

Meter Data Distribution Market Trials

IESO Response to Participant Feedback

Issue Date: June 5, 2015

Public

Copyright © 2015 Independent Electricity System Operator. All rights reserved.

Table of Contents

Contents

1. Introduction	4
1.1 Purpose	4
1.2 Scope.....	4
1.3 Out of Scope	4
2. Summary	5
3. Market Participant Feedback	6
4. Defect Summary	10
5. Test Overview	11
5.1 Test Summary	11
5.2 Test Environment and Data	11
5.3 Testing Coverage Summary.....	12

1. Introduction

The objectives of the Meter Data Distribution (MDD) Market Trials (MT) were:

- Demonstrate the readiness of Participants to manage their revenue meter data related information using the updated Online IESO
- Demonstrate the readiness of Participants to retrieve their revenue meter data reports using the new IESO Reports Site

1.1 Purpose

The purpose of this report is to consolidate the MT testing results and to summarize the defects identified throughout the execution of the MT testing.

1.2 Scope

The scope of MT included the following elements:

- Sandbox System Access Testing:
 - Ability testing – allows you to verify system access using a Person Account to access the updated Online IESO and new IESO Reports Site in Sandbox
 - Connectivity testing – allows you to verify system access using a Machine Account to access the IESO Sandbox Reports Site
- Business Process Testing
 - Meter Data Report Profile(s)
 - Request Meter Data Report(s) (ad-hoc requests)
 - Retrieve Meter Data Report(s)

1.3 Out of Scope

The following business areas were not included within the scope of Market Trials:

- Creating Revenue Metering Data Contact(s)
- Meter Data Associate Participation
- Revenue meter data accuracy
- Other non-revenue meter data reports, e.g., settlements reports, etc.
- Participants' internal systems and processes

-End of Section-

2. Summary

The MDD Market Trials started on April 13, 2015 and formally concluded on May 18, 2015. Based on participant requests the Business Process Testing period was extended by one week to ensure all participants are able to finish their testing.

The MDD market trials testing environment remained available to market trials participants to further test their internal systems and process to adapt to the new MDD solution.

There were 75 person accounts and 12 machine accounts, representing more than 60 organizations, enrolled in the MDD market trials. Based on the feedback from various market trials participants, all test cases were successfully executed and the results were as expected.

A number of market trials participants expressed concerns about the format and content of the meter data reports published by the new MDD solution. Market participant feedback and IESO responses are presented in Section 3 below.

-End of Section-

3. Market Participant Feedback

#	Participant Feedback/Questions	IESO Response
1	<p>Inability to process meter data reports published in EDI-867 file format using a Machine account (i.e., API) due to changes to the file layout/content.</p>	<p>The EDI867 file format specification remains unchanged as compared to the current MV-STAR EDI-867 specification [Reference #1]. However, the values for two elements have changed:</p> <ul style="list-style-type: none"> • BPT09 Reference Information element: It is defined as “Request Reference” of the EDI Request file in the MV-WEB. It will be changed to the report type of meter data. For Meter Data Report Profiles, the reference information is formatted as Participant Role-Report Type e.g. MMP-TMD-WL. For Ad-hoc meter data requests, the reference Information is formatted as MD-AD-HOC-Request ID e.g. MD-AD-HOC-12345 • <u>REF02 Reference Identification</u> element within N1 Loop: The values are assigned by the IESO based on the selected service point options in your meter data report profile or Ad-hoc meter data report request <ul style="list-style-type: none"> • ALLDP = All Delivery Points • ALLSP = All Summary Points • ALLMP = All Meter Points • ALL = ALLDP + ALLSP+ALLMP • ALLDP+ALLSP = All Delivery Points and Summary Points (<i>New</i>) • ALLDP+ALLMP = All Delivery Points and Meter Points (<i>New</i>) • ALLSP+ALLMP = All Summary Points and Meter Points (<i>New</i>) • DP = One or More Delivery Points (<i>New</i>) <p>The EDI-867 file format specification has been revised to reflect these new segment values [Reference #2].</p>
2	<p>EDI-867 file header - the number of transactions specified in the transaction trailer do not match the actual number of transactions.</p>	<p>A defect was raised to address the issue regarding the number of transactions. The defect will be fixed prior to MDD go live.</p>
3	<p>Difficulty in reading and analyzing meter data reports published in EDI-867 file format using a Person account.</p> <ul style="list-style-type: none"> • Cannot read the EDI file using Notepad • There are no graphing capabilities to display meter data • There are no total usage calculations for a specific period (i.e., daily, week, month) 	<p>WordPad may be used to open and view an EDI file or EDI files can manually imported into Microsoft (MS) Excel for further processing and data analysis.</p> <p>Notepad is not an appropriate tool to handle newline character difference between Unix and Windows systems</p> <p>The graphing, total usage and max demand functions, currently in MV-WEB, will not be provided as part of the new Meter Data Distribution system. A new user guide [Reference #3] has been created to provide guidelines on how</p>

#	Participant Feedback/Questions	IESO Response
	<ul style="list-style-type: none"> There are no maximum demand calculations All the meter data channels are shown horizontally vs vertically in current MV-WEB 	<p>to import an EDI file into Excel and then analyze the meter data using Excel capabilities. As an alternative, participants may source a dedicated EDI converter tool to automatically read the information contained in the EDI file.</p> <p>To provide monthly totals for delivery point data the IESO will extend the Monthly AQEW AQEI report to also include Load - Metered Market Participants (MMP).</p>
4	<p>Why is Version 1 of the totalized meter data (TMD) report published 2 calendar days after the trade date (TD+2CD) as opposed to the next day (TD+1CD) in current MV-WEB?</p>	<p>The additional calendar day is required to facilitate the totalized meter data calculations by the new Meter Data Management system and subsequently publish daily meter data reports based on participant selection of meter data report profiles. The Meter Data Management system calculation timing is different from current MV-WEB which performs totalized meter data calculations based on ad-hoc participant requests vs scheduled batch totalized meter data calculations. The new report publishing timeline was communicated and finalized as part of the design and analysis in the IESO Settlement Meter Data Applications Working Group (SE-113).</p>
5	<p>The EDI report displays the first interval of the day only. Why is the timestamp not shown for each meter data interval?</p>	<p>The EDI specification permits the DTM field to be omitted when the time for an interval reading can be deduced from a previous DTM field and the interval size. This is determined by the Redundant DTM Flag status (i.e., if set to "Yes", then a DTM field will be included with every interval reading in the EDI report file, if this parameter is set to "No" or is not specified, then the EDI report will include a DTM field in the first interval only).</p> <p>The new MDD sets the default Redundant DTM Flag as "No" for all meter data report profiles and Ad-hoc requests, except for Ad-hoc requests for 'One or more Delivery Points' where the DTM Flag can be selected by the user. The decision to omit the DTM field for meter data report profiles was made to control the EDI file size and improve performance of profile report publishing and distribution to participants (the DTM field significantly increases the report file size).</p> <p>Prior to go-live we will revise the Ad-hoc request user interface to allow users to select the DTM Flag status for all Ad-hoc requests. However, the default DTM Flag for all meter data profiles will remain set as 'No'.</p>
6	<p>When comparing the EDI reports to current MV-WEB reports the 5-minute intervals seem to be off by 2 intervals (i.e., 10-minutes). It appears that there are only 287 intervals in a 24 hours timeframe.</p>	<p>As per the EDI specification, the first 5-minute interval meter data appears between REF*MT and MEA*MU segments, 287 5-minute interval data appears after the DTM*151 segment. DTM151 means Service Period End (Interval End). It means first 5-minute interval on trade date is 00:05, which aligns with MV-WEB export.</p>

#	Participant Feedback/Questions	IESO Response
7	<p>MV-WEB allows participants to submit requests for one service point (e.g., delivery/summary/meter point) over a date range. The new MDD allows participants to submit ad-hoc requests for more than one service point for only one trade date and therefore at the end of a month, 30+ ad-hoc meter data requests may be needed to request data for every trade date of the month. Would IESO consider also a date range selection for meter data ad-hoc requests?</p>	<p>The IESO will consider your feedback as potential future enhancements.</p> <p>As an alternative to creating ad-hoc meter data requests for each day of the month at the end of a month, you can create a meter data report profile at the beginning of the month, specifying the profile to publish data that you would retrieve through the ad-hoc requests. This way the metering data specified in the profile will be published daily throughout the month, and you can retrieve all relevant reports at the end of the month from the IESO Reports Site, without issuing ad-hoc requests.</p>
8	<p>Meter data report profiles allow users to select meter data reports for all the delivery points (DP) or meter points belonging to one Metered Market Participant (MMP) only. It does not allow a MMP to select a single DP or a group of DPs or Meter Points.</p>	<p>You can use ad-hoc requests to retrieve data for one or more specified DPs.</p>
9	<p>Why are some meter data reports published without a version number?</p>	<p>The reports without a version number are called global and local links for the report. For more details refer to [Reference #4]</p>
10	<p>What is the daily publishing time for meter data reports?</p>	<p>As part of the go-live communication to participants, the IESO will provide the final publishing schedule for production reports. The proposed publishing timelines are as follows:</p> <p>Totalized Meter Data (TMD) reports – published daily by 7:00AM EST</p> <p>Validate Meter Data (VMD) reports – published daily by 9:00 AM EST</p> <p>Meter data for an Ad-hoc request within 90 calendar days of the trade date will be available on the IESO Reports site one calendar day after the request date by 7:00 AM EST</p> <p>Meter data for Ad-hoc requests beyond 90 calendar days of the trade date will be available on the IESO Reports site by end-of-day next Sunday after the request date by 7:00 AM EST</p>
11	<p>Best practices for setting meter data report profiles.</p>	<p>Creation of meter data report profiles is managed by the Revenue Metering Data contacts for each organization. Based on IESO observations, the Totalized Delivery Point Data with losses profile (report TMD-WL) will satisfy the needs of most participants (this profile represents the metering data used for settlements). Information related to the creation of meter data report profiles was presented to participants on various occasions (e.g., SE-113, market trials webinar). Also, the market trials testing guide [Reference #5] provides details on how to create a meter data report profile and what reports will be published based on the selected profile.</p> <p>Additional training (i.e., webinar) will be provided to participants prior to MDD go-live.</p>

#	Participant Feedback/Questions	IESO Response
12	Only a limited number of delivery points were available for market trials testing. Some market trial participants were concerned that they could not perform performance volume testing.	Market Trials testing was executed in the IESO Sandbox environment which was configured to use production like revenue meter data and therefore limiting the number of delivery points made available for testing.
13	Will the delivery of settlement statements be affected by the changes?	There will be no changes to the current settlement statements.
14	Is the IESO Reports Site path to the meter data reports going to be the same for all participants?	The path to meter data report folders using SFTP will be the same for all participants. The meter data report folder names will be based on the selected Meter Data Report Profiles or Ad-Hoc Requests. E.g. MMP-TMD-WL, MMP-VMD, MD-AD-HOC etc.
15	Will all participant folders in SFTP be named using the short market participant name?	Yes, this is the same as current IESO Reports Site
16	What is the naming convention for the versioned data? We're seeing files marked V1, V2 and V3 but also files with no version number – what do they contain? Will the version labels always correspond to the timing of the data: can we assume files marked V1 will always be the one day data, V2 will always be the data used for the preliminary statements and V3 will always be the final statement data?	<p>Three (3) versions of meter data reports will be published per Trade Date: V1: Published at TD+1CD (VMD) or TD+2CD (TMD), V2: Published at TD+8BD+1CD (Prelim), V3: Published at TD+18BD+1CD (Final).</p> <p>For more details about the meter data reports, please refer to Appendix D of Meter Data Distribution Market Trials – Business Process Testing Guide [Reference #5]</p> <p>The files without version number are called global and local links for the report. For more details please to [Reference #4]</p>
17	Is there a calendar available indicating publication dates for the various versions?	Yes, the “Settlement Schedule Planner” calendar on IESO website shows the preliminary and final settlement calculation days. Metering data (versions V2 and V3) is published one calendar day later. [Reference #6]
18	Is the meter data in Sandbox from production for the same dates?	Yes the meter data is for the same trade date. The IESO tried as much as possible to bring production meter data into the Sandbox for market trials testing. However, for some dates the meter data was estimated and therefore is different from the real production data.
19	Will historical meter data remain in MV-WEB after MDD go-live date or data will be available only in the new IESO Report Site?	Upon go-live and for a limited period of time, participants will have access to both MV-WEB and MDD systems. MV-WEB will be available to participants for access to historical data up to 18 months pre go-live date. MDD will also be available to participants for access to historical data up to 3 months pre go-live. Post go-live data will only be published in MDD. It will be possible for participants to perform a parallel calculation comparison for the 3 months of historical pre go-live data which will exist in both systems. Once a go-live date is announced, a communication will be issued to participants detailing date range of data in both systems and MV-WEB system availability post go-live.

-End of Section-

4. Defect Summary

There was 1 defect identified during the market trials testing. The defect will be resolved before Meter Data Management (MDM) in-service date.

Defect ID	Defect Name	Priority	Status	Notes
1	EDI file - the number of transactions specified in the transaction trailer do not match the actual number of transactions	Medium	Open	The defect will be resolved prior to MDM in-service date.

-End of Section-

5. Test Overview

5.1 Test Summary

The MDD market trials testing comprised of the following distinct stages:

Sandbox System Access Testing

Ability Testing

The Ability Testing was designated for market participants using a Person Account to access the updated Online IESO and new IESO Reports Site in Sandbox.

Connectivity Testing

The Connectivity testing was designed for market participants using a Machine Account i.e., an application programming interface (API) to test their connection to the new IESO Sandbox Reports Site.

For more details about system access testing refer to [Reference #7].

Business Process Testing

Business process testing provided market participants with an opportunity to test the following business processes:

- Meter Data Report Profile(s)
- Request Meter Data Report(s) (ad-hoc requests)
- Retrieve Meter Data Report(s)

Part of market trials business testing, we encouraged participants to test their own internal systems and processes to adapt to the new Meter Data Distribution solution however, individual solutions were out of scope of the market trials.

For more details about business process testing refer to [Reference #5].

5.2 Test Environment and Data

Market trials testing were executed in the IESO Sandbox which was configured to use production like revenue meter data. Each participant was provided access to a set of meter data to be used for market trials testing. A list of available Delivery Points was communicated to market trials participants before commencing the business process test case execution.

For the purpose of market trials the Oldest Allowed Trade Date was March 1, 2015. Also, to facilitate market trials testing for the ad-hoc requests, the 90 days period was changed to **36 days**. In other words, ad-hoc requests for trade dates 36 days ago or older were published on the weekend, while ad-hoc requests for trade dates within the latest 35 days were published the next calendar day.

5.3 Testing Coverage Summary

Business Process	Test Case ID	Test Case Name
Meter Data Report Profile(s)	MT-001	Create New Meter Data Report Profile
Retrieve Meter Data Report(s)	MT-002	Edit Meter Data Report Profile
Request Meter Data Report(s)	MT-003	Request Meter Data Report(s) Within 90 Days
Retrieve Meter Data Report(s)	MT-004	Request Meter Data Report(s) Beyond 90 Days
Retrieve Meter Data Report(s)	MT-005	Monthly LDC AQEW/AQEI Report

For additional details about testing coverage refer to MDD Market Trials Business Process Testing Guide. A copy of the documents is available at [Reference #5].

-End of Section-

References:

#	Description
1	MV-STAR I/O Reference Guide 5.0.213.1 http://www.ieso.ca/Documents/ti/Revenue_Metering/GDE9001_MV-STAR-RefGuide.pdf
2	Revenue Metering Reports – Implementation Guide for EDI-867 Meter Data TBD
3	Revenue Metering Reports – Importing and Reading the IESO EDI-867 Meter Data File TBD
4	Quick Takes - Retrieving Reports via the IESO Reports Site http://www.ieso.ca/Documents/training/QT15_RetrievingReports.pdf
5	Meter Data Distribution Market Trials – Business Process Testing Guide http://www.ieso.ca/Documents/consult/se113/SE113-20150420-Business_Process_Testing_for_Market_Trials_v07.pdf
6	2015 Physical Market SSPC – Settlement Schedule Planner http://www.ieso.ca/Pages/Participate/Calendars/2015-Physical-Market-SSPC.aspx
7	MDD Market Trials – Ability and Connectivity Testing http://www.ieso.ca/Documents/consult/se113/SE113-20150413-Ability_Testing_for_Market_Trials_v03.pdf

– End of Document –