Measurement Canada
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Instructions for Meter Owners and Meter Verifiers

Instructions for providing Meter Data to Measurement Canada Electricity Marketplace Monitoring Program

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http://mc.ic.gc.ca

Canada

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1. Purpose

The purpose of this document is to provide additional information on the Electricity Marketplace Monitoring Program. This will include detailed information on reporting methods, Electricity Monitoring Marketplace Application (EMMA), data items descriptions and data contributors.

2. Scope

This document has been prepared for the electricity meter owners and accredited organizations that are providing meter data to the Electricity Marketplace Monitoring program of Measurement Canada.

3. Definition

EMMA is, " the Electricity Marketplace Monitoring Application".

4. Reference Document

- Marketplace Monitoring of the Electricity Measurement Trade Sector *Program Overview*
- Communiqué, Implementation of the Electricity Marketplace Monitoring Program

5. Electricity Monitoring Marketplace Application (EMMA)

Measurement Canada has developed an informatics application named *Electricity Marketplace Monitoring Application* (EMMA). This application will be the principal tool used to gather the data needed for the program. This IT application is a web-page system and work in conjunction with Measurement Canada Information System (MCIS).

Each participant must register (enrolment) for obtaining access to EMMA. Contributors must use online Electricity Marketplace Monitoring Application (EMMA) enrolment form found on MC web-site to register: **http://mc.ic.gc.ca**

1. Forms will be submitted to the nearest Measurement Canada district office by fax, by mail or by e-mail (if the form is saved and then reattached to an e-mail).
2. The district will assess the participant identification, validate the information provided and add/modify MCIS/Organizations table accordingly.
3. The district will contact the organization representative (by telephone) to obtain the password chosen by the organization. For security reasons, passwords have to be done by telephone or directly.
4. The password chosen by the participant will be entered in EMMA by the district,
5. After this, the contributor has access to EMMA by using its client ID number and its password. If an organization loses its password, they will have to contact the nearest MC district office to have it changed in EMMA.

The organizations will access only the web data entry forms that they need to fill, other fields will not appear on the screen. This selection is done through the definition of the organization's characteristics (Meter Owner, Accredited, etc.) during the enrolment.

When entering data, you must identify the organization that the data pertains to. You may report data on meters owned by other organizations. EMMA will ask to identify the meter owner, a scrolling list could be use for that identification.

When entering data, you must identify the Effective Date. The online help says that the effective date is the date that the data pertains to. As an exemple if you report 2004 data at the beginning of 2005 the effective date must state year 2004 otherwise the data will be compiled in the wrong year. The month/day helps to identify the quarter.

EMMA has an online help that can provide more information on its functionality.

6. When the reporting has to be done?

The reporting period is based on the calendar year, from January 1st to December 31st. The available data is to be provided on a quarterly basis as a minimum. Data may be submitted on an ongoing basis if that is the preference of the submitting organization. You must submit your data prior to the end of the month following a quarter if you want that data include in that quarter.

Measurement Canada acknowledges that data can only be reported if completed and available. As an example, if compliance data (seal extension) is only available at year end it will be reported at that time.

7. Data to be reported

The following table is providing detailed information on data to be reported through *Electricity Marketplace Monitoring Application* (EMMA).

Data items	Description	Contributor
7.1.1 Meter Population Data	This basic general information is usually available from the data base managing the meter information.	
7.1.1 (1) Number of electricity meters in service	This is the total number of meters, including domestic and commercial meters, owned by the organization.	Meter Owners

7.1.1 (2) Number of electricity metering installation in service	This is the total number of metering installations owned by the organization. Metering installation is usually any electricity metering equipment comprising at least one meter and that includes one or more external current and/or voltage transformers installed for the purpose of making measurements of, or obtaining the basis of a charge for electricity supplied to a purchaser;	Meter Owners
7.1.1 (3) Number of meters currently in service which exceed their current re-verification period (overdue). For the purposes of marketplace monitoring data gathering, a meter is considered to be overdue if it remains in service after December 31 of the calendar year in which the meter verification/re-verification expires. (eg Meter verified in 2000 with 6 years seal period means that this meter will be overdue after December 31, 2006)	As prescribed by sub-section 12 of the *Electricity and Gas inspection Act.*	Meter Owners
7.1.2 Meter Verification Data	Meter certified to be in compliance with the Act and the Regulations. This information usually appears on the inspection certificates or is attached to it. This includes all inspections performed by accredited organizations or Measurement Canada. These three data are similar to certain of section 7.1.4.	

7.1.2 (1) Number of meters initially verified pursuant to the EGIA	This is the total number of meters, never verified (new), including domestic and commercial meters, that were verified and sealed. For an accredited organization being also meter owner and inspecting only its own meters, that could be: 7.1.4 (1)	Meter Owners
7.1.2 (2) Number of meters reverified pursuant to the EGIA	This is the total number of meters that have been previously verified (old), including domestic and commercial meters, that have been re-processed, reverified and sealed. For an accredited organization being also meter owner and inspecting only its own meters, that could be: 7.1.4 (4)	Meter Owners
7.1.2 (3) Number of meters granted extension of verification period (compliance sampling)	This is the total number of meters that have obtained an extension of their original verification period. This is also known as seal extension. For an accredited organization being also meter owner and inspecting only its own meters, that could be: 7.1.3 (3)+7.1.3 (4)+7.1.3 (5)+7.1.3 (6)	Meter Owners
7.1.3 Meter Compliance Data	This is data related to the seal extension program. This information is usually found on the inspection certificates.	
7.1.3 (1) Number of meters which constitute a lot of meters where a sample is inspected for the purposes of extension of verification period (compliance sampling).	This is the total number of meters that were presented for the compliance sampling (the total meters in the lots).	Meter Owners

7.1.3 (2) Number of sample meters inspected for the purposes of extension of verification period (compliance sampling).	This is the total number of meters that have been physically tested (the sample meters)	Meter Owners
7.1.3 (3) Number of meters granted extension of verification period - Level 1.	This is the total number of meters that obtained a 'Level 1' as extension of their original verification period. Not including the reject meters.	Meter Owners
7.1.3 (4) Number of meters granted extension of verification period - Level 2.	This is the total number of meters that obtained a 'Level 2' as extension of their original verification period. Not including the reject meters.	Meter Owners
7.1.3 (5) Number of meters granted extension of verification period - Level 3.	This is the total number of meters that obtained a 'Level 3' as extension of their original verification period. Not including the reject meters.	Meter Owners
7.1.3 (6) Number of meters granted extension of verification period - Level 4.	This is the total number of meters that obtained a 'Level 4' as extension of their original verification period. Not including the reject meters.	Meter Owners
7.1.3 (7) Number of meters which constitute each rejected lot of meters.	This is the total number of meters, from the different lots, that did not obtain an extension of their original verification period (rejected meters). From rejected lots only.	Meter Owners
7.1.3 (8) Number of sample meters discovered to exceed legal limits of error as prescribed by section 46 of the EGIR.	This is the total number of sample meters, from the different lots, that were not meeting the specifications. Currently ± 3%.	Meter Owners

Example for 7.1.3; 1000 meters have been submitted to compliance sampling. 55 sample meters have been randomly selected and inspected. 1 sample meter is not meeting ± 3%. The lot is getting a Level 2 as seal extension.

1000 = 7.1.3 (1) 55 = 7.1.3 (2)
1 = 7.1.3 (8) (1000 -1 reject) = 7.1.3 (4) = 999

If the lot would have been rejected under the same conditions, we would get 1000 for 7.1.3 (7).

7.1.4 Meter Inspection Data	This inspection information can be found on the inspection certificates. This section is to know what each AMV did on behalf of MC.	
7.1.4 (1) Number of new (never verified) meters inspected	This is the total number of inspected meters (verified), either through sampling or 100% testing. For an accredited organization being also meter owner and inspecting only its own meters, that could be: 7.1.2 (1)	Meter Verifiers
7.1.4 (2) Number of new (never verified) meters which exceed the specified limits of error.	This is the total number of meters, either found during sampling or 100% testing, that were not meeting the specifications. 1. Could be a whole lot where sampling inspection leads to rejection of a lot. 2. Could be each single rejected sample meter where lot is accepted by sampling but has rejected meter(s). 3. Could be each single rejected meter from 100% inspection.	Meter Verifiers
7.1.4 (3) Number of new (never verified) meters physically tested.	This is the total number of meters that have been put through testing, either through sampling or 100% testing. 1. Could be the sample meters where sampling is performed. 2. Could be the total number of meters where 100% testing is performed.	Meter Verifiers
7.1.4 (4) Number of reworked (previously verified) meters inspected.	This is the total number of inspected meters (verified), either through sampling or 100% testing. Reworked meter is also called old meter. For an accredited organization being also meter owner and inspecting only its own meters, that could be equivalent to 7.1.2 (2).	Meter Verifiers

7.1.4 (5) Number of reworked (previously verified) meters which exceed the specified limits of error.	This is the total number of meters, either found during sampling or 100% testing, that were not meeting the specifications. 1. Could be a whole lot where sampling inspection leads to rejection of a lot. 2. Could be each single rejected sample meter where lot is accepted by sampling but has rejected meter(s). 3. Could be each single rejected meter from 100% inspection.	Meter Verifiers
7.1.4 (6) Number of reworked (previously verified) meters physically tested.	This is the total number of meters that have been put through testing, either through sampling or 100% testing. 1. Could be the sample meters where sampling is performed. 2. Could be the total number of meters where 100% testing is performed.	Meter Verifiers
7.1.4 (7) Number of meters granted extension of verification period (compliance sampling).	This is the total number of meters that obtained an extension of their original verification period. Seal extension. For an accredited organization being also meter owner and inspecting only its own meters, that could be equivalent to: 7.1.3 (3)+7.1.3 (4)+7.1.3 (5)+7.1.3 (6)	Meter Verifiers
Example for 7.1.4; 1000 meters have been submitted for initial inspection. 50 sample meters have been randomly selected and tested. 1 sample meter is not meeting the specifications. The lot is accepted. 50 = 7.1.4 (3) 1 = 7.1.4 (2) 999 = 7.1.4 (1) = (1000 -1 reject) If the whole lot would have been rejected we would get 1000 for 7.1.4 (2) and nothing for 7.1.4 (1).		
7.1.7 Electricity Installation Compliance Data	This information on installation inspection is usually found in the company installation inspection records.	
7.1.7 (1) Number of installations inspected, (including installations inspected as part of a dispute investigation).	This is the total number of installations that have been put through testing by the organization.	Meter Owners

7.1.7 (2) Number of non-conforming installations which do not result in measurement error exceeding legal limits as prescribed by the EGIR.	This is the total number of installations that are not conforming but are not exceeding ± 3% of measuring error. NC could be bad markings, broken seals, overdue meters, etc.	Meter Owners
7.1.7 (3) Number of non-conforming installations resulting in positive measurement error exceeding legal limits as prescribed by section 46 of the EGIR.	This is the total number of installations that are exceeding the limit of error of + 3%. These installations are overbilling. 1. Could be wrong multipliers, wrong connections, fast meter, wrong meter application, etc.	Meter Owners
7.1.7 (4) Number of non-conforming installations resulting in negative measurement error exceeding legal limits as prescribed by section 46 of the EGIR.	This is the total number of installations that are exceeding the limit of error of - 3%. These installations are underbilling. 1. Could be wrong multipliers, wrong connections, slow meter, wrong meter application, etc. 2. This includes meter installations with equipment failures such as meter with open coils, blown fuses or burned out instrument transformers that lead to a - 3% error.	Meter Owners

Example for 7.1.7; 1000 installations have been inspected by an utility during the year. 30 installations have been found non-conforming but not resulting in measurement error exceeding ± 3%. 10 installations have been found with measurement error of +13.3%.
5 installations have been found with wrong multiplier leading to a measurement error of -100%.

1000 = 7.1.7 (1) 30 = 7.1.7 (2)
10 = 7.1.7 (3) 5 = 7.1.7 (4)

8. Data contributor

This table shows what data the contributors will report.

	Meter Owners	**Meter Verifiers (Accredited organizations)**
7.1.1 Meter population	**X**	
7.1.2 Meter verification	**X**	
7.1.3 Meter Compliance	**X**	
7.1.4 Meter Inspection		**X**
7.1.7 Installation	**X**	

9. Additional information

For additional information pertaining to the Electricity Marketplace Monitoring program please consult our Communiqué *Implementation of the Electricity Marketplace Monitoring Program* and/or *Marketplace Monitoring of the Electricity Measurement Trade Sector Program Overview.* They can be found on MC web-site at http://mc.ic.gc.ca/

You can also contact the nearest Measurement Canada district.