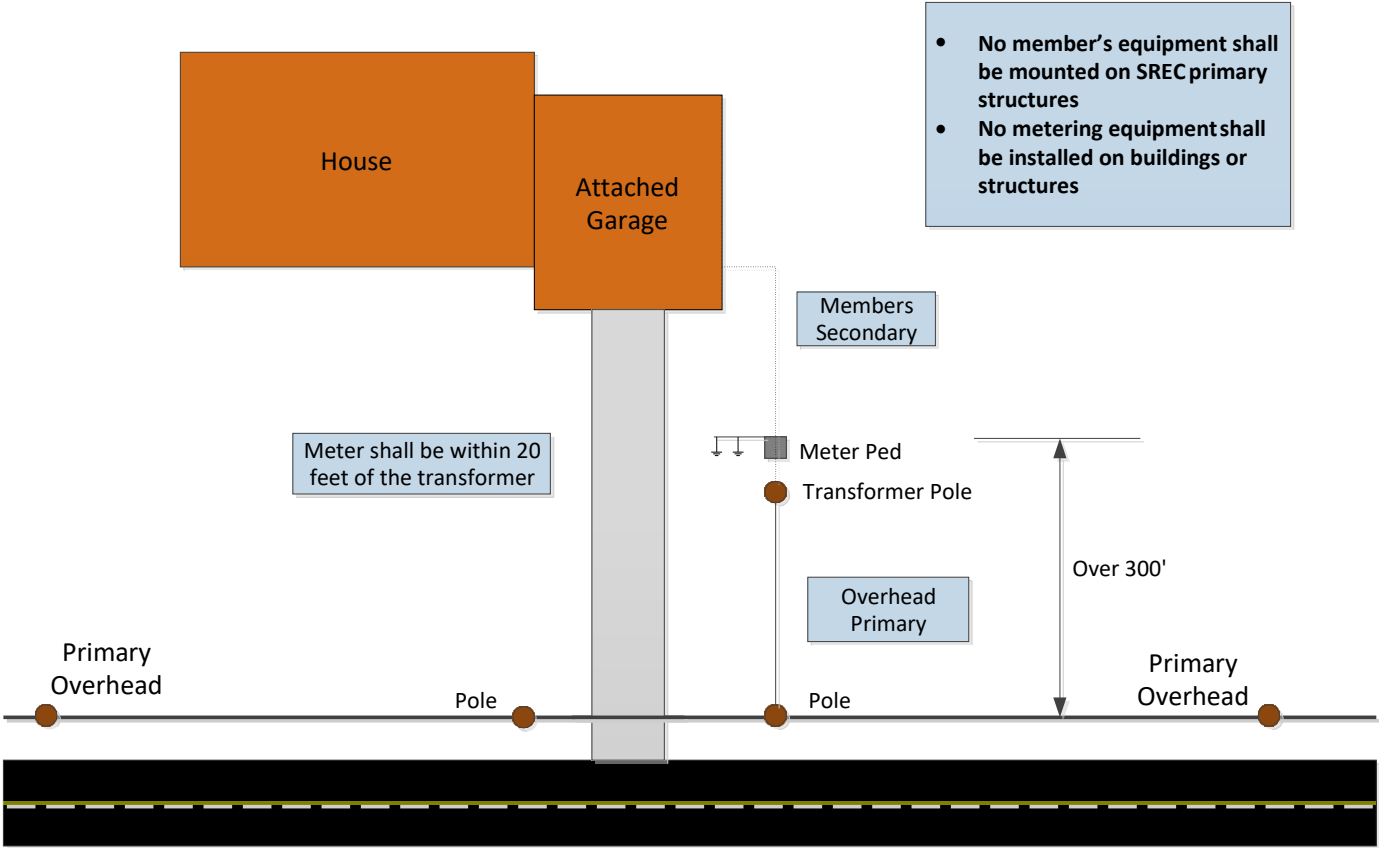
<u>Service Size</u>	<u>Minimum Sizes</u>	
	Copper	Aluminum
200-amp	No. 2/0	No. 4/0
320-amp	No. 4/0	No. 350MCM

Please see current code requirements for wire type and size.

Single-Family Dwellings

- Minimum meter sockets shall be 200-amp rating with 4 terminals (no matter what size load) with proper FCI rated overcurrent protection at the service point. All equipment must be UL listed and Type 3R outdoor rated. Please contact SREC for approval of all metering equipment prior to installation.
- Single family dwellings may have only one main service disconnect. Exception: A second main may be installed for (1) a different rate (Controlled Electric Heat). Service metering shall be rated to at least the rating of any disconnects and overcurrent protection

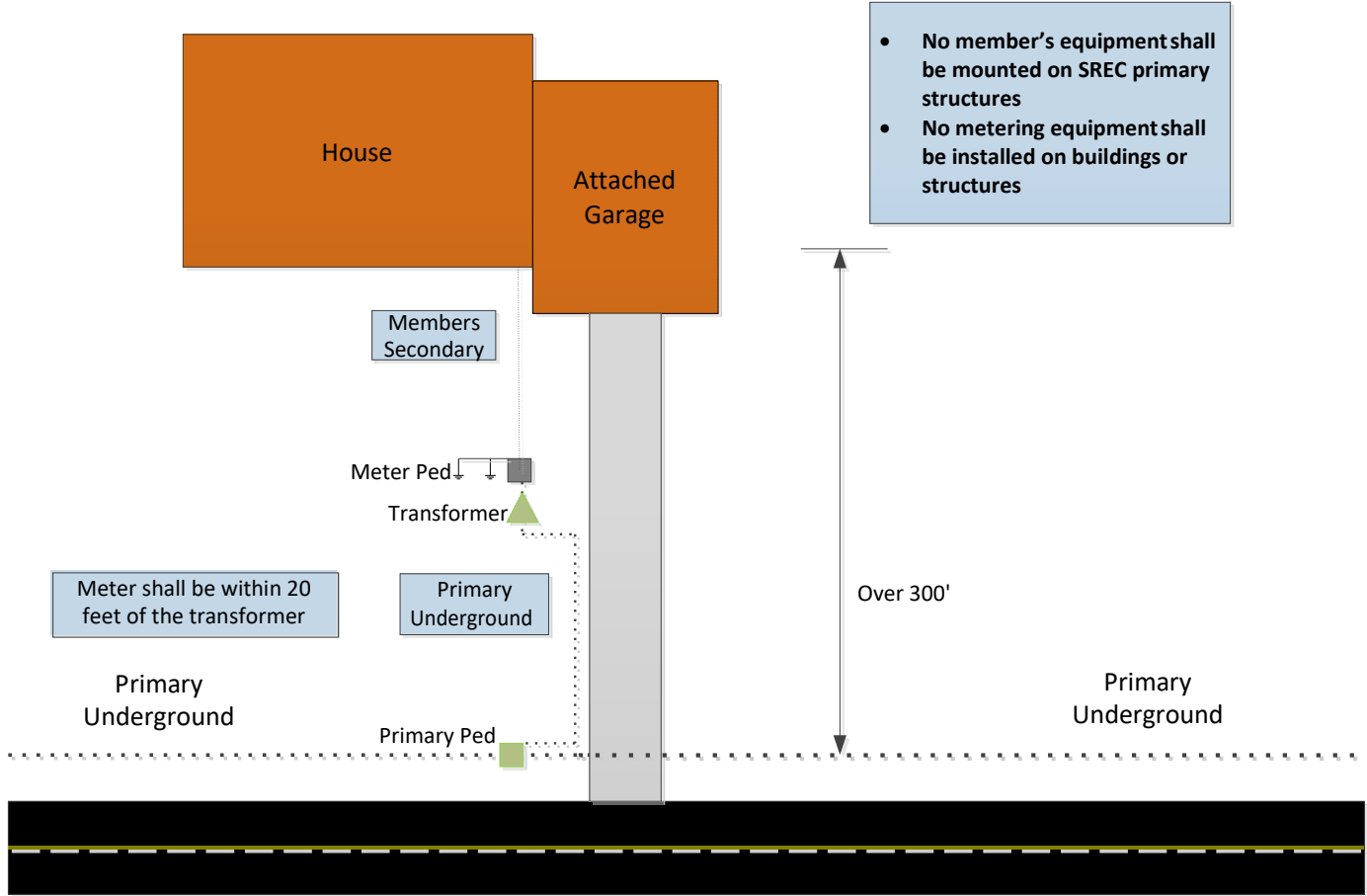
Placement Guide
New Service Metering Point
Over 300' From SREC Facilities
Primary Overhead line



Total Secondary (Utility and Member) Not to Exceed 300' to the Main Service Location

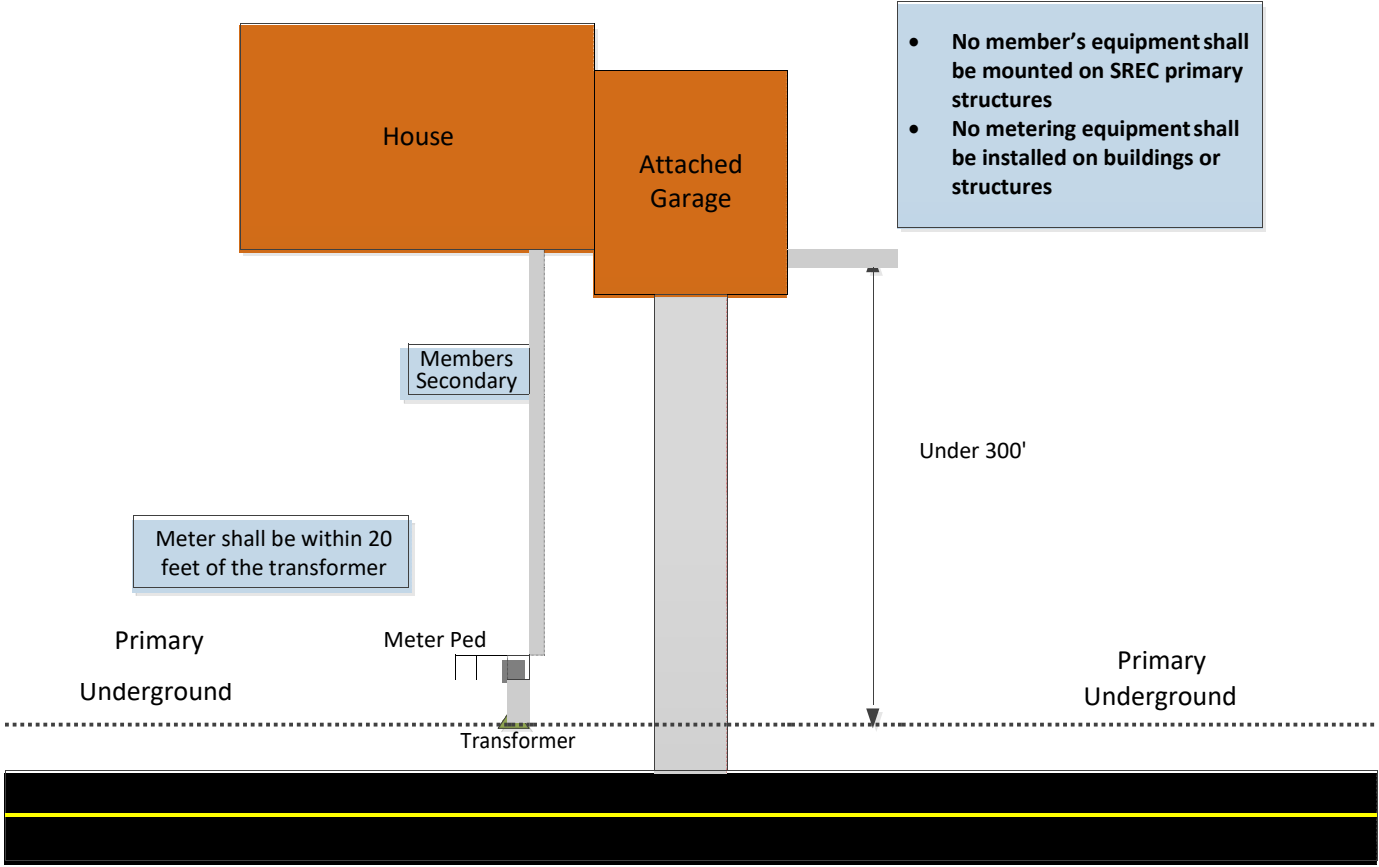
Last Revision Date: 1/20/2017

Placement Guide
New Service Metering Point
Over 300' From SREC Facilities
Underground Primary Line



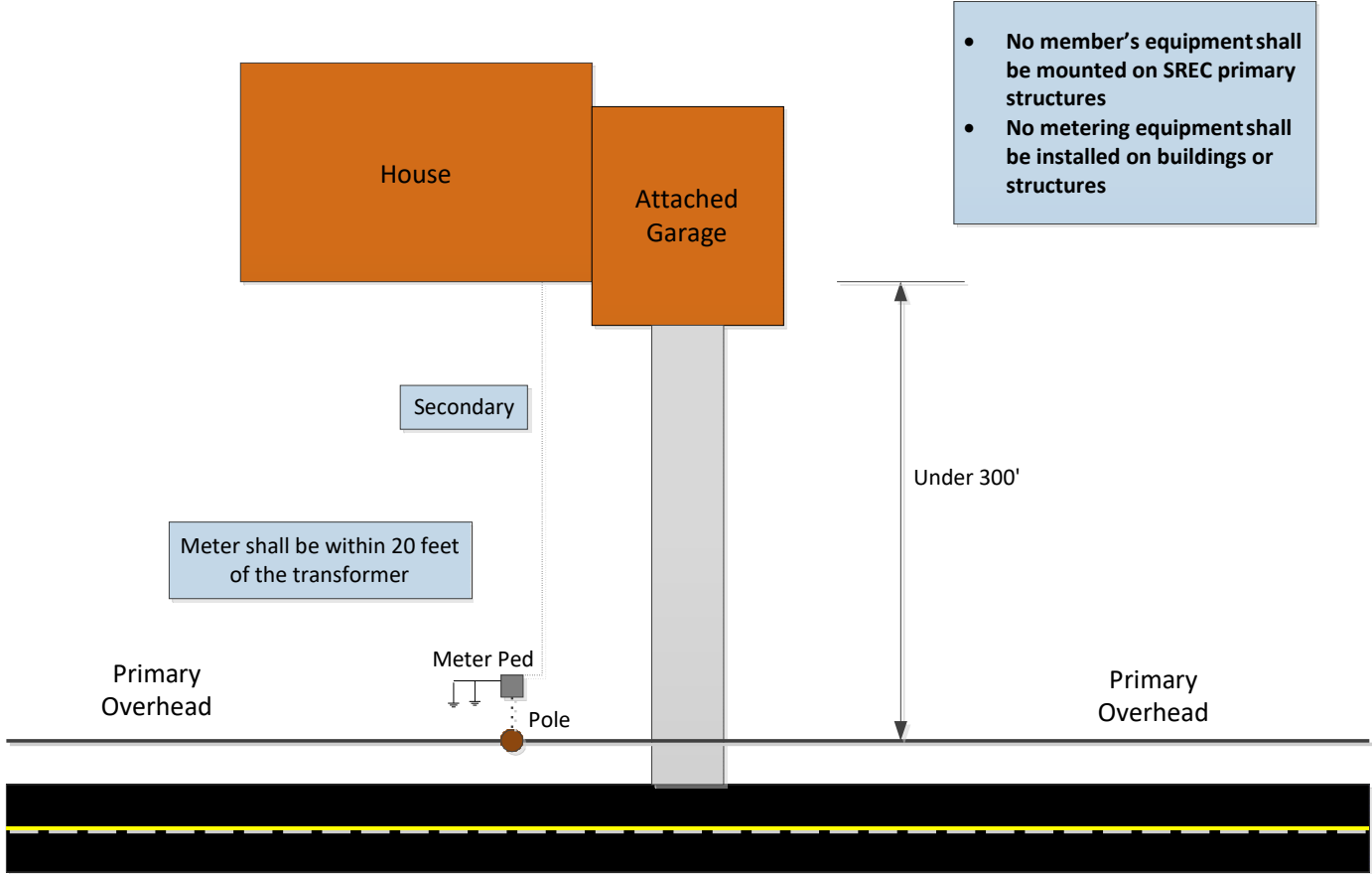
Total Secondary (Utility and Member) Not to Exceed 300' to the Main Service Location

Placement Guide
New Service Metering Point
Under 300' From SREC Facilities
Underground Primary Line



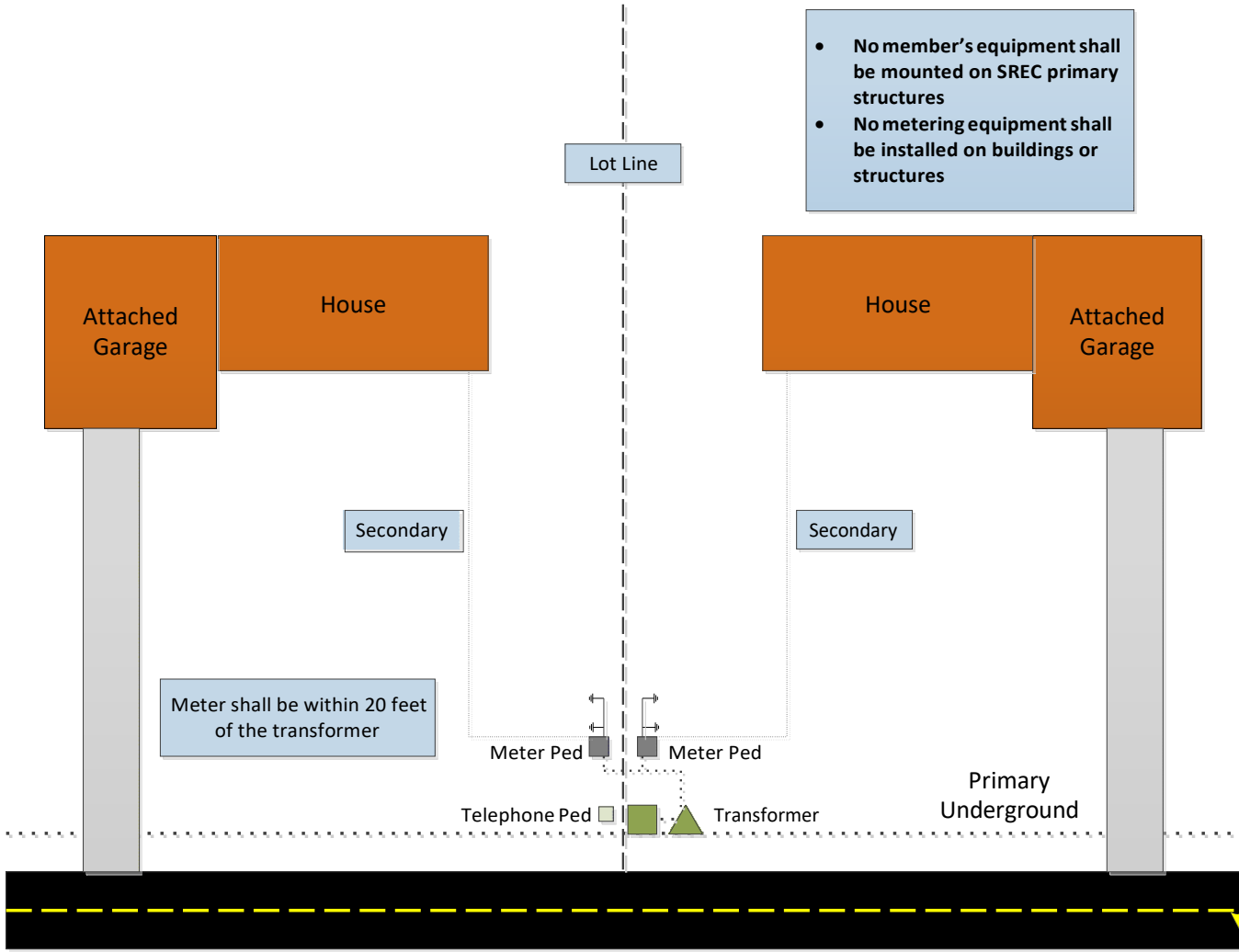
Total Secondary (Utility and Member) Not to Exceed 300' to the Main Service Location

Placement Guide
New Service Metering Point
Under 300' From SREC Facilities
Overhead Primary Line



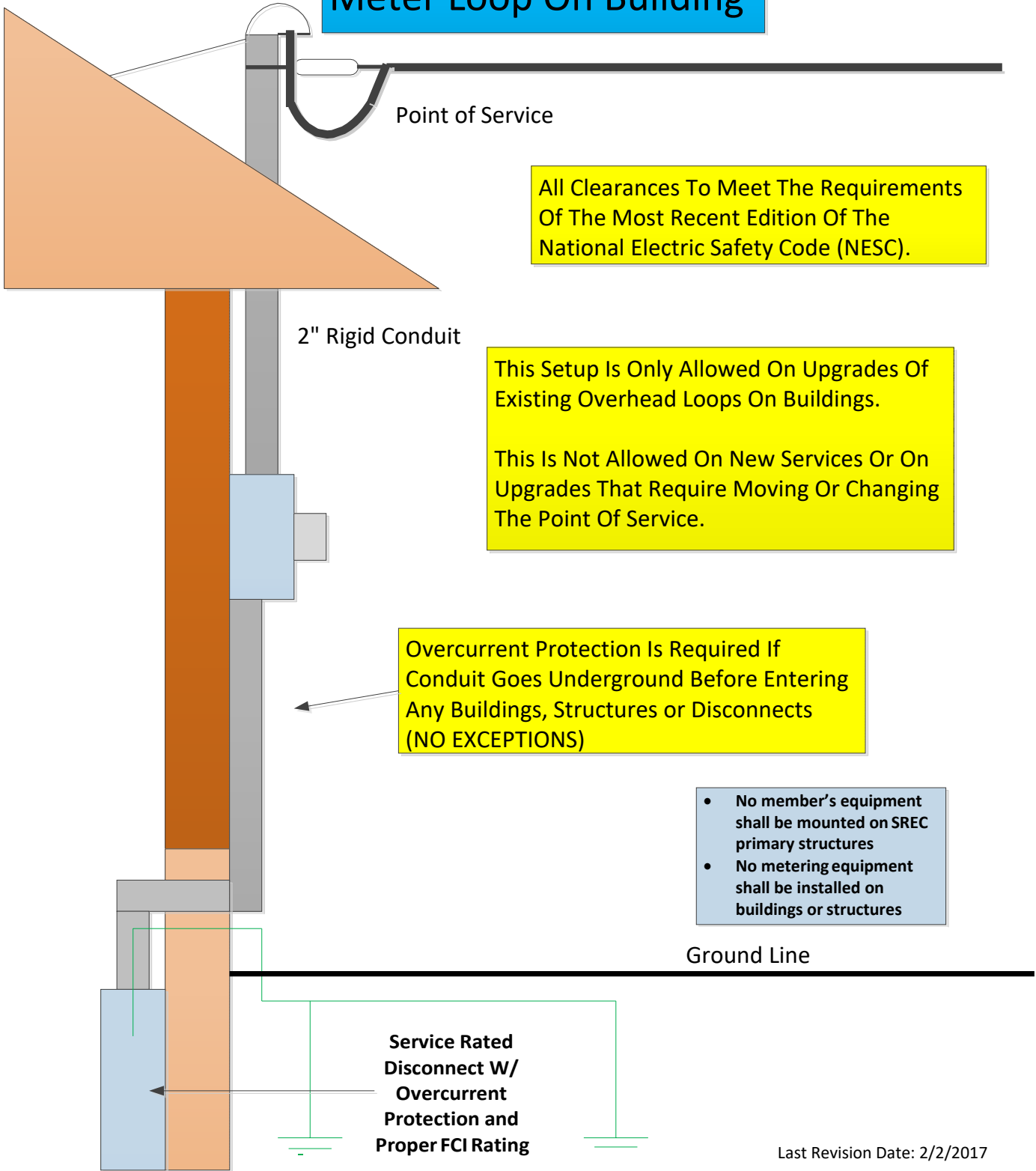
Total Secondary (Utility and Member) Not to Exceed 300'

Placement Guide New Service Metering Point Shared Lot Line



Total Secondary (Utility and Member) Not to Exceed 300' to the Main Service Location

Meter Loop On Building



Point of Service

All Clearances To Meet The Requirements Of The Most Recent Edition Of The National Electric Safety Code (NESC).

2" Rigid Conduit

This Setup Is Only Allowed On Upgrades Of Existing Overhead Loops On Buildings.
This Is Not Allowed On New Services Or On Upgrades That Require Moving Or Changing The Point Of Service.

Overcurrent Protection Is Required If Conduit Goes Underground Before Entering Any Buildings, Structures or Disconnects (NO EXCEPTIONS)

- No member's equipment shall be mounted on SREC primary structures
- No metering equipment shall be installed on buildings or structures

Ground Line

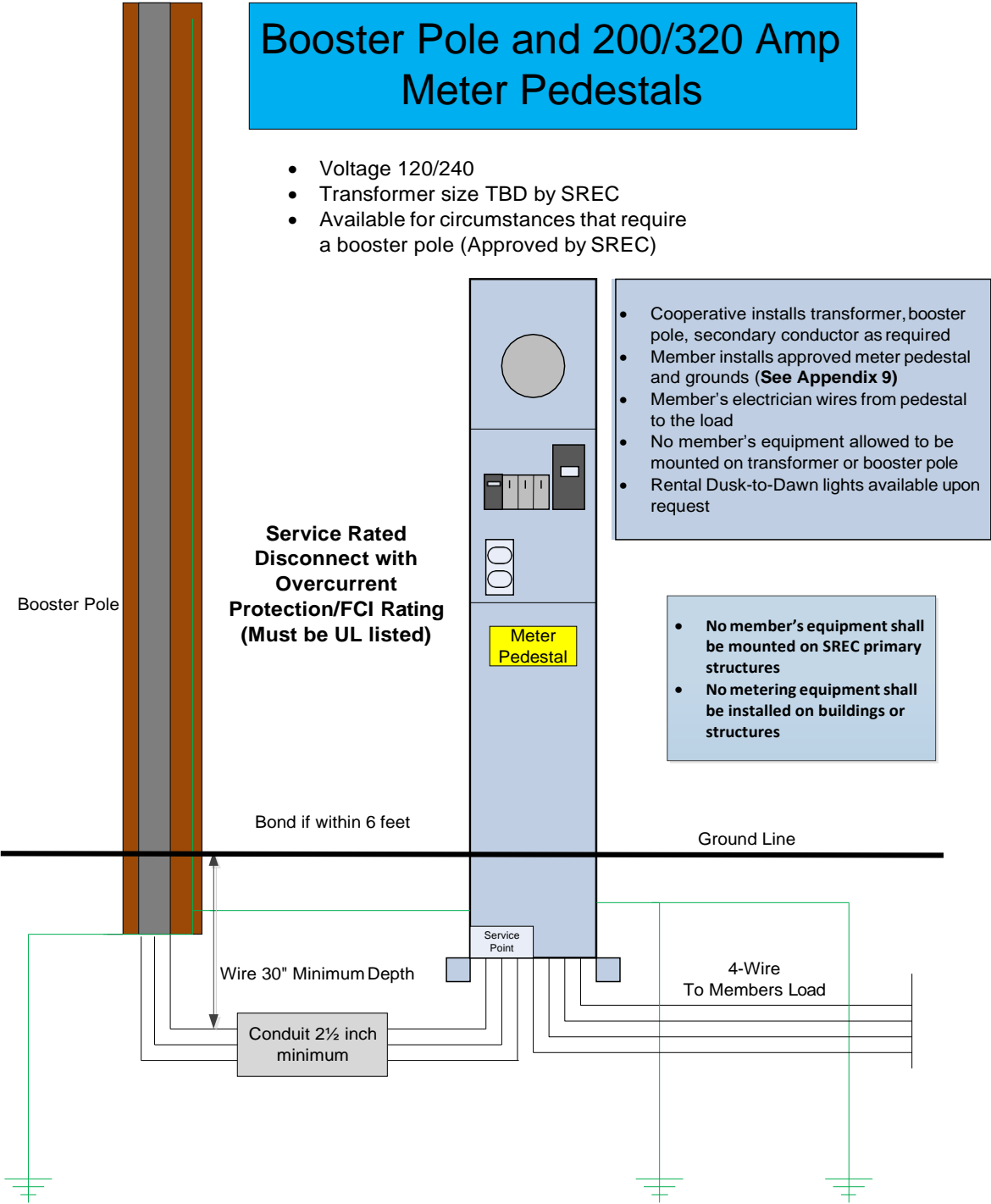
Service Rated Disconnect W/ Overcurrent Protection and Proper FCI Rating

Last Revision Date: 2/2/2017

Scenic Rivers Energy Cooperative
 Wiring/Service Specifications and Recommendations

**Booster Pole and 200/320 Amp
 Meter Pedestals**

- Voltage 120/240
- Transformer size TBD by SREC
- Available for circumstances that require a booster pole (Approved by SREC)



Last Revision Date: 12/2/2017

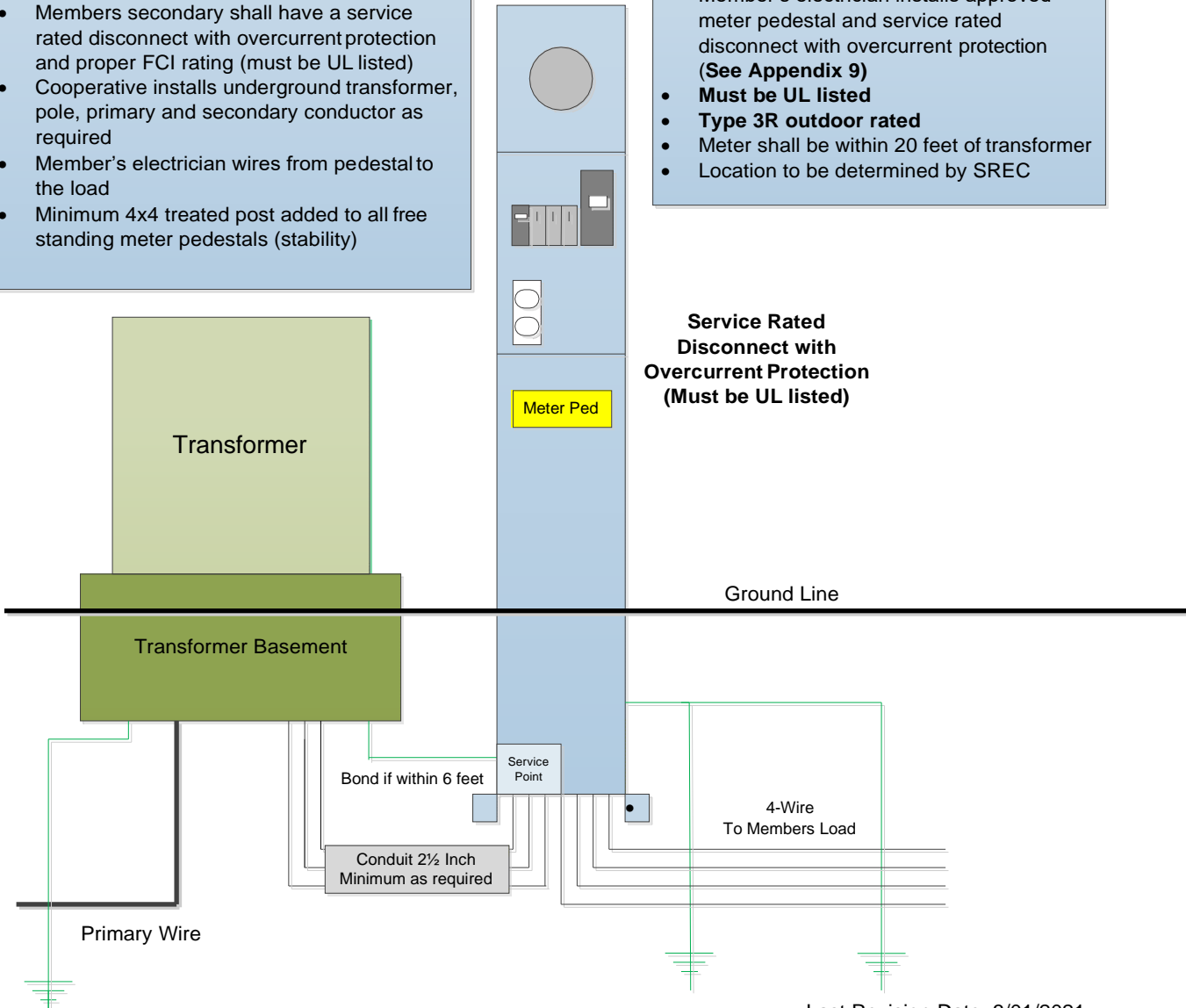
Scenic Rivers Energy Cooperative
 Wiring/Service Specifications and Recommendations

200 Amp Meter Pedestal

- Voltage 120/240
- Transformer size TBD by SREC
- KVA charge over 25KVA
- Location within 20 feet of transformer
- Transformer placement TBD by SREC

- Members secondary shall have a service rated disconnect with overcurrent protection and proper FCI rating (must be UL listed)
- Cooperative installs underground transformer, pole, primary and secondary conductor as required
- Member's electrician wires from pedestal to the load
- Minimum 4x4 treated post added to all free standing meter pedestals (stability)

- Member's electrician installs approved meter pedestal and service rated disconnect with overcurrent protection (**See Appendix 9**)
- **Must be UL listed**
- **Type 3R outdoor rated**
- Meter shall be within 20 feet of transformer
- Location to be determined by SREC



Last Revision Date: 3/01/2021

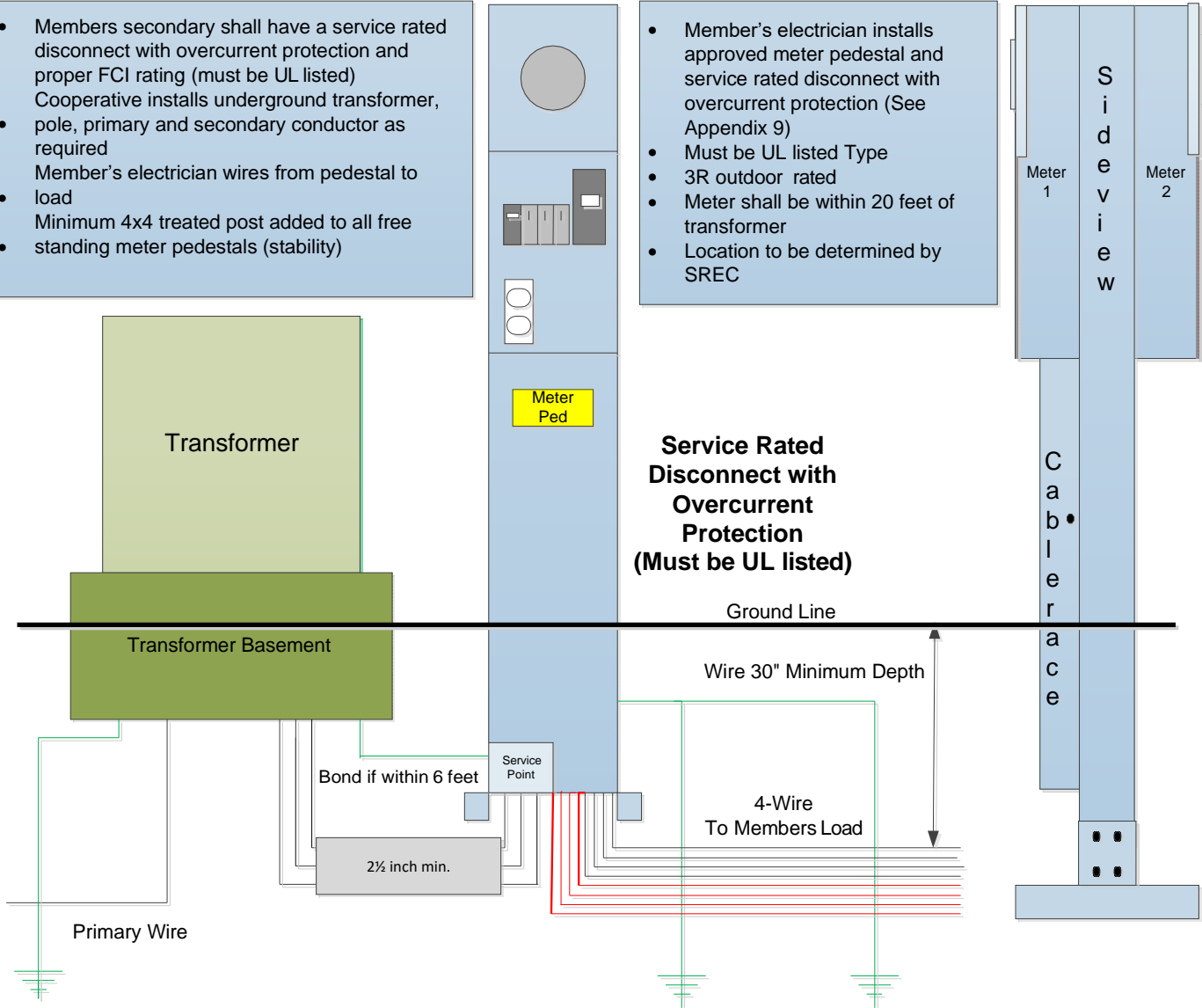
Scenic Rivers Energy Cooperative
 Wiring/Service Specifications and Recommendations

200 Amp Double Meter Pedestal

- Voltage 120/240
- Transformer size TBD by SREC
- KVA charge over 25KVA
- Location within 20 feet of transformer
- Transformer placement TBD by SREC

- Members secondary shall have a service rated disconnect with overcurrent protection and proper FCI rating (must be UL listed)
Cooperative installs underground transformer, pole, primary and secondary conductor as required
- Member's electrician wires from pedestal to load
- Minimum 4x4 treated post added to all free standing meter pedestals (stability)

- Member's electrician installs approved meter pedestal and service rated disconnect with overcurrent protection (See Appendix 9)
- Must be UL listed Type
- 3R outdoor rated
- Meter shall be within 20 feet of transformer
- Location to be determined by SREC



Last Revision Date: 3/01/2021

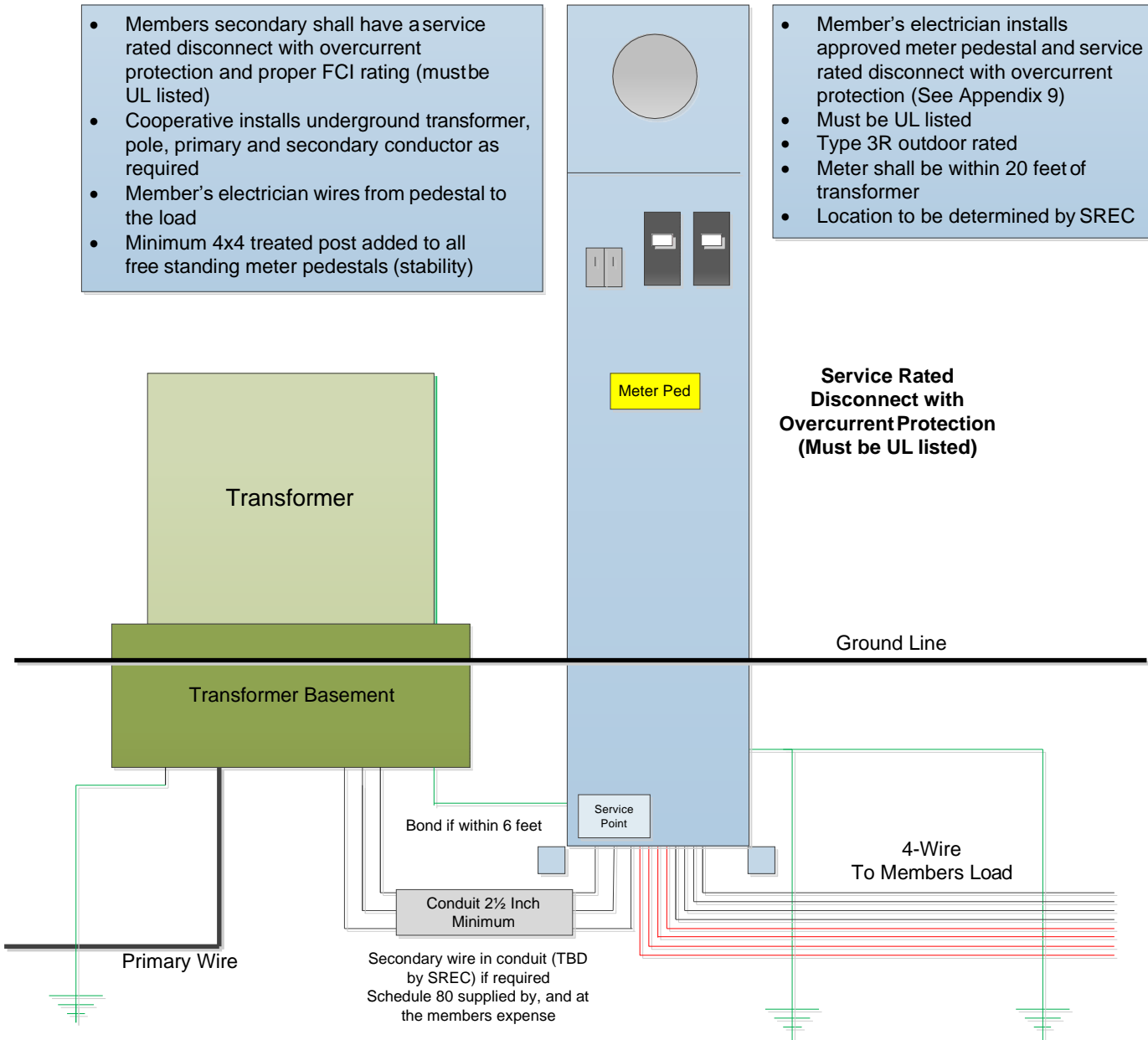
Scenic Rivers Energy Cooperative
 Wiring/Service Specifications and Recommendations

320 Amp Meter Pedestal

- Voltage 120/240
- Transformer size TBD by SREC
- KVA charge over 25KVA
- Location within 20 feet of transformer
- Transformer placement TBD by SREC

- Members secondary shall have a service rated disconnect with overcurrent protection and proper FCI rating (must be UL listed)
- Cooperative installs underground transformer, pole, primary and secondary conductor as required
- Member's electrician wires from pedestal to the load
- Minimum 4x4 treated post added to all free standing meter pedestals (stability)

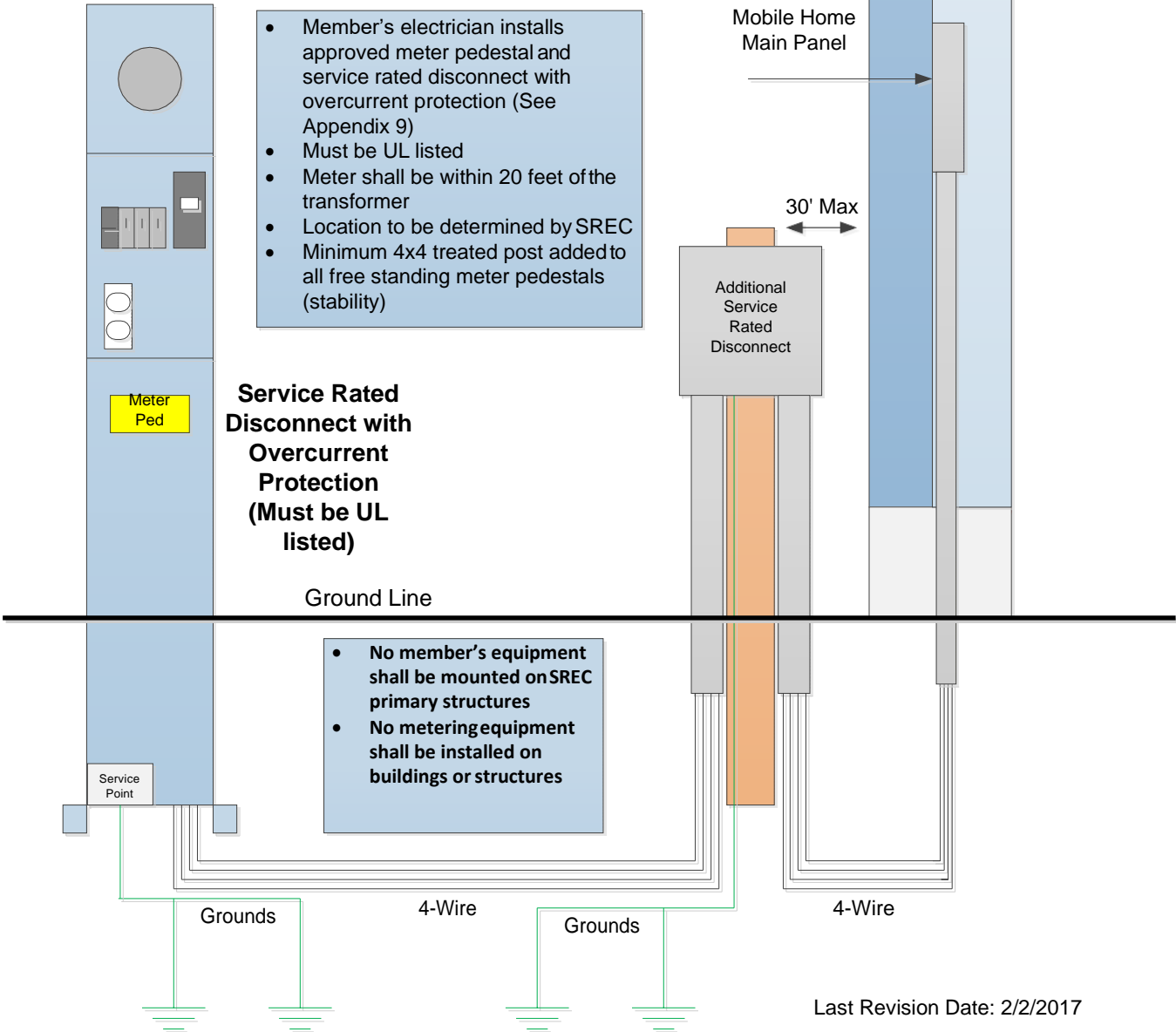
- Member's electrician installs approved meter pedestal and service rated disconnect with overcurrent protection (See Appendix 9)
- Must be UL listed
- Type 3R outdoor rated
- Meter shall be within 20 feet of transformer
- Location to be determined by SREC



Last Revision Date: 3/01/2021

Guide for Mobile Home

- Voltage 120/240
- Transformer size TBD by SREC
- KVA charge over 25 KVA
- Meter located within 20 feet of transformer
- If meter is more than 30 feet from home, an additional disconnect is required

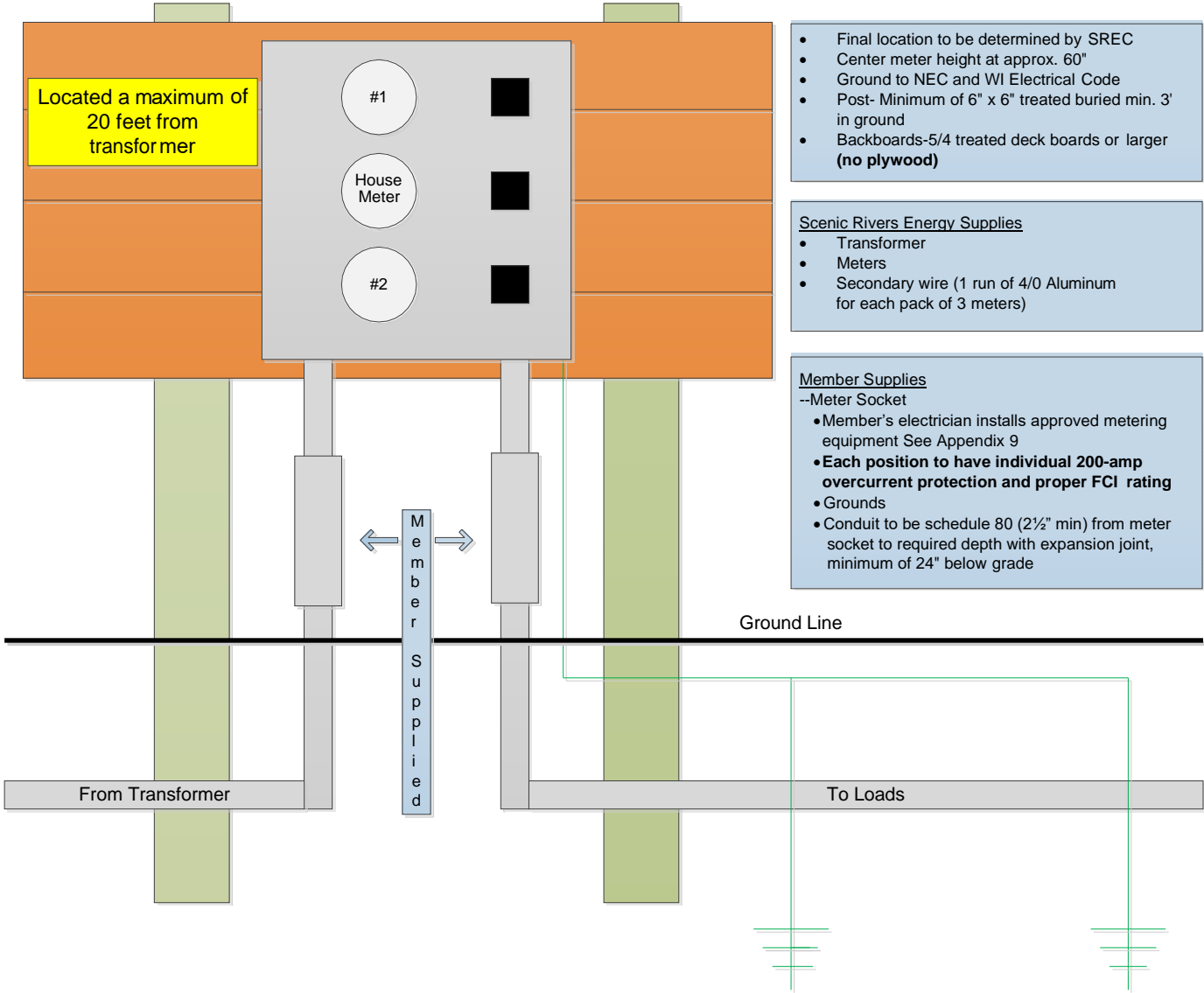


Last Revision Date: 2/2/2017

Scenic Rivers Energy Cooperative
Wiring/Service Specifications and Recommendations

Duplex Metering

- Voltage 120/240
- Transformer size TBD by SREC (Max. 50 KVA per 3 pack)
- Metering shall be located within 20 feet of the transformer
- Transformer location to be determined by SREC
- For pedestals with more than 2 meters, verification of meter locations must be made by both SREC and electrician prior to meter installation



Last Revision Date: 03/01/2021

Scenic Rivers Energy Cooperative
Wiring/Service Specifications and Recommendations

400 to 600 Amp Single Phase

- Voltage 120/240
- Transformer size TBD by SREC
- KVA charges per rate schedule
- Bond CT cabinet & meter socket to code

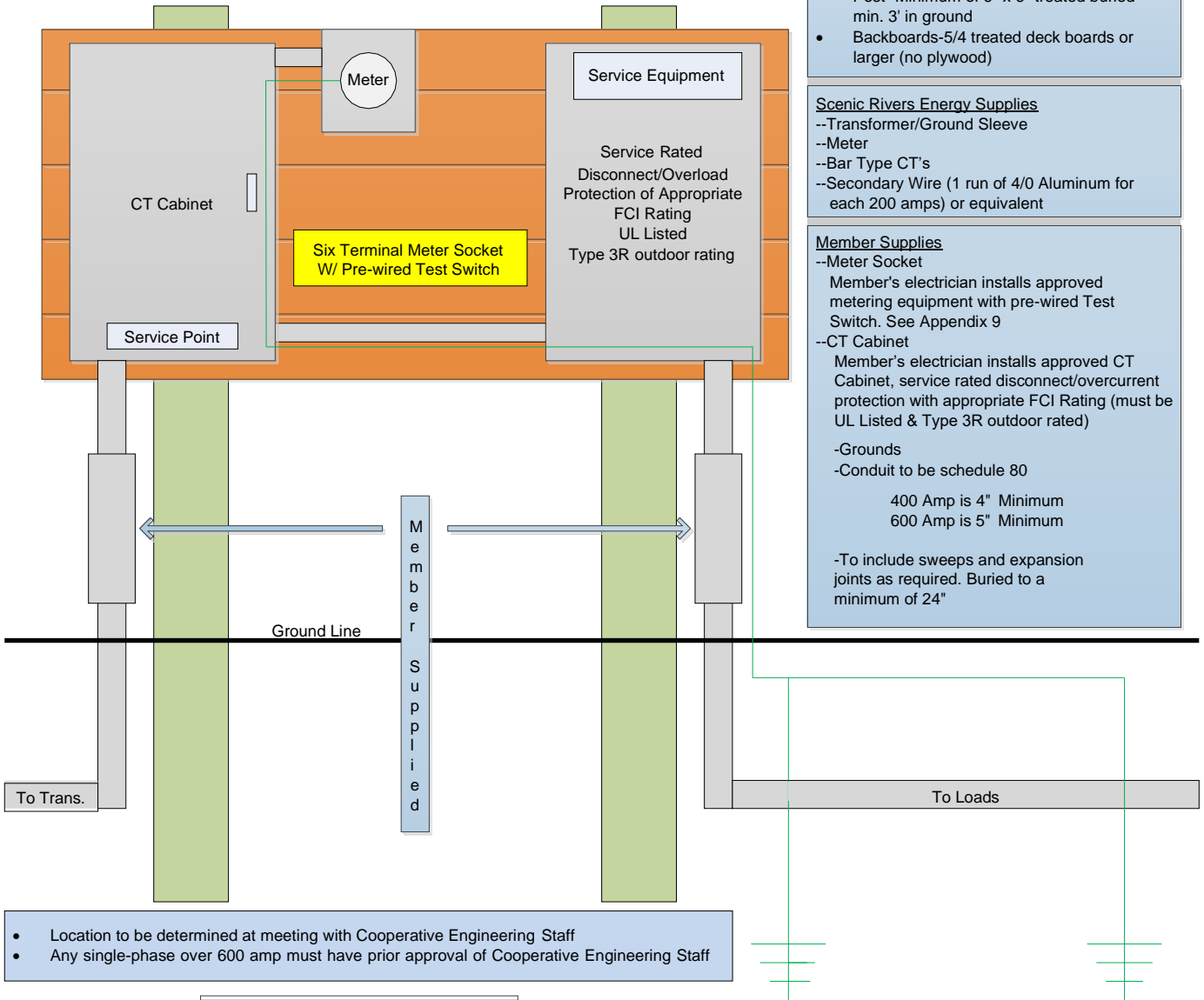
- Location within 20 feet of transformer
- Minimum of 12' from transformer if agricultural

- Meter height at approx. 60"
- Ground to NEC and WI Electrical Code
- Post- Minimum of 6" x 6" treated buried min. 3' in ground
- Backboards-5/4 treated deck boards or larger (no plywood)

- Scenic Rivers Energy Supplies
- Transformer/Ground Sleeve
 - Meter
 - Bar Type CT's
 - Secondary Wire (1 run of 4/0 Aluminum for each 200 amps) or equivalent

- Member Supplies
- Meter Socket
Member's electrician installs approved metering equipment with pre-wired Test Switch. See Appendix 9
 - CT Cabinet
Member's electrician installs approved CT Cabinet, service rated disconnect/overcurrent protection with appropriate FCI Rating (must be UL Listed & Type 3R outdoor rated)
 - Grounds
 - Conduit to be schedule 80

400 Amp is 4" Minimum
600 Amp is 5" Minimum
 - To include sweeps and expansion joints as required. Buried to a minimum of 24"



- Location to be determined at meeting with Cooperative Engineering Staff
- Any single-phase over 600 amp must have prior approval of Cooperative Engineering Staff

- **No member's equipment shall be mounted on SREC primary structures**
- **No metering equipment shall be installed on buildings or structures**

Last Revision Date: 3/01/2021

Scenic Rivers Energy Cooperative
Wiring/Service Specifications and Recommendations

400 to 600 Amp Single Phase w/Transfer Switch

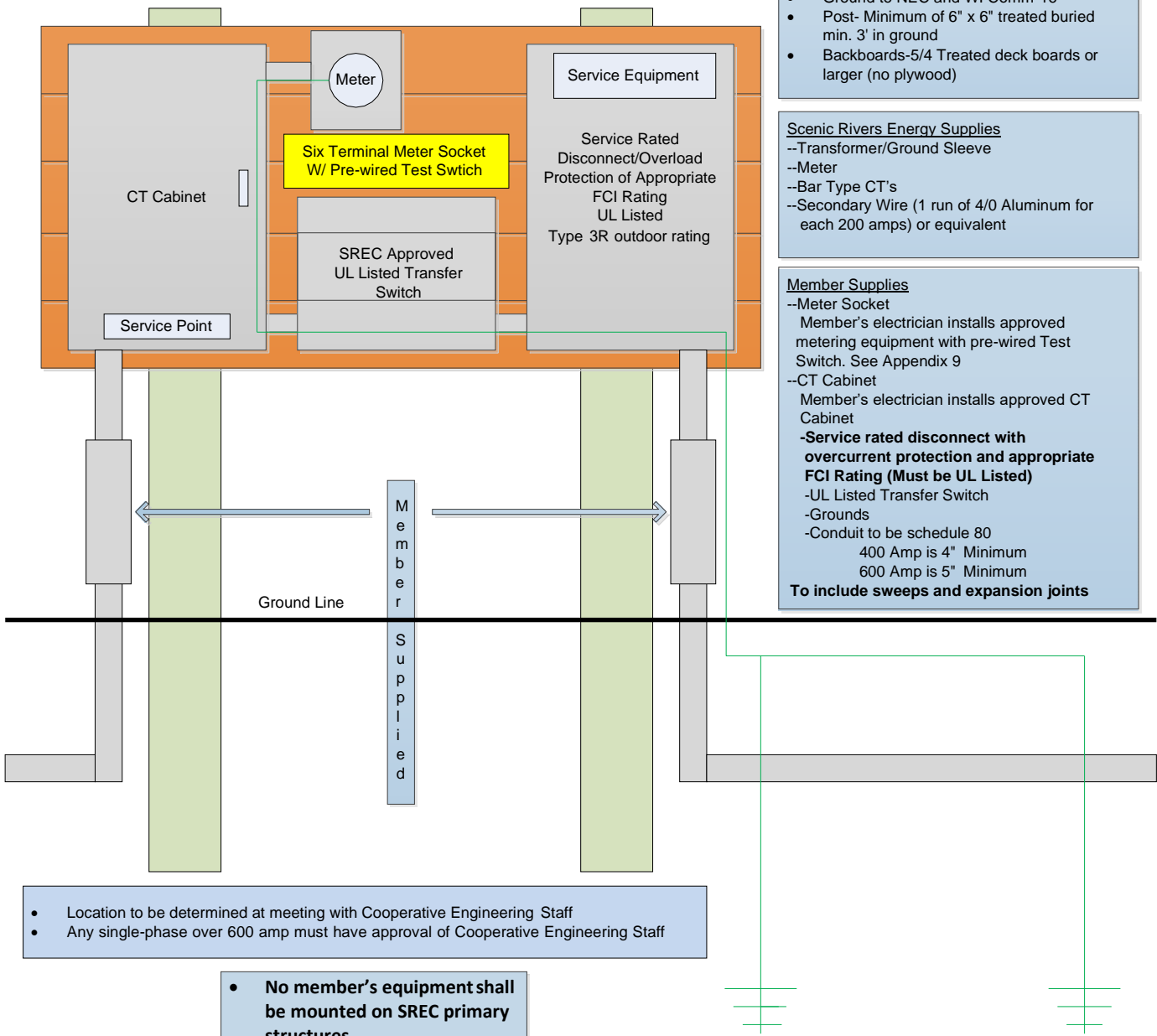
- Voltage 120/240
- Transformer size TBD by SREC
- KVA charges per rate schedule
- Bond CT cabinet & meter socket to code

- Location within 20 feet of transformer
- Minimum of 12' from transformer if agricultural

- Meter height at approx. 60"
- Ground to NEC and WI Comm 16
- Post- Minimum of 6" x 6" treated buried min. 3' in ground
- Backboards-5/4 Treated deck boards or larger (no plywood)

- Scenic Rivers Energy Supplies
- Transformer/Ground Sleeve
 - Meter
 - Bar Type CT's
 - Secondary Wire (1 run of 4/0 Aluminum for each 200 amps) or equivalent

- Member Supplies
- Meter Socket
 - Member's electrician installs approved metering equipment with pre-wired Test Switch. See Appendix 9
 - CT Cabinet
 - Member's electrician installs approved CT Cabinet
 - Service rated disconnect with overcurrent protection and appropriate FCI Rating (Must be UL Listed)**
 - UL Listed Transfer Switch
 - Grounds
 - Conduit to be schedule 80
 - 400 Amp is 4" Minimum
 - 600 Amp is 5" Minimum
 - To include sweeps and expansion joints**



- Location to be determined at meeting with Cooperative Engineering Staff
- Any single-phase over 600 amp must have approval of Cooperative Engineering Staff

- **No member's equipment shall be mounted on SREC primary structures**
- **No metering equipment shall be installed on buildings or structures**

Last Revision Date: 3/1/2021

400 to 800 Amp Three Phase

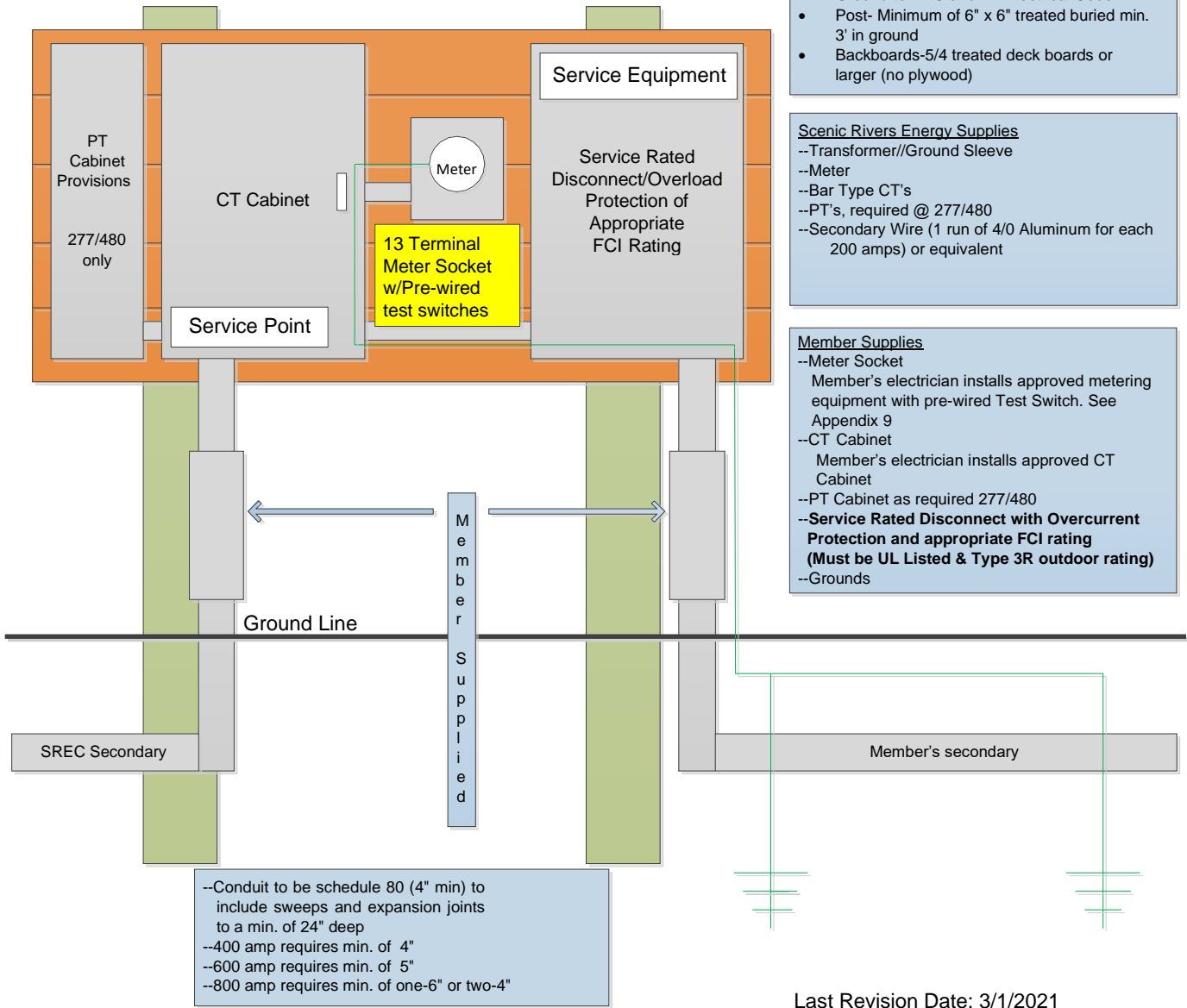
- Voltage 120/208 or 277/480
- Transformer size (225 KVA or smaller)
- KVA charges per rate schedule
- Metering located within 20 feet of transformer,
- Minimum of 12' if agricultural
- Bond CT cabinet & meter socket to code

- **No member's equipment shall be mounted on SREC primary structures**
- **No metering equipment shall be installed on buildings or structures**

- Meter Height at Approx. 60"
- Ground to NEC and WI Electrical Code
- Post- Minimum of 6" x 6" treated buried min. 3' in ground
- Backboards-5/4 treated deck boards or larger (no plywood)

- Scenic Rivers Energy Supplies
- Transformer//Ground Sleeve
 - Meter
 - Bar Type CT's
 - PT's, required @ 277/480
 - Secondary Wire (1 run of 4/0 Aluminum for each 200 amps) or equivalent

- Member Supplies
- Meter Socket
Member's electrician installs approved metering equipment with pre-wired Test Switch. See Appendix 9
 - CT Cabinet
Member's electrician installs approved CT Cabinet
 - PT Cabinet as required 277/480
 - Service Rated Disconnect with Overcurrent Protection and appropriate FCI rating (Must be UL Listed & Type 3R outdoor rating)**
 - Grounds

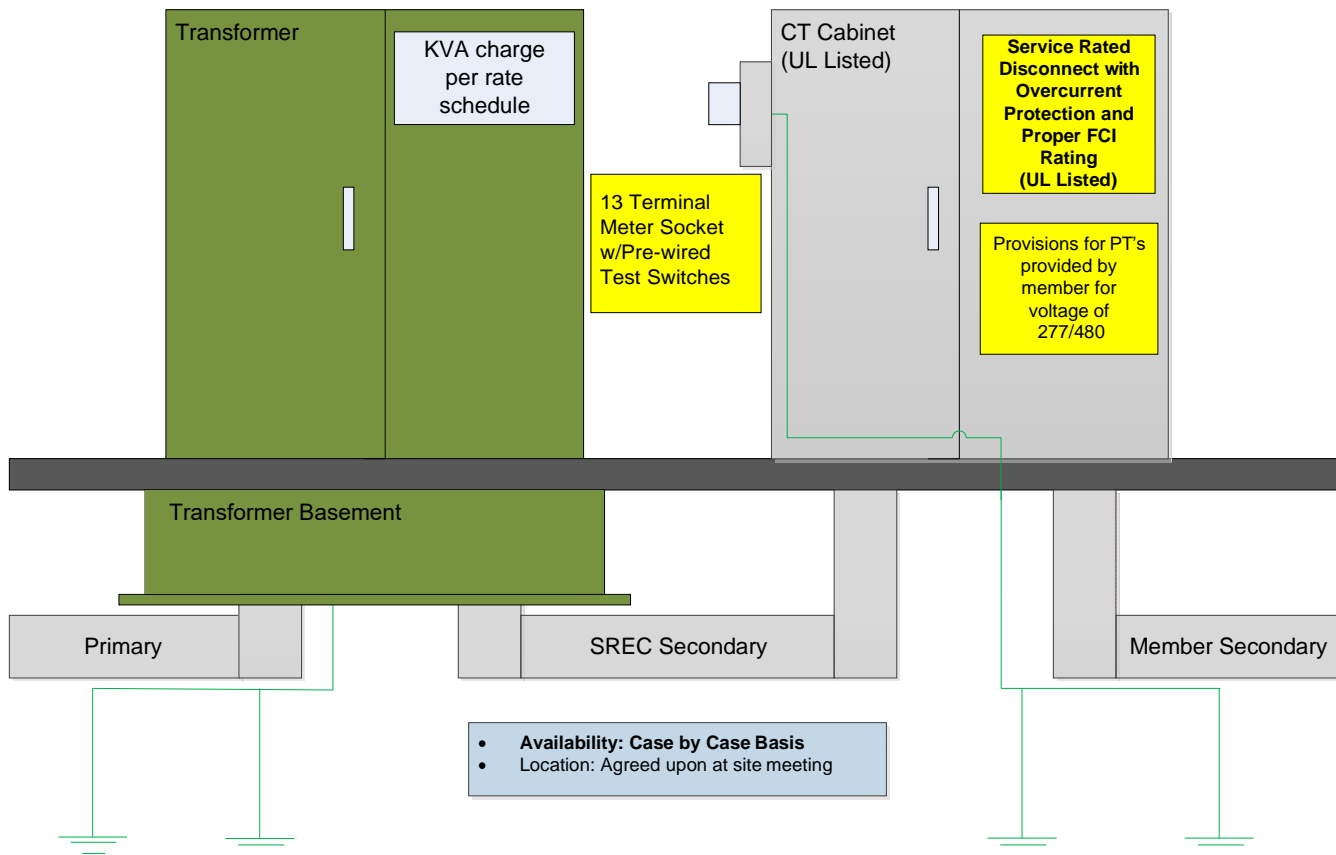


Last Revision Date: 3/1/2021

Scenic Rivers Energy Cooperative
Wiring/Service Specifications and Recommendations

1000 Amp and Larger Three-Phase

- Voltage 120/208 or 277/480
- Transformer size 300 KVA or Larger (KVA charges based on size of service)
- CT cabinet to be a minimum of 12' from the transformer if agricultural, maximum of 20' from transformer
- Final location to be determined by the Cooperative
- Bond CT cabinet & meter socket to code



Member Supplies
 --Meter Socket
 Member's electrician installs approved metering equipment with pre-wired 10 pole test switch. See Appendix 9
 --Cement Pad to incorporate
 --CT Cabinet/Overcurrent Protection (**UL Listed**)
 --CT cabinet **W/Service Rated Disconnect W/Overcurrent Protection and proper FCI Rating (Must be UL Listed)**
 --PT provisions as required (277/480V)
 --Raceway and/or required conduit for SREC secondary
 --Grounds per NEC and WI Elec. Code

--Conduit to be schedule 80 (6" min) per run between Transformer and CT Cabinet

Scenic Rivers Energy Supplies
 --Transformer/Ground Sleeve
 --Meter
 --Bar or Finger Type CT's as determined by SREC
 --PT's for (277/480 only)
 --Secondary Wire (1 run of 4/0 Aluminum for each 200 amps) or equivalent.

- **No member's equipment shall be mounted on SREC primary structures**
- **No metering equipment shall be installed on buildings or structures**

Last Revision Date: 3/1/2021