

# Measurement Canada Updates - MC Consultations

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# Loss Compensation - Consultation

- Measurement Canada issued two draft specifications and a policy bulletin for consultation based on the recommendations developed by the Joint Working Group.
  - Specifications for the approval of type of electricity meters equipped with loss compensation functions
  - Specification for the installation and use of approved and verified electricity meters used to establish processed legal units of measure (Revisions)
  - Policy on loss compensation functions that influence legal units of measure in meters
- Deadline to submit comments March 31, 2016

# Loss Compensation – Results

- The following two methods for determining losses and establishing compensated loss values are recognized:
  - $I^2h/V^2h$  method (used inside or outside the meter)
  - VA method (used outside of the meter and limited to those situations in which the nature of the equipment physically prevents the installation of the metering required to apply  $I^2h/V^2h$  method)

# Loss Compensation – Issues

- The IESO's review identified two potential issues:
  - Fixed Factor Loss Application
    - Not permitted to be applied to the Legal Unit of Measure (LUM) value as a means for loss compensation
    - Complex loss distribution has to be done through a socialized loss, which is approved by the Energy Board and is common to all customer class.
    - Settlement is done on measured energy and not on sale of dollars
    - Adjustments have to be made to the LUM values as it is the most practical means of applying loss distribution.
  - Fixed Loss Allocation between Multiple Customers
    - If losses are required to be apportioned amongst multiple market participants, then losses must be apportioned dynamically based on load
    - This will require the sharing of meter data amongst market participants which puts the confidentiality of this commercially sensitive information at risk
    - This should not be the only method to apportion losses amongst market participants as they should have the option to apportion losses amongst themselves based on an established agreement.

# Loss Compensation – Next Steps

- Comments received during the consultation have been collected
- The JWG will meet to review the comments and work with MC to draft a response
- Meeting is scheduled in July 2016

# Instrument Transformers Wire Size - Consultation

- Measurement Canada conducted a consultation in spring 2015 on wire sizes associated with instrument transformers
  - Specification for installation and use: size of wires used to connect meters to conventional instrument transformers (S-E-10)
- The CEA has since consulted with its members and now have identified a number of potential concerns with the updated spec.

# Instrument Transformers Wire Size – Summary

- Current Transformers
  - Connecting leads shall not impart a burden more than 50% that of the instrument transformer's rated burden
  - Table indicating the minimum wire gauges required for a given run length of wire connected to a current transformer of a given rated burden
- Potential Transformers
  - Connecting leads shall not impart a burden that would cause an error of more than 0.3% in the meter registration of active energy
  - Table indicating the minimum wire gauges required for a given run length of wire connected to a current transformer of a given rated burden

# Instrument Transformers Wire Size – Issues

- The burden assumptions used to develop the tables are based on old electro-mechanical type meters (not solid-state type meters).
- Table for PT wire sizes assuming a fully loaded PT



# Instrument Transformers Wire Size - Suggestions

- Current Transformers
  - Publish a table for standard solid state meters that allows up to 90% of current transformer's burden, or
  - Provide an equation that could be applied in cases with installations that have a run length greater than the one identified in the table.
- Potential Transformers
  - Add reference tables for PT that rely on cases where the PT is not fully loaded to reduce the number of non-standard installations.

# Instrument Transformers Wire Size - Next Steps

- Concerns and suggestions are being raised with MC and revisions may be forthcoming to the specification.

