

# METER DATA MANAGEMENT (MDM) SYSTEM UPGRADE

Deployment to Production  
MSP User Group

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July 22, 2015

# Introduction

- MDM Upgrade deployment to production is scheduled for Aug. 30, 2015 (target).
- IESO will issue communication to participants once date has been finalized.
  - Go-live announcement
  - Meter Data Distribution incl. Online IESO/Report site
  - Data Availability
  - Registration Freeze (Aug. 20 to Sept. 2)
  - Conversion/Transformation details
  - SRR Distribution
  - LPS Final Calculation versus MV-Star Preliminary Calculation

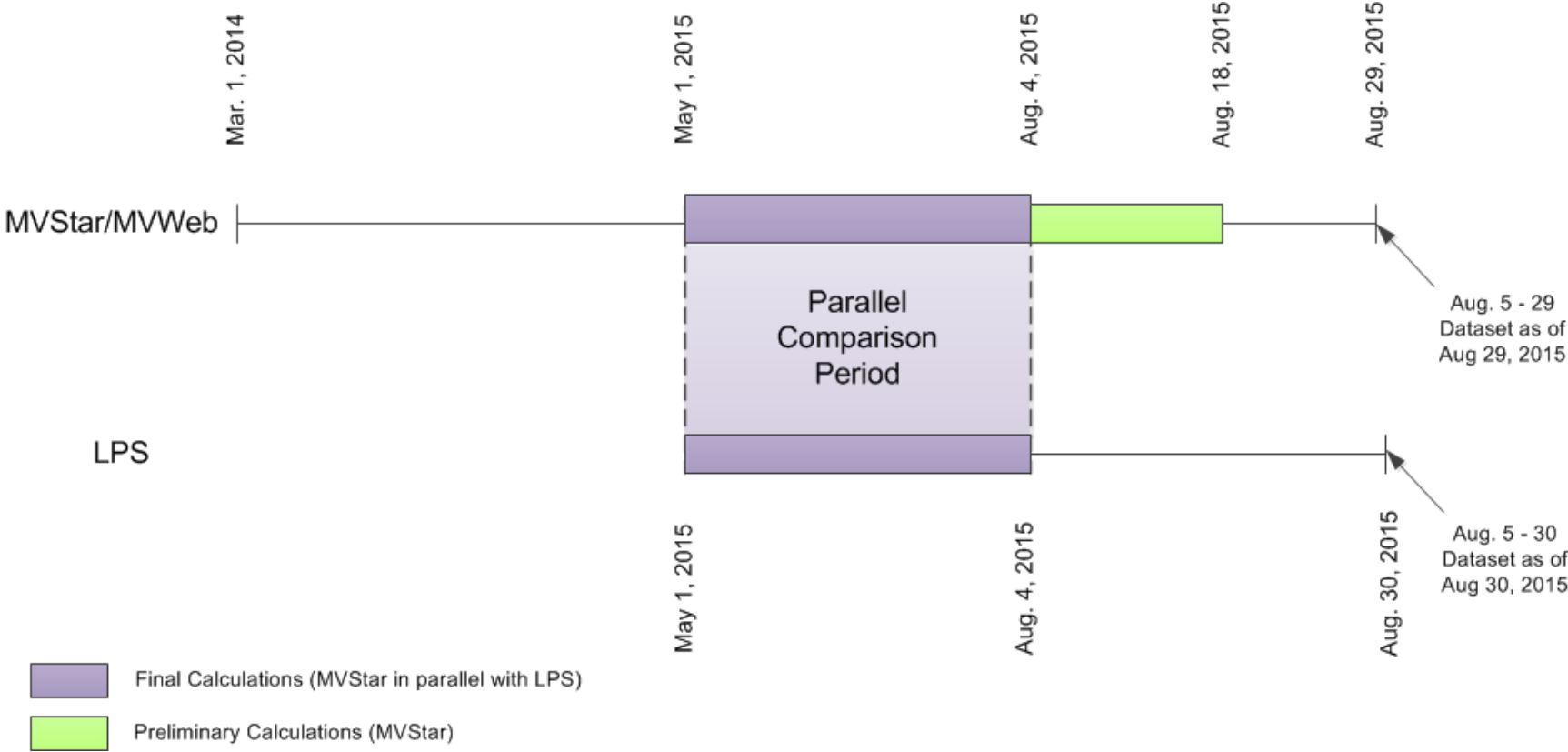
# Today's Agenda

- Data Availability
- Registration Freeze
- Site Registration Report (SRR) distribution
- Migration of Voltage/Current thresholds (exceptions)

# Data Availability at Go-Live

- Deployment to production will be a hard cutover from MV-Star/MV-Web to Oracle LPS/MDD (i.e. there will not be parallel system operations post go-live).
- MV-Star/MV-Web will continue to be available 2 months post go-live for participant access to historical data.
- At go-live, Oracle LPS/MDD will have meter and calculated data from May 1, 2015 to current day.
- Historical data will continue to be migrated to LPS post go-live. Details will be communicated post go-live.

# Data Availability at Go-Live



# Registration Freeze

- A registration freeze is needed to support the MDM Upgrade implementation.
- Registration freeze will be in effect from August 20 to September 2 inclusive.
  - All registration activities must be completed by noon on August 19 (including approved EUR's and SRR's).

# Registration Work and Registration Freeze

Unaffected	Affected
Submit/Review Single Line Diagram	Meter Master File
Submit/Review EITRP	EUR
Submit/Review MEC	Implement Totalization Tables (includes MEC, SSLA and Virtual Meter changes)
Submit/Review SSLA	
Submit/Review Virtual Meter	
Submit/Review Totalization Tables	
Submit/Review Commissioning	

# Registration Work – Unaffected by Freeze

- Single Line Diagram – any updates not affecting a totalization table or IT ratio can be completed.
- EITRP – any updates to an EITRP can be completed.
- Commissioning – Processing of Commissioning documents will be processed as normal.



# Registration Work – Partially Affected by Freeze

- MEC – MEC updates will be reviewed but the totalization table changes will not be implemented until after registration freeze.
- SSLA – SSLA updates will be reviewed but the totalization table changes will not be implemented until after registration freeze.
- Virtual Meter – Virtual Meter updates will be reviewed but the totalization table changes will not be implemented until after registration freeze.

# Registration Work – Meter Registration Affected by Freeze

The following meter registration activities that occur during the registration freeze will be processed after the freeze, starting September 3. The effective date will be back dated to the actual in-service date:

- Meter Master Files – meter registrations and meter replacements (including like-for-like replacements) will not be processed during the freeze. Field work may be completed.
- EUR – EURs will not be performed during the registration freeze.

# Registration Work – Totalization Table Registration Affected by Freeze

Totalization Table changes that occur during the registration freeze will be implemented after the freeze, starting September 3. The effective date will be back dated to the actual in-service date.

# Registration Work – Affected by Freeze

- Metering Installations is working with Market Registration to identify projects that require a New Facility Notification (NFN) during the registration freeze (i.e. facilities scheduled to be connected/energized during the registration freeze).
- Metering Installations will contact the MSPs to coordinate where an NFN is required during this time frame.
- This will be done by exception.

# Registration Freeze and Settlement Calendar

	Trade Date																
	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	01-Sep	02-Sep	03-Sep	04-Sep
<b>Preliminary</b>	07-Aug 08-Aug 09-Aug	10-Aug	11-Aug	-	-	12-Aug	13-Aug	14-Aug 15-Aug 16-Aug	17-Aug	18-Aug	-	-	19-Aug	20-Aug	21-Aug 22-Aug 23-Aug	24-Aug	25-Aug
<b>NOD</b>	29-Jul	30-Jul	31-Jul 01-Aug 02-Aug 03-Aug	-	-	04-Aug	05-Aug	06-Aug	07-Aug 08-Aug 09-Aug	10-Aug	-	-	11-Aug	12-Aug	13-Aug	14-Aug 15-Aug 16-Aug	17-Aug
<b>Final</b>	23-Jul	24-Jul 25-Jul 26-Jul	27-Jul	-	-	28-Jul	29-Jul	30-Jul	31-Jul 01-Aug 02-Aug 03-Aug	04-Aug	-	-	05-Aug	06-Aug	07-Aug 08-Aug 09-Aug	10-Aug	11-Aug

Note: The cells in red are dates after the registration freeze is over.

# Emergency Registration Work

- There may be circumstances during the registration freeze where registration work will have to be completed. This will be assessed on a case by case basis (by exception).
- Contact Dan Ferguson for Metering Installations work or Heather Kline for Meter Data Management work.

# Registration Contacts

- For general metering registration inquiries during the registration freeze, contact [MeteringInstallations@ieso.ca](mailto:MeteringInstallations@ieso.ca)

# SRR Distribution

- In some instances, MV-Star master data was transformed during conversion to Oracle LPS. Transformation differences include:
  - Voltage Codes and Loss Codes have been renamed in some cases.
  - Summary Meter with a '.' in the name has been transformed with a '\_\_'.
  - Totalization tables where a meter is mapped directly to a delivery point has been transformed with an intermediary summary meter (i.e. MP to SM to DP)
  - Compliance Aggregation and Meter Disaggregation Models include 'Ratio Meter' which is used to calculate apportionment ratio of dispatch instructions.
- Transformation of master data will be reflected in the 'go-live' Site Registration Report (SRR).



# SRR Distribution

- On Aug. 24, 2015 the IESO will be publishing a 'go-live' SRR for each registered delivery point.
- The SRR will detail the totalization table structure in Oracle LPS as of Aug. 4, 2015 onwards.
  - Effective date of the SRR is Aug. 5, 2015
- The SRR will be distributed to the participant (MMP, MMPT, TRAN and MSP) by associated role at the delivery point via IESO Report Site.
- You must have a 'Revenue Meter Data Contact' assigned in On-line IESO in order to have access to the reports.

# SRR Distribution

- Report Details:
  - Document Identifier (also the folder name on the IESO Reports Site): Contract Role- METER-SRR (e.g. MMP-METER-SRR)
  - Format: ZIP file containing SRR pdf files
  - Naming: CNF-MP SHORT NAME\_ Contract Role- METER-SRR \_YYYYMMDD\_v1.zip (YYYYMMDD: Publishing Date)
  - Publishing Frequency: One-Time Prior to the MDM go-live
  - Retention Period: 90 calendar days

# SRR Distribution

- The registered meter installation records in On-line IESO will also be updated with the latest SRR (effective Aug. 5, 2015).
- Participants will also have access to the latest SRR via On-line IESO.

# IESO's Hourly Voltage/Current Validations and Default Thresholds (over any 2 consecutive hours)

- ❑ Overall Average Voltage Minimum and Maximum is between **10,000 - 17,425** (based on 100-132 Volts)
- ❑ Voltage Channel Average for each channel is within **6%** (**above or below**) average of all Voltage Channels
- ❑ Overall Average Current is less than **56.25 Maximum** (based on 7.5 amps @R.F of 1.5)
- ❑ Current Channel Average for each channel is within **50%** (**above or below**) average of all Current Channels

# Voltage/Current Validation Threshold Exception Process

- In response to re-occurring failed voltage or current Validation MTRs, MSPs can request through the MTR a change to the Voltage or Current threshold for a certain meter to prevent further failed validations by that meter.
- Some of the reasons are **temporary** (EITRP, load transfer), others are **permanent** ( a wind farm's normal operations of @R.F 4.0 or 20 amps will always exceed Max Average Current; another facility's normal operation at 69 volts will always be below Max Average Voltage etc)

# Voltage/Current Validation Threshold Exception Process

- Metering Installations reviews the request and if appropriate grants the threshold exception
- In the past, the new validation threshold for that meter was updated, however the reasons and potential end date were not captured outside the closed MTR.
- In preparation for LPS implementation, we started reviewing all voltage/current thresholds to be carried over into new system and have 317 exceptions dating back to 2004. Many are probably not even relevant today.

# V/C Threshold Transfer Process to new LPS

All existing threshold exceptions will be transferred to LPS with **staggered end dates** (will either fail voltage/current validation or not).

- Any threshold changes requested in last year (**Sept 2014 to Aug 2015**) will be end dated **Sept 2016**.
- All other thresholds from **April 2004 to Aug 2014** will be end dated in the next year **according to the original date** they were requested starting in October this year.
- Original Request from **Oct 4, 2005** will be end dated **Oct 4, 2015**
- Original Request from **April 27, 2009** will be end dated **April 27, 2016**

# New Upcoming Process for Voltage/Current Threshold Exceptions

- We are developing a new process and criteria for managing Voltage/Current Threshold Exceptions which will be discussed at next RMSC/MSP Users Group Meeting in November.
- Thresholds will have date effectivity (e.g. end dated within four months for EITRP, a year or two for certain load imbalances and permanent if operations dictate)
- Threshold exceptions will still be requested through MTRs, however more information on technical reason for request, projected end date or reason for permanent change should be provided to assist in review and date effectivity selection.



