SERVICE - ELECTRIC PLUG-IN VEHICLE
Sub-Meter Socket Installation

REFERENCE USE ONLY

Published: 11-01-23
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USE : Requirements for installation of plug-in electric vehicle (PEV) car charging station sub-meter socket.
Note: Special installation no longer approved for new construction. Standard is kept for reference use only.

STANDARD ORIGINATED	PREVIOUS STANDARD REVISION	PREVIOUS STANDARD NUMBERS
04-12	04-01-12	-

REVISION SUMMARY: Convert to current format. General revision. Noted standard is for informational use only.

REFERENCE(S): (All references are latest revision; unless noted)

National Standard(s)

a. Association of Edison Illuminating Companies (AEIC®)
b. ANSI C2: National Electrical Safety Code® (NESC®)
c. ANSI C12.7: Requirements for Watthour Meter Sockets
d. Edison Electric Institute (EEI)
e. Indiana Electrical Code / National Electrical Code® (IEC/NEC®)
f. National Electrical Manufacturers Association (NEMA)
g. Underwriter Laboratories® (UL®) 414: Meter Sockets

NIPSCO Standard(s)

h. Tariff Rider 685 (Valid 02/01/12 to 01/31/17): Plug- in Electric Vehicle Off-Peak Charging Rider (Pilot Program)
i. Electric Rules Standard ER 13-230: Meters - Location
j. Electric Rules Standard ER 19-900: Standards of Work

SPECIFICATIONS:

1. METER SOCKETS:

1.1. Shall meet the following specifications, unless otherwise stated below.
1.2. Shall be designed for use with standard detachable-type watthour meters.
1.3. Shall meet requirements of AEIC, EEI, NEMA standards for watthour meter sockets.
1.4. Shall have swing-style latch accepting padlock or wire-style seal.
1.5. Shall be made of aluminum alloy or galvanized steel.
1.6. Shall be ringless type.
1.7. Shall be UL listed.
1.8. Shall be provided with concentric knockouts on back, sides, and bottom.
1.9. Shall include by-passes shall be of manual, horn, or lever type, arranged such that the meter socket cannot be sealed with the by-pass on.
1.10. Shall be provided with a grounding connector for a #6 conductor.
1.11. Shall be plainly marked with manufacturer name, catalog number, and electrical ratings
1.12. Shall be rated for 100 amperes.
1.13. Shall include bonding bushings and jumpers used to maintain electrical continuity to service equipment enclosures when the entire concentric knockout is not removed.

2. INSTALLATION:

2.1. The sub-meter socket shall be installed as close as possible to the existing service entrance meter socket (while maintaining specified clearances per NIPSCO ER 13-230) and shall be installed five feet from top of meter opening.

2.2. Properly sized 240-volt wiring and circuit breaker shall be installed for PEV car charging station.

2.3. PEV car charging station shall be connected as a dedicated feed in such manner that customers shall not have other loads connected to this feed.

2.4. Sub-meter socket shall be labeled "SUB-METER FOR CAR CHARGING STATION". (See **Section 3**)

2.5. All PEV car charging station installations shall comply with all applicable codes and standards, including but not limited to codes listed in the reference section of this standard.

2.6. PEV car charging station sub-meter installations must be approved by an authorized municipal, county, or other governmental inspector, where such inspection procedures are established, and by a final inspection by a NIPSCO representative.

2.7. PEV car charging station and sub-meter socket installation is the sole ownership and responsibility of the customer. NIPSCO will provide watthour meter for proper billing purposes.

3. PEV SUB-METER SOCKET INSTALLATION:

Typical PEV sub-meter socket installation:

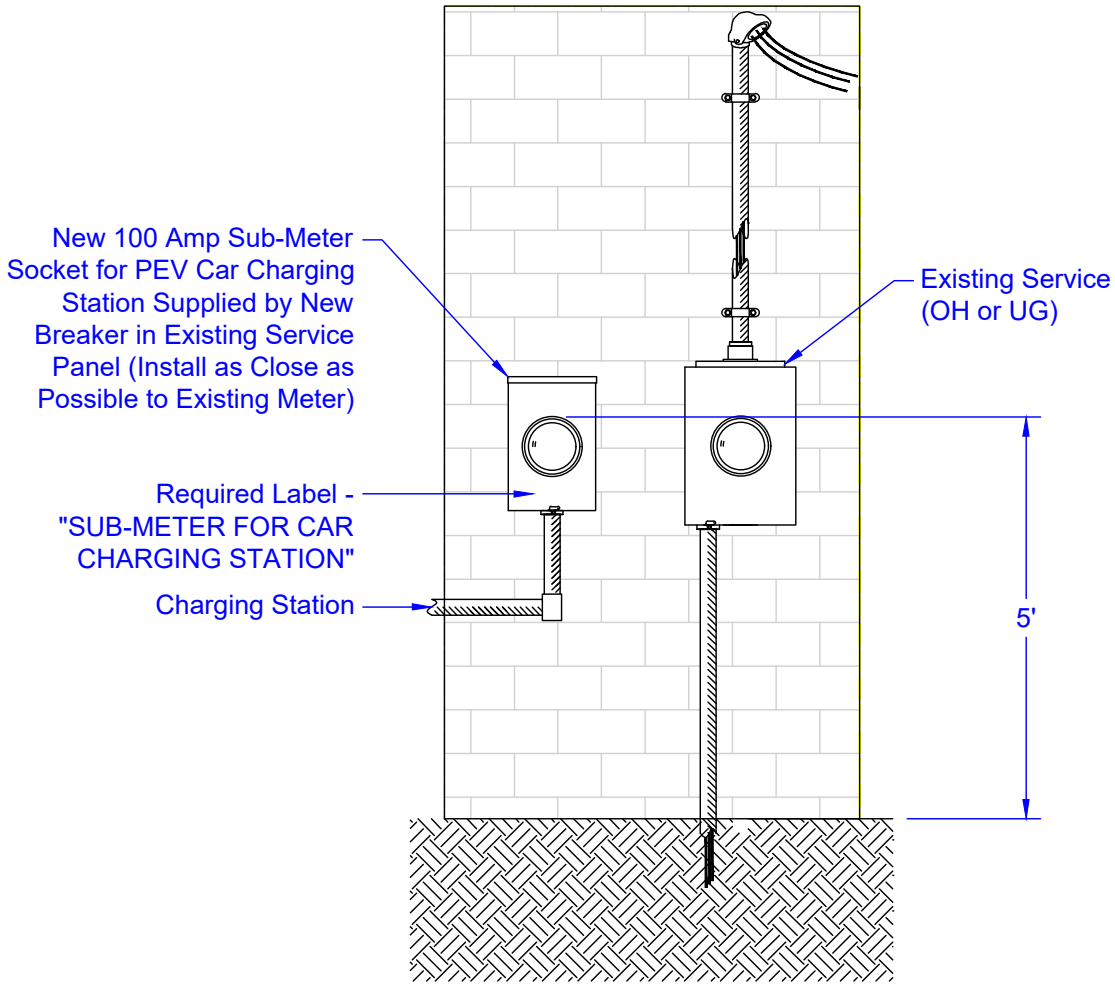

Figure 3

4. CUSTOMER SERVICE PANEL DETAIL:

Typical customer service panel new wiring circuit for PEV car charging station:

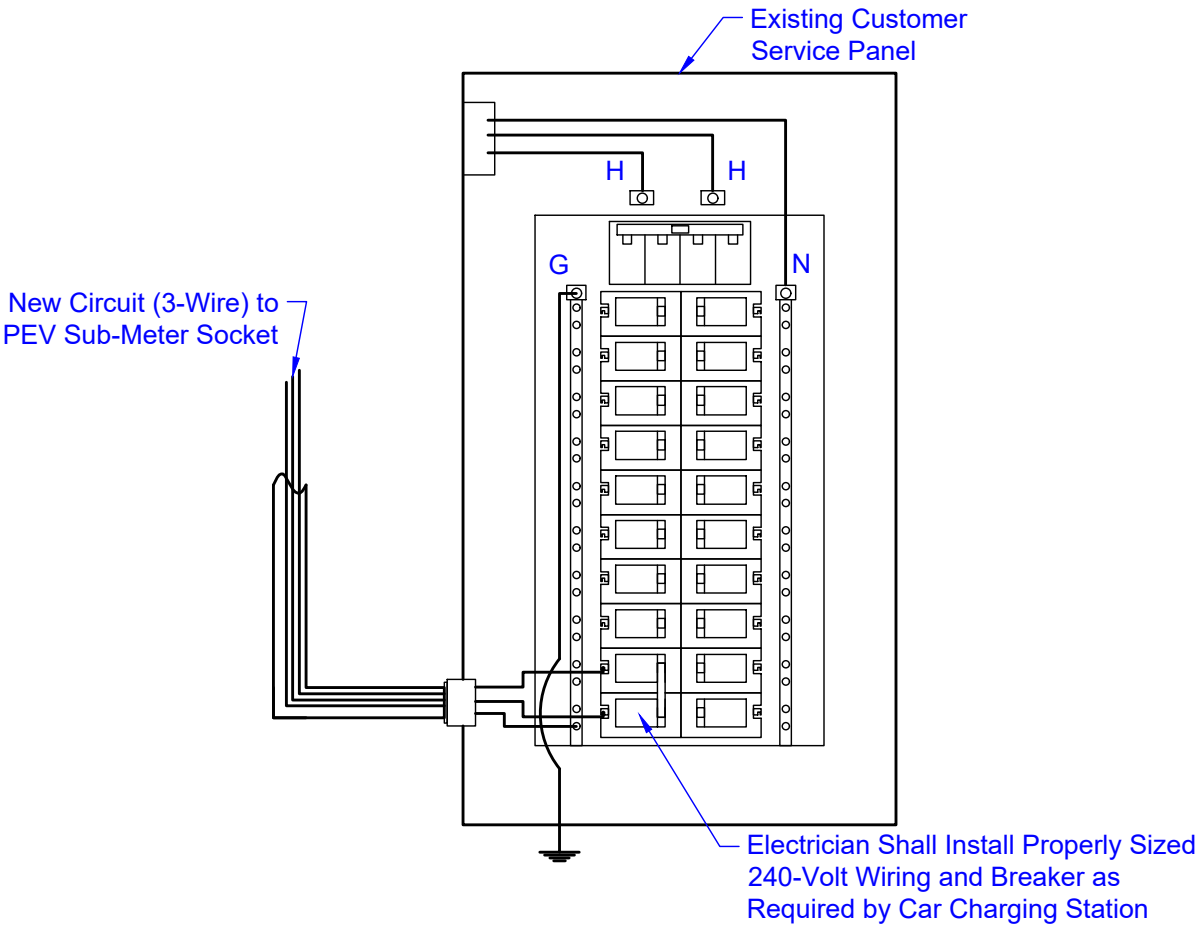

Figure 4

5. PEV SUB-METER SOCKET DETAIL:

PEV sub-meter socket wiring detail:

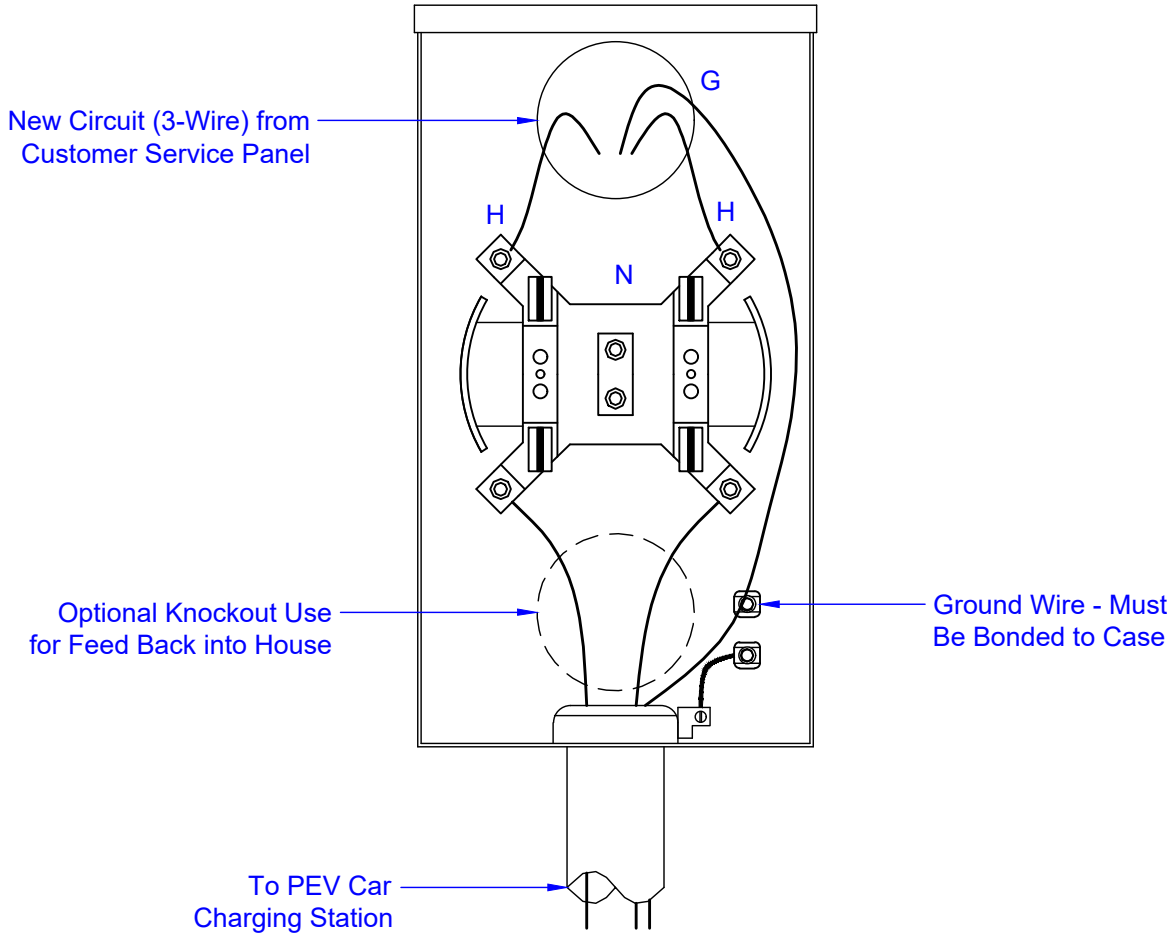

Figure 5