

1.11 Instrument Transformers – Primary Connection Point

1.11.1 Each *metering installation* for which registration is being sought under MR Ch.6 s.4.4.2 that does not comply with the primary connection point proximity requirements for *instrument transformers* set forth in this Chapter and in any policy or standard established by the *IESO* pursuant to this Chapter shall meet the following conditions:

1.11.1.1 in the case of a *metering installation* relating to a *load facility*, or an *electricity storage facility*:

- a. the *metering installation* shall minimize the voltage drop between the voltage transformer and the current transformer;
- b. the *metering installation* shall minimize the leakage of current between the voltage transformer and the current transformer; and
- c. where the maximum error introduced by any physical separation of the primaries of the voltage transformer and the current transformer exceeds 0.02% for either active or reactive power flows, a constant correction factor has been provided to and approved by the *IESO* in the manner described in this Chapter and in any policy or standard established by the *IESO* pursuant to this Chapter; or

1.11.1.2 in the case of a *metering installation* relating to a *generation facility*:

- a. the *metering installation* shall, where a current transformer is located on the grounded of the *generation facility*, minimize the leakage of current between the voltage transformer and the current transformer; and
- b. where the maximum error introduced by leakage current between the location of the current transformer and the location of the corresponding voltage transformer exceeds 0.02% for either active or reactive power flows, a constant correction factor has been provided to and approved by the *IESO* in the manner described in this Chapter and in any policy or standard established by the *IESO* pursuant to this Chapter.

1.11.2 *Metering data* from a *metering installation* in respect of which registration has been granted under MR Ch.6 s.4.4.3 that meets the conditions set out in section 1.11.1 shall be the subject of adjustment by the correction factors referred to in section 1.11.1.1 or 1.11.1.2, as the case may be, in the manner described in the wholesale revenue metering standard established by the *IESO* pursuant to this Chapter.

- 1.11.3 The *IESO* may, by notice to the *metered market participant* in respect of the *metering installation* to which the registration relates, revoke registration of a *metering installation* granted under MR Ch.6 s.4.4.3 that meets the conditions set out in section 1.11.1 if the conditions set forth in section 1.11.1.1 or 1.11.1.2 are not met, in which case the *metered market participant* shall ensure that each *instrument transformer* within the *metering installation* is replaced with an *instrument transformer* that complies with the primary connection point proximity requirements set forth in this Chapter and in any policy or standard established by the *IESO* pursuant to this Chapter within 8 weeks of the date of notice of such revocation.
- 1.11.4 If the *IESO* does not grant the *metered market participant* the right to retain registration under MR Ch.6 s.4.4.8 the registration of a *metering installation* that meets the conditions set out in section 1.11.1 shall expire on the date on which the *metering installation* or the *facility* to which such *metering installation* relates undergoes upgrading or refurbishment that is, in the *IESO's* opinion, substantial.

1.12 Instrument Transformer – Primary Cable

- 1.12.1 A *metering service provider* that seeks to register a *metering installation* under MR Ch.6 s.4.4.2 that does not comply with the permissible primary cable error factor requirements for *instrument transformers* set forth in this Chapter and in any policy or standard established by the *IESO* pursuant to this Chapter shall provide to the *IESO*, for the *IESO's* approval, a constant correction factor.
- 1.12.2 *Metering data* from a *metering installation* in respect of which registration has been granted under MR Ch.6 s.4.4.3 that meets the conditions set out in section 1.12.1 shall be the subject of adjustment by the correction factor referred to in section 1.12.1 in the manner described in the wholesale revenue metering standard established by the *IESO* pursuant to this Chapter.
- 1.12.3 If the *IESO* does not grant the *metered market participant* the right to retain registration under MR Ch.6 s.4.4.8, the registration of a *metering installation* that meets the conditions set out in section 1.12.1 shall expire on the date on which the *metering installation* or the *facility* to which such *metering installation* relates undergoes upgrading or refurbishment that is, in the *IESO's* opinion, substantial.

1.13 Instrument Transformers – Burdens

- 1.13.1 A *metering service provider* that seeks to register a *metering installation* under MR Ch.6 s.4.4.2 that does not comply with the prohibition against errors resulting from calculated burdens for *instrument transformers* set forth in this Chapter and in any policy or standard established by the *IESO* pursuant to this Chapter shall provide to the *IESO*, for the *IESO's* approval, a correction factor.

- 1.13.2 *Metering data* from a *metering installation* in respect of which registration has been granted under MR Ch.6 s.4.4.3 that meets the conditions set out in section 1.13.1 shall be the subject of adjustment by the correction factor referred to in section 1.13.1 in the manner described in the wholesale revenue metering standard established by the *IESO* pursuant to this Chapter.
- 1.13.3 If the *IESO* does not grant the *metered market participant* the right to retain registration under MR Ch.6 s.4.4.8 the registration of a *metering installation* that meets the conditions set out in section 1.13.1 shall expire on the date on which the *metering installation* or the *facility* to which such *metering installation* relates undergoes upgrading or refurbishment that is, in the *IESO's* opinion, substantial.

1.14 Estimation Pending Rectification

- 1.14.1 Where registration has been revoked or expires pursuant to any section of this Appendix, the *IESO* may for *settlement* purposes estimate the *metering data* recorded in the *metering installation* in the manner described in section 1.14.2 with effect:
- 1.14.1.1 [Intentionally left blank]
- 1.14.1.2 in the case of revocation from the date specified in the notice of revocation issued by the *IESO*; or
- 1.14.1.3 in the case of expiry, from the date of expiry,
- to the date on which the *IESO* is satisfied that the corrective action referred to in the relevant section of this Appendix has been taken.
- 1.14.2 For the purposes of section 1.14.1, estimation of *metering data* shall be based on the following:
- 1.14.2.1 in the case of a *metering installation* for a *generation facility*, production shall be estimated at zero;
- 1.14.2.2 in the case of a *metering installation* for a load, withdrawal for each hour shall be estimated at 1.80 times the self-cooled rating of the power transformer or, if none exists, the highest hourly level of withdrawal of *energy* recorded for that load during the twelve-month period preceding the applicable date referred to in section 1.14.1.2 or 1.14.1.3; or
- 1.14.2.3 in the case of a *metering installation* for an *electricity storage unit*, the injections shall be estimated at zero and the withdraws for each hour shall be estimated at 1.80 times the self-cooled rating of the

power transformer or, if none exists, the highest hourly level of withdrawal of *energy* recorded for that load during the twelve-month period preceding the applicable date referred to in section 1.14.1.2 or 1.14.1.3

1.3.3 The documentation relating to loss adjustment and measurement error correction factors and the documentation relating to *instrument transformer* burdens required by section 1.3.2 to form part of the *meter point* documentation for a *metering installation* shall be stamped by a registered professional engineer.

1.3.4 The *metering service provider* for a *metering installation* that measures the consumption of *energy* referred to in MR Ch.9 s.2.2.1.1 or that measures the consumption of *station service* shall provide to the *IESO*, in support of the application to register the *metering installation*, the proportions referred to in MR Ch.9 s.2.2.4.1 or 2.2.4.2(a), as may be applicable, to the extent that such proportions have been agreed in the manner specified in those sections and in such form as may be required by the applicable *market manuals*.

1.3A Transmitter Confirmation of Meter Point Documentation

1.3A.1 No *metering service provider* to whom a request has been made pursuant to section 6.1.2A of Chapter 6 shall submit to the *IESO* the *meter point* documentation referred to in section 1.3 in respect of a *metering installation* that will be used for the calculation and collection of charges for *transmission service* unless the relevant portion of the *meter point* documentation is accompanied by the confirmation of the approval of each applicable *transmitter* referred to in MR Ch.10 s. 3.1.3, 5.1.3, 6.1.3 or 6A.1.2.2, as may be applicable.

1.4 Other

1.4.1 The *IESO* shall ensure that the *metering registry* contains, in respect of each registered *metering installation* and *metering installations* whose registration has expired but whose continued use has been determined by the *IESO* to be necessary for the efficient operation of the *IESO-administered markets*, the identification number assigned by the *IESO* to the *defined meter point* for that *metering installation*.