THE MANITOBA HYDRO ACT (C.C.S.M. c. H190)

# Manitoba Electrical Code

Regulation 76/2018 Registered June 15, 2018

#### Adoption of Canadian Electrical Code, Part I, 24th edition

**1** Subject to section 3 and the amendments set out in the Schedule, the *Canadian Electrical Code*, Part I, 24th edition, CSA Standard C22.1-18, is incorporated by reference as part of this regulation and is adopted as the electrical code for Manitoba.

# Interpretation

**2** In this regulation, a reference to "the code" or "this code" (whether capitalized or not) is a reference to the *Canadian Electrical Code*, Part I, 24th edition, CSA Standard C22.1-18, as amended by the Schedule.

# Application of code

**3** This code governs the construction, installation, maintenance, repair, extension, alteration and use of electric wiring and related facilities using or intended to use power supplied by Manitoba Hydro, except within the City of Winnipeg and in mines and quarries as defined in *The Mines and Minerals Act*.

# Referring to code

**4** This code may be referred to as the *Manitoba Electrical Code*, 13th Edition.

# Repeal

**5** The Manitoba Electrical Code, Manitoba Regulation 124/2015, is repealed.

# Coming into force

**6** This regulation comes into force on August 1, 2018 or on the day it is registered under *The Statutes and Regulations Act*, whichever is later.

June 15, 2018

The Manitoba Hydro-Electric Board:

Marina James Chair of the Board

# SCHEDULE (Section 1)

### AMENDMENTS TO THE CANADIAN ELECTRICAL CODE, PART I

1 For the purpose of this regulation, the Canadian Electrical Code, Part I, 24th edition, CSA Standard C22.1-18, is amended as set out in this Schedule.

# Amendments to Section 0 — Object, Scope, and Definitions

#### 2 Section 0 is amended

# (a) by replacing the definitions "Approved" and "Inspection department" with the following:

**Approved** (as applied to electrical equipment) —

- 1) equipment that has been certified by a certification organization accredited by the Standards Council of Canada in accordance with the requirements of
  - a) CSA Group Standards; or
  - b) other standards that have been developed by a standards development organization accredited by the Standards Council of Canada, or other recognized documents, where CSA Group Standards do not exist or are not applicable, provided that such other standards or other recognized documents
    - i) are correlated with provisions of the *CE Code*, *Part I*; and
    - ii) do not create duplication with standards already listed in Appendix A;
- 2) equipment that conforms to the requirements of the regulatory authority (see Appendix B);
- equipment that has been given special acceptance by Manitoba Hydro; or
- 4) equipment that has been given special acceptance by the Minister of Labour and Immigration for Manitoba.

Inspection department means Manitoba Hydro.

(b) by adding the following definitions:

**Chief electrical inspector** — the person designated by Manitoba Hydro as the chief electrical inspector.

**Manitoba Building Code** — the most recent version of the regulation entitled "Manitoba Building Code", made under *The Buildings and Mobile Homes Act*.

# Amendments to Section 2 — General Rules

#### Rule 2-004

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#### Rule 2-004 (Permit) is replaced with the following:

#### 2-004 Electrical permits and requirements respecting work under a permit

- 1) No electrical work with respect to the installation, alteration, repair or extension of any electrical equipment shall commence until an electrical permit is issued by the inspection department.
- 2) Notwithstanding Subrule (1), a person licensed under *The Electricians' Licence Act* (Manitoba) is not required to have an electrical permit for the following electrical work:
  - a) the replacement or repair of wiring devices with an electrical rating no greater than 30 amperes, 150 volts to ground and not associated with a location as described by section 18 or 20 of this Code;
  - b) the replacement or repair of electrical equipment with an electrical rating no greater than 30 amperes, 150 volts to ground and associated with a dwelling unit;
  - c) the installation of voice, data or video equipment within a dwelling unit; or
  - d) electrical installations
    - i) when the cost of labour and materials (excluding the cost of utilization equipment supplied by the circuitry) does not exceed two hundred dollars (\$200) as determined by the inspection department in accordance with the current schedule of electrical permit fees;
    - ii) that are not associated with a hazardous location as described by sections 18 or 20 of this Code;
    - iii) that are not part of a consumer's service; and
    - iv) that do not involve the replacement or addition of distribution panels, fusible switches, motor controllers and similar equipment.
- 3) An electrical permit may be issued to
  - a) a person licensed under *The Electricians' Licence Act (Manitoba)* to perform any work that is permitted by the person's licence;
  - b) an allied tradesperson licensed by the Province of Manitoba to perform any electrical work that is permitted by the person's licence;

- c) a qualified person as defined in the *Canada Occupational Safety and Health Regulations* under the *Canada Labour Code* for the purposes of work on premises regulated by those regulations; or
- d) an owner of residential premises if
  - i) the applicant occupies or will occupy the premises as a dwelling;
  - the premises, if it is a building, stands alone or is separated from any other occupancy or other part of the building by a fire wall or fire separation;
  - iii) the work to be performed is not in a hazardous location as defined in this Code;
  - iv) the work to be performed does not include generators or renewable energy systems as defined in this Code;
  - v) the work to be performed does not include swimming pools or hot tubs;
  - vi) the work to be performed does not include a consumer's service; and
  - vii) the electrical rating of the installation in or on any land, building or premises does not exceed 150 volts to ground, single phase and 200 amperes.
- 4) An annual electrical permit may be issued for electrical work of a routine nature in connection with the maintenance or operation of a building or plant that is required to be performed at frequent intervals if the owner or occupant of the building or plant employs their own electricians for that purpose and agrees to
  - a) keep a record of the work that is performed;
  - b) produce this record to the inspection department upon request;
  - c) pay to the inspection department the fees that the inspection department charges for an annual permit; and
  - d) pay in full any outstanding fees due to a change in status of the building or plant before the permit is renewed.
- 5) An application for an electrical permit must be made to the inspection department giving the location and ownership of the premises in, on or about which electrical work is to be done, the purpose of the work, details of the installation as required by Rule 2-014 and any other particulars required by the inspection department.
- 6) If an application is approved by the inspection department, an electrical permit will be issued.

- 7) The inspection department may refuse to issue an electrical permit if
  - a) electrical work done previously by the applicant has not been completed to the satisfaction of the inspection department; or
  - b) there are outstanding fees on previous work done by the applicant.
- 8) A permittee must notify the inspection department as soon as the electrical work authorized by the electrical permit is completed or when an inspection is required.
- 9) At the request of the permittee, or in other circumstances determined by the chief electrical inspector, the inspection department may inspect the electrical installation pursuant to the electrical permit. If the installation conforms to this Code and the appropriate fees have been paid in full in accordance with the current schedule of electrical permit fees, the inspection department will, on request, issue a certificate of approval.
- 10) The chief electrical inspector may establish terms and conditions for the registration of electricians and electrical contractors for the purposes of this Code, based on criteria including but not limited to safety and compliance with this Code. The inspection department may elect to forgo inspections if the permittee or an electrician employed by the permittee has been registered by the inspection department. An electrician must
  - a) notify the inspection department when an installation has been completed; and
  - b) supply the inspection department with a signed declaration that the installation complies with this Code. The inspection department reserves the right to audit and inspect installations by registered electricians for compliance with this Code and the schedule of electrical permit fees.
- 11) The inspection department may direct the alteration or repair of an existing electrical installation that does not conform with the requirements of this Code.
- 12) If an application for an electrical permit is refused or a permittee does not agree with an electrical inspection report, defect notice or interpretation of Code rules issued on any particular installation, an appeal may be made in writing to the office of the chief electrical inspector. The appeal must specify what is being appealed, the reasons for the appeal and the decision requested.
- 13) The inspection department may do any or all of the following:
  - a) prohibit the use of an installation until it is inspected, tested and approved;
  - b) direct the permittee to carry out and produce results of tests on equipment as considered necessary to ensure that the installation is properly installed.

- 14) An electrical permit expires 90 days after the date it is issued unless the installation authorized by the electrical permit is commenced or the inspection department, in its discretion, grants an extension.
- 15) An electrical permit expires 12 calendar months after the date it is issued unless the installation authorized by the electrical permit is not completed and the inspection department, in its discretion, grants an extension.
- 16) The issuance of an electrical permit does not obligate the owner of the premises to have the work done by the permittee.

# Rule 2-006

4 Rule 2-006 (Application for inspection) is struck out.

# Rule 2-008

# 5 Rule 2-008 (Fees) is replaced with the following:

# 2-008 Fees

- 1) The amount of any fee payable for electrical permits or inspection of electrical installations is as specified by the inspection department in the schedule of electrical permit fees.
- 2) The inspection department has the right at any time to make adjustments in the electrical permit fee payable as a result of additions or deletions to the work specified in the electrical permit or to correct errors in the calculation of fees made at the time the electrical permit was issued.
- 3) The inspection department will refund any fee paid for an unused electrical permit if application is made within one year of the date of the issuance of the electrical permit, but reserves the right to deduct an amount equal to any costs and expenses that it incurs in connection with the permit and refund and will in any case deduct an amount equal to the current minimum fee.

# Rule 2-010

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Rule 2-010 (Posting of permit) is struck out.

# Rule 2-014

# Rule 2-014 (Plans and specifications) is replaced with the following:

# 2-014 Plans and specifications

- 1) Plans and specifications are required for
  - a) electrical installations when
    - i) the ampacity of the service entrance equipment exceeds 200 amperes single phase or the supply service is multi-phase; or
    - ii) the installation operates at voltages in excess of 750 volts;

- b) installations covered by Section 18, 20, 22, 24, 36 or 64 of this Code; and
- c) other installations as the inspection department may require.
- 2) Plans and specifications required by Subrule (1) must be submitted to the inspection department for acceptance before an electrical permit may be issued.
- 3) Plans and specifications must be prepared and signed by, and bear the seal of, a professional engineer registered to practice in Manitoba and fully qualified in the application of this Code
  - a) for an installation covered by Section 18, 20, 24 or 36 of this Code, unless the inspection department considers it unnecessary that the plans and specifications be prepared, signed or sealed by an engineer; or
  - b) if the inspection department considers them necessary for any other installation.
- 4) The responsible professional engineer must submit a letter to the inspection department stating his or her responsibility for the review of construction for the installation to ensure conformity with the approved plans and specifications. Note: Subrule (1) still applies.
- 5) On completion of an installation under Subrule (4), the responsible professional engineer must submit a letter stating:

"I hereby certify that I, or another suitably qualified person that reports to me, have reviewed the installation for compliance with the plans and specifications provided to the inspection department. The installation complies with the requirement of the current version of the *Manitoba Electrical Code*."

6) When current transformer revenue metering is required for an installation, plans and a list of loads, as required by Manitoba Hydro's Customer Metering Standards, are required to be submitted before the revenue metering will be ordered by the inspection department.

# Rule 2-025

# 8 The following is added to the Code after Rule 2-024 (Use of approved equipment):

#### 2-025 Special acceptance inspection

A special acceptance inspection may be made of electrical equipment that is not approved by or does not bear the approval mark of an accredited certification organization. In general, this applies to electrical equipment

- a) of other than a regular line of manufacture;
- b) manufactured or produced singly or in small quantities; or
- c) built to a customer's order.

#### Rule 2-030

# 9 Rule 2-030 (Deviation or Postponement) is replaced with the following:

### 2-030 Deviation or postponement

Notwithstanding Subrule 2-004(9), the inspection department may by special permission approve an installation that does not conform to the standards established by this Code when, in the inspection department's opinion, the installation provides a standard of safety equivalent to the standard provided by this Code. The request for special permission must specify the aspects of the installation that do not conform to the Code and the equivalent electrical requirements and must be submitted prior to proceeding with the work.

#### Amendments to Section 4 — Conductors

# Rule 4-004(22)

10(1) Subrule (22) of Rule 4-004 (Ampacity of wires and cables) and Table 39 are struck out.

#### Rule 4-004(27)

# 10(2) The following is added to the Code after Subrule (26) of Rule 4-004 (Ampacity of wires and cables):

27) If other derating factors are applied to reduce the conductor ampacity, the conductor size shall be the greater of that so determined or that determined by Rule 8-104 (5) or (6).

# Rule 4-006(2)

# 11 Subrule (2) of Rule 4-006 (Temperature limitations) is replaced with the following:

2) For the purpose of Subrule (1) and except as provided for by other Rules of this Code, where the maximum conductor termination temperature for equipment is not marked, the maximum conductor termination temperature is deemed to be 75°C.

#### Rule 4-022(2)

12 Subrule (2) of Rule 4-022 (Installation of identified conductor) is struck out.

#### Rule 4-030(3)

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8 Subrule (3) of rule 4-030 (Use of identified conductors) is struck out.

### Amendments to Section 6 — Services and Service Equipment

# Rule 6-212(3)

14 Subrule (3) of Rule 6-212 (Wiring space in enclosures) is struck out.

# **Rule 6-400**

# 15 Rule 6-400 (Metering equipment) is amended by renumbering it as Rule 6-400(1) and adding the following as Subrule (2):

2) To determine the type of metering equipment required by the supply authority, reference shall be made to supply authority metering standards. In the case of a conflict between those standards and Rules 6-402 to 6-412, the standards prevail.

#### Amendments to Section 8 — Circuit Loading and Demand Factors

#### Rule 8-102(1)

# 16 Subrule (1) of Rule 8-102 (Voltage drop) is replaced with the following:

#### Rule 8-102 (Voltage drop) (see Appendices A and B)

- 1) The voltage drop in an installation shall be based on the connected load of the branch circuit if known. Otherwise, the voltage drop shall be based on 80% of the rating of the overload or overcurrent device protecting the branch circuit or feeder and shall not exceed
  - a) 3% in a feeder or branch circuit; and
  - b) 5% from the supply side of the consumer's service (or equivalent) to the point of utilization.

#### Rules 8-106(5) and (9)

17(1) Subrules (5) and (9) of Rule 8-106 (Use of demand factors) are struck out.

#### Rule 8-106(12)

# 17(2) The following is added to the Code after Subrule (11) of Rule 8-106 (use of demand factors):

12) The size of service conductors computed in accordance with this Section shall be the minimum used except that, if the next smaller standard size in common use has an ampacity not more than 5% less than this minimum, the smaller size conductor shall be permitted.

# Amendments to Section 10 — Grounding and bonding

### Rule 10-102(2)(a)

# 18 Subrule (2)(a) of Rule 10-102 (Grounding electrodes) is replaced with the following:

- a) in the case of a rod grounding electrode, consist of two rod electrodes that are
  - i) copper clad;
  - ii) not less than 15.8 mm in diameter;
  - iii) spaced not less than 3 m apart;
  - iv) driven to the full length of the rod; and
  - v) interconnected with a grounding conductor sized as prescribed for grounding conductors;

#### Rule 10-116(1)

# 19(1) Subrule (1) of Rule 10-116 (Installation of grounding conductors) is replaced with the following:

1) The grounding conductor for a system shall be without joint or splice throughout its length, except in the case of busbars, thermit-welded joints or compression connectors applied with a compression tool compatible with the particular connector.

# Rule 10-116(5)

# 19(2) Subrule (5) of Rule 10-116 (Installation of grounding conductors) is replaced with the following:

- 5) A grounding conductor installed in the same raceway with other conductors of the system to which it is connected shall be insulated, except that an uninsulated grounding conductor shall be permitted where the length of the raceway
  - a) does not exceed 15 m between pull points; and
  - b) does not contain more than the equivalent of two 90° bends between pull points.

### Rule 10-210

# 20 Rule 10-210 (Grounding connections for solidly grounded ac systems supplied by the supply authority) is replaced with the following:

#### 10-210 Grounding connections for solidly grounded ac systems

- 1) The grounded conductor of a solidly grounded ac system supplied by the supply authority shall
  - a) be connected to a grounding conductor at each consumer's service with the connection being made on the supply side of the service disconnecting means in the service box;
  - b) have a minimum size as specified
    - i) for a bonding conductor; and
    - ii) for a neutral conductor when the grounded conductor also serves as a neutral;
  - c) be connected to the equipment bonding terminal by a system bonding jumper; and
  - d) have no other connection to the non-current carrying conductive parts of electrical equipment on the load side of the grounding connection.
- 2) Where two or more buildings or structures are supplied from a single consumer's service
  - a) the grounded circuit conductor at each of the buildings or structures shall be connected to a grounding electrode and be connected to the equipment bonding terminal by a system bonding jumper; or
  - b) the non-current-carrying conductive parts of the electrical equipment in or on the building or structure shall be bonded to ground by a bonding conductor run with the feeder or branch circuit conductors.
- 3) Where the system is grounded at any point, the grounded conductor shall be run to each individual service.

# Rule 10-212(2)

21 Subrule (2) of Rule 10-212 (Grounding connections for solidly grounded separately derived ac systems) is struck out.

#### Rule 10-616

# 22 The following is added to the Code after Rule 10-614 (Size of system bonding jumper or bonding conductor):

# 10-616 Installation of equipment bonding conductors

1) The bonding conductor for equipment shall be permitted to be spliced or tapped, but such splices or taps shall be made only within boxes, except in the case of open wiring where they shall be permitted to be made externally from boxes and shall be covered with insulation.

- 2) Where more than one bonding conductor enters a box, all such conductors shall be in good electrical contact with each other by securing all bonding conductors under bonding screws, or by connecting them together with a solderless connector and connecting one conductor only to the box by a bonding screw or a bonding device, and the arrangement shall be such that the disconnection or removal of electrical equipment fed from the box will not interfere with, or interrupt, the bonding continuity.
- 3) Where a bonding conductor is run in the same raceway with other conductors of the system to which it is connected, it shall be insulated, except that where the length of the raceway does not exceed 15 m and does not contain more than the equivalent of two quarter bends, an uninsulated bonding conductor shall be permitted to be used.
- 4) A bonding conductor shall be protected from damage.
  - a) mechanically; or
  - b) by location.
- 5) Where a separate bonding conductor, required by this Code, is run with single-conductor cables, the bonding conductor shall follow the same route as the cables.
- 6) The bonding jumper, in the case of receptacles having grounding terminals isolated from the mounting strap required for special equipment, shall be permitted to be extended directly back to the distribution panel.
- 7) Electronic equipment rated to operate at a supply voltage not exceeding 150 volts to ground and that requires a separate bonding conductor shall be permitted to be bonded to ground by an insulated conductor extending directly back to the distribution panel, provided that
  - a) the separate bonding conductor is enclosed in the same raceway or cable containing the circuit conductors throughout the length of that cable or raceway;
  - b) the separate bonding conductor is sized not less than as given in Rule 10-614 for each leg of the run; and
  - c) the bonding requirements of Rule 10-600 are met.

# Amendments to Section 12 — Wiring Methods

Rule 12-904(2)

23 Subrule (2) of Rule 12-904 (Conductors in raceways) is amended by striking out "Except for cable tray, no" and substituting "No".

Rule 12-2200(7)24Subrule (7) of Rule 12-2200 (Method of installation) is struck out.

# Rule 12-220825Rule 12-2208 (Provisions for bonding) is replaced with the<br/>following:

# 12-2208 Provisions for bonding

Metal cable trays shall be adequately bonded at intervals not exceeding 15 m and the size of bonding conductors shall be based on the size of the largest ungrounded conductor or equivalent for multiple conductors carried by the cable tray in accordance with Rule 10-614.

# Amendment to Section 14 — Protection and Control

#### Rule 14-402

# 26 Rule 14-402 (Disconnecting means required for fused circuits) is replaced with the following:

#### 14-402 Disconnecting means required for fused circuits (see Appendix B)

Circuits protected by fuses shall be equipped with disconnecting means, integral with or adjacent to the fuseholders, by which all live parts for mounting fuses can be readily and safely made dead. However, such disconnecting means may be omitted in the following cases:

- a) instrument and control circuits on switchboards when the voltage does not exceed 250 V;
- b) primary circuits of voltage transformers having a primary voltage of 750 V or less on switchboards; or
- c) a circuit having only one ungrounded conductor when a plug fuse is used.

#### Amendments to Section 26 — Installation of Electrical Equipment

#### Rule 26-014(4)(c)

# 27 Subrule (4)(c) of Rule 26-014 (Dielectric liquid-filled equipment — Outdoors) is replaced with the following:

c) if installed at ground level, be located on a concrete or fibreglass pad draining away from structures or be in a curbed area filled with coarse crushed stone; and

# Rule 26-250(4)

28 Subrule (4) of Rule 26-250 (Overcurrent protection for power and distribution transformer circuits rated over 750 V) is replaced with the following:

- 4) A transformer having an overcurrent device on the secondary side rated or set at not more than the values in Table 50 or a transformer equipped with coordinated thermal overload protection by the manufacturer shall be permitted to:
  - a) omit the primary branch circuit overcurrent device, provided that the primary feeder overcurrent device is rated or set at not more than the values in Table 50; or
  - b) increase the primary branch circuit overcurrent device to not more than the values in Table 50.

# Rule 26-254(2)

# 29 Subrule (2) of Rule 26-254 (Overcurrent protection for dry-type transformer circuits rated 750 V or less) is replaced with the following:

- 2) Notwithstanding Subrule (1), a transformer having an overcurrent device on the secondary side set at not more than 125% of the rated secondary current of the transformer, shall be permitted to
  - a) omit the primary branch circuit overcurrent device, provided that the primary feeder overcurrent device is set at not more than 300% of the rated primary current of the transformer; or
  - b) increase the primary branch circuit overcurrent device to a value of not more than 300% of the rated primary current of the transformer.

# Rule 26-654(g)

# 30 Rule 26-654 (Branch circuits for dwelling units) is amended by striking out "and" at the end of paragraph (e), adding "and" at the end of paragraph (f) and adding the following after paragraph (f):

g) at least one branch circuit shall be provided solely for the receptacles provided for each driveway as required by Rule 26-726(d).

# Rule 26-700(8)

# 31 The following is added to the Code after Subrule (7) of Rule 26-700 (General):

- 8) When a sump is required by *The Winnipeg Building By-law* or the *Manitoba Building Code* for the control of water from a subsurface drainage (weeping tile) system,
  - a) a single receptacle shall be installed for the connection of the sump pump; and

b) the receptacle for the sump pump shall be supplied from a branch circuit that supplies no other outlets or equipment.

### Rule 26-708

# 32 Subrules (2) and (3) of Rule 26-708 (Receptacles exposed to the weather) are replaced with the following:

#### 26-708 Receptacles exposed to the weather

- 2) Receptacles of CSA configurations 5-15R, 5-20R, 5-20RA, 6-15R, 6-20R and 6-20RA shall be provided with cover plates suitable for wet locations and marked "Extra Duty".
- 3) Notwithstanding Subrule 2), wet location cover plates not marked "Extra Duty" shall be permitted for receptacles
  - a) installed facing downward at an angle of  $45^{\circ}$  or less from the horizontal; or
  - b) located at least 1 m above finished grade or floor level in a damp location.

#### Rule 26-726(d)

33 Rule 26-726 (Receptacles for single dwellings) is amended by striking out "and" at the end of paragraph (b), adding "and" at the end of paragraph (c) and adding the following after paragraph (c):

d) at least one duplex receptacle shall be provided for each driveway.

#### Amendment to Section 28 — Motors and Generators

#### Rule 28-602

34 Subrule (5) of Rule 28-602 (Types and ratings of disconnecting means) is struck out.

#### Amendment to Section 30 — Installation of Lighting Equipment

# Rule 30-504

# The following is added to the Code after Subrule (3) of Rule 30-504 (Stairways):

4) Notwithstanding Subrule (3) and Appendix G, provisions for 3-way switches must be installed for stairway lighting to basements.

# Amendment to Section 36 — High-voltage Installations

# Rule 36-302(1)(a)

# 36 Subrule (1)(a) of Rule 36-302 (Station ground electrode) is replaced with the following:

a) consist of a minimum of four driven copper-clad ground rods not less than 3 m long and 17.09 mm in diameter spaced at least the rod length apart and, where practicable, located adjacent to the equipment to be grounded;

### Amendment to Section 46 — Emergency Power Supply, Unit Equipment, Exit Signs, and Life Safety Systems

#### Rule 46-108(3)

# 37 Subrule (3) of Rule 46-108 (Wiring method) is replaced with the following:

- 3) Conductors installed in buildings of combustible construction in accordance with Section 12 of this Code may be
  - a) non-metallic-sheathed cable; or
  - b) installed in totally enclosed non-metallic raceway.

#### Amendments to Section 64 — Renewable Energy Systems

#### Rule 64-060(2)(g)

# 38 Subrule (2)(g) of Rule 64-060 (Disconnecting means) is replaced with the following:

- g) be located
  - i) within sight of the equipment or capable of being locked in the open position; and
  - ii) within 9 m of the equipment or be integral to the equipment.

#### Rule 64-110

# **39** Rule 64-110 (Unbalanced interconnections) is replaced with the following:

# 64-110 Unbalanced interconnections (see Appendix B)

1) Single-phase inverters for renewable energy systems and ac modules in interactive renewable energy systems shall not be connected to three-phase systems.

2) Three-phase inverters and three-phase ac modules in interactive systems shall comply with the requirements of Rules 84-008 and 84-018.

### Amendment to Section 76 — Temporary Wiring

#### Rule 76-006

# 40 Paragraph (d) of Rule 76-006 (Service entrance equipment) is replaced with the following:

- d) be installed in one of the following ways:
  - i) for services not exceeding 200 A, on a pole, or on a solid wood post that measures at least 89 mm x 150 mm nominal and is adequately braced;
  - ii) for services exceeding 200 A, on a substantial pole structure; or
  - iii) for services supplied from underground distribution, on an adequately braced post.

### Amendment to Appendix A

# Appendix A

41 Appendix A (Safety Standards for Electrical Equipment, Canadian Electrical Code, Part II) is amended in Note (4) by striking out "may be used" and substituting "shall be used".