

The OESC 28th Edition Proposals for Ontario Amendments

Proposal Number: 2021-OA-017

Rule 75-902

Description of Change: Revised Rule 75-902 to recognize ground mounted central

metering systems.

Submitted by: CM system working group

Background: There has been an increased number of underground customer owned primary installations to an embedded supply authority's pad mounted transformer.

Rationale: Amended rule since central metering systems can be either pole mounted or padmounted. There are no rules in the OESC that will permit the central metering system to be supplied from a pad mounted transformer.

Proposed Change:



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75-902 Central metering system (CMS) (See Appendix B)

The following requirements shall apply to the central metering system (CMS):

- a) A standard pole-mounted distribution transformer without a secondary breaker or pole-mounted switch Permitted to be used to supply multi-service installations when
 - i) there is no customer-owned equipment between the supply authority's embedded transformer (s) and the demarcation point supply authority interface (excluding surge arresters and conductor); and
 - ii) written assurance has been received from a supply authority stating it owns and controls the embedded transformer (s).
- b) Each building shall have a disconnecting means, and where the disconnecting means is a service box, it shall be installed as per Section 6.
- c) Voltage drop of the service conductors from the transformer to the service box shall meet the requirements of not exceed 3% based on 80% of the service switch or a calculated load as per Section 8. e) d) New Oeverhead yard wiring shall; be
 - i) be neutral-supported cable with a minimum of No. 2 AWG aluminum; and,
 - ii) when parallel conductors are installed, shall comply with Rule 12-108 when parallel conductors are installed; and or
 - ii) iii) notwithstanding Item c) i), for over 200 A, open wire bus shall be permitted where circuit ampacity exceeds 200 A. as open wire for over 200 A.
- e) The minimum ampacity of overhead or underground conductors feeding more than one service or building shall be based on 80% of the sum of the ratings of all service boxes supplied.
- e) f) Transformer pole hardware and metering equipment shall be in accordance with Specifications 41, 42, and 43.
- g) pad mounted installations shall be in accordance with Specification 41.1. meet the requirements of the supply authority.
- f) h) CMS-type service systems shall not have more than four subdivisions services of the service extending from a transformer pole.



8 - consumer service conductors

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Add new Appendix B 75-902 g) as follows: Shown below is an example of a pad mounted central metering installation. Figure B75-1 Central metering system- pad mounted installation G See note 3 (\mathbb{H}) į 6 (C) H1B 9-9 GRADE See note 1 8 1 = 6 in x 6 in x 10 ft pressure treated post 1. Foundation installation determined by the supply authority. 2. Meter base installed inside the ground gradient loop. Bond meter 2 = % in PVC conduit base to transformer ground loop. 3 = cable straps 3. Meter base type to be determined by the supply authority. 4 = approved meter base 4. Height of meter base to finished grade determined by the supply 5 = post cap 6 = current transformers 7 = wiring for metering No. 12 copper. Colour coding and number of conductors shall be as required by the supply authority