



DECEMBER 05, 2024

# Revenue Metering Standing Committee



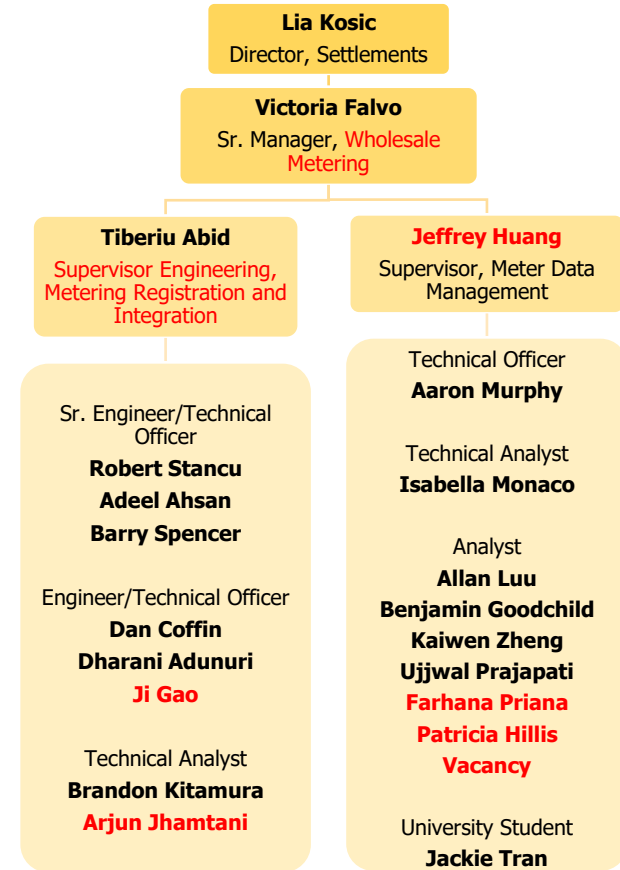
# Welcome Remarks

Victoria Falvo | Sr. Manager, Wholesale Metering

# IESO Org and Staff Updates

## Changes:

- **Jeffrey Huang** – Supervisor (Rotation), Meter Data Management
- **Ji Gao** – Engineer/Technical Officer (Rotation), Metering Registration and Integration
- **Arjun Jhamtani** – Technical Analyst (Rotation), Metering Registration and Integration
- **Farhana Priana** – Analyst, Meter Data Management
- **Patricia Hillis** – Analyst, Meter Data Management





# Administrative Items

Tiberiu Abid | Supervisor Engineering, Metering Registration and Integration

# Administrative Items List

- Review current meeting agenda
- Review and approval of last meeting minutes
- Action Items - none are open



# IESO Metering Status and MSP Performance Updates



# IESO Metering Updates

Jeffrey Huang | Supervisor, Meter Data Management

# Metering Installations by the Numbers – Part 1

Total of 2531 metering installations (2233 physical + 298 virtual) registered in IESO Administered Market (IAM)

## Physical Metering Installations

- 2233 physical metering installations
- 1892 registered under the Declaration of Compliance (DOC)
- 341 registered under the Alternative Metering Installation Standard (AMIS)



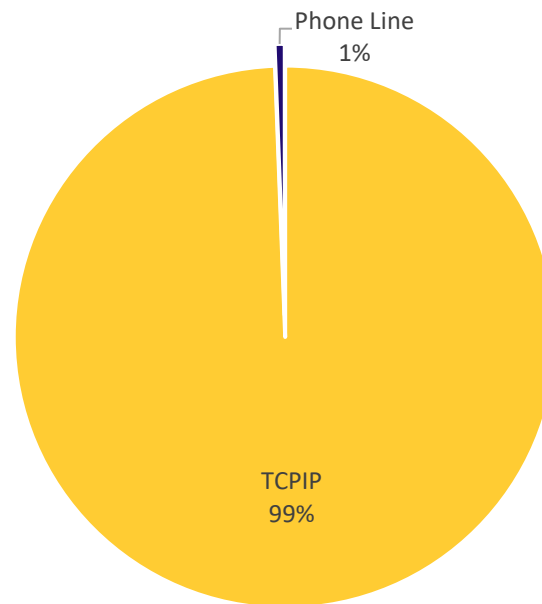
# Metering Installations by the Numbers – Part 2

## Virtual Metering Installations

- 298 virtual metering installations
- 115 represent station service (unmetered or allocated between MMPs)
- 183 represent embedded generation for the purpose of transmission tariff (Form 1563)

# Metering Communications

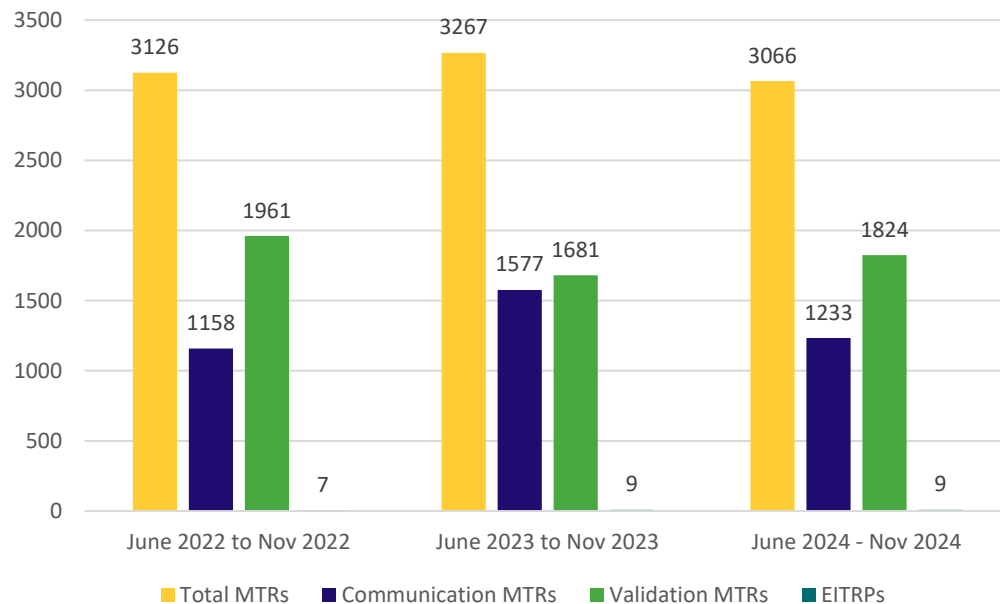
- 4509 Meters interrogated daily
- 4482 via TCPIP (99%, ■)
- 27 via telephone lines (1%, ■)



# Meter Trouble Reports (MTRs) Overview

From June 2024 – November 2024

- 3066 MTRs issued
  - 1233 Communication MTRs
  - 1824 Validation MTRs
  - 9 EITRP MTRs
- 291 Outage MTRs opened





# MSP Performance Metrics and Registration Updates

Isabella Monaco | Technical Analyst, Meter Data Management

# Introduction to MSP Performance Reports

- Part of conformance monitoring
  - Defined by market rules: **Market Manual 3.9**
- MSP performance reports released monthly for **two** months preceding
  - MSPs can access via: Online IESO>Reports>MSP Performance Reports
- Four main themes:
  - Communications and Validations, MTRs, Registration and Errors/Conformance
- Overall, positive MSP performance over the last 12 months (October 2023 – September 2024)

# Overall MSP Performance Summary – Theme 1

Over the last 12 months (October 2023 – September 2024):

- 95% Successful Daily Meter Communication on First Attempt
- 97% Successful Daily Meter Communication
- Approximately 94% of the Meter Installations do not experience communication MTRs on a monthly basis (Measure 3)
- Approximately 97% of Meter Installations do not experience validation MTRs on a monthly basis (Measure 4)

## Overall MSP Performance Summary – Theme 2

Over the last 12 months (October 2023 – September 2024):

- MTR responses has shown positive results relating to:
  - MTRs Resolved Within 2 Business Days of Issuance (Measure 5)
  - Number of Unresolved MTRs by Preliminary Settlement Statement (Measure 6)
  - Number of Unresolved MTRs by Final Settlement Statement (Measure 7)

# MSP Performance Monthly Breakdown (November 2023 – September 2024)

Measure	Target	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024
1. Successful Daily Meter Communication on First Attempt	90%	94.2	95.6	95.9	95.4	94.3	93.9	94.5	94.5	94.9	95.3	94.6	-
2. Successful Daily Meter Communication	95%	96.7	98.0	98.3	97.9	96.9	96.6	97.0	97.0	97.6	97.7	97.1	-
3. Communication Meter Trouble Reports Issued													
- # of communication MTRs issued	0	203	126	134	154	137	201	180	247	190	177	210	-
- % of meter installations without communication MTRs issued	100%	93.0	95.8	95.5	95.4	95.1	93.0	93.9	91.3	93.7	94.1	92.6	-

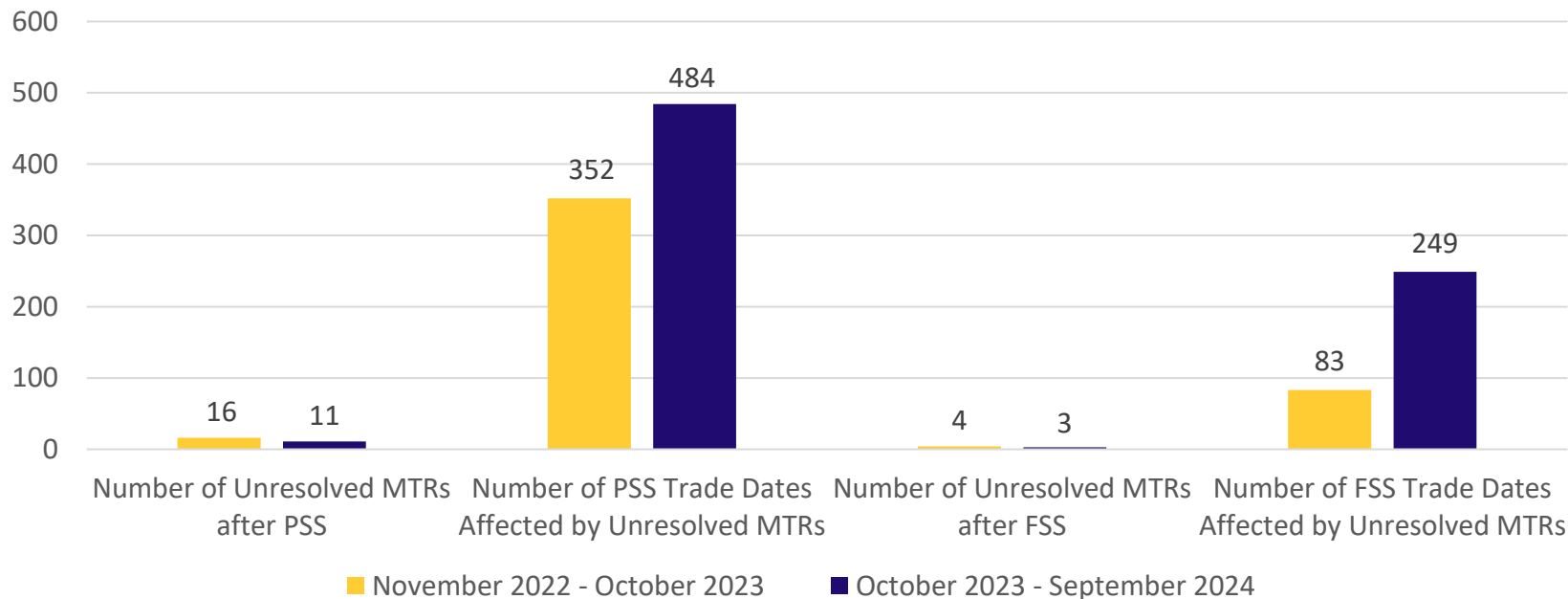


# MSP Performance Monthly Breakdown (November 2023 – September 2024)

Measure	Target	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024
4. Validation Meter Trouble Reports Issued													
- # of validation MTRs issued	0	82	65	70	55	71	111	126	106	142	104	101	-
- % of meter installations without validation MTRs issued	100%	97.1	97.5	97.4	97.8	97.4	95.9	95.4	96.0	95.0	96.2	96.4	-
5. Meter Trouble Reports Resolved Within 2 Business Days of Issuance	95%	96.1	96.9	96.9	98.3	97.6	98.1	97.5	97.4	98.4	98.1	96.6	-

# PSS/FSS Performance Overview

All MSPs 12-Month Performance  
(Nov 2022 - Oct 2023 vs. Oct 2023 - Sep 2024)



# Overall MSP Performance Summary – Theme 3

Over the last 12 months (October 2023 – September 2024):

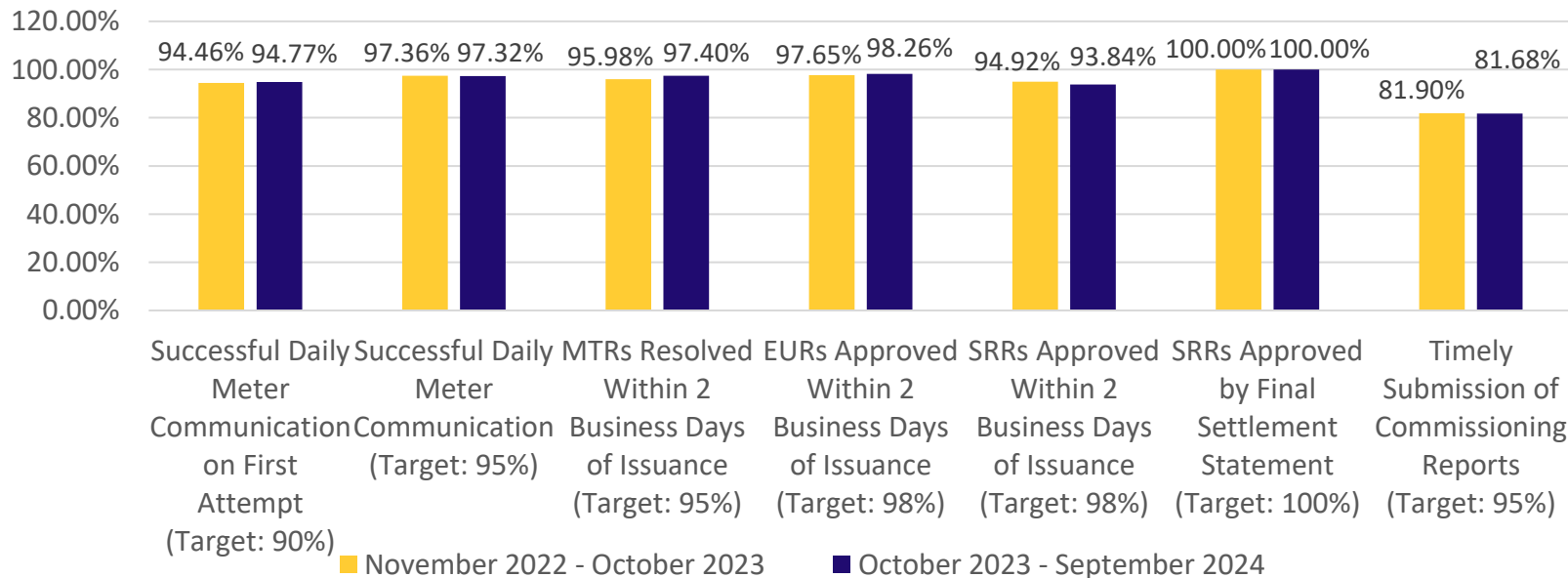
- Registration activity has shown positive results relating to:
  - EURs Approved Within 2 Business Days of Issuance (Measure 8)
  - SRRs Approved By Final Settlement Statement (Measure 10)
- Registration activity has shown lower performance relating to:
  - Timely Submission of Commissioning Reports (Measure 11)

# MSP Performance Monthly Breakdown (November 2023 – September 2024)

Measure	Target	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024
8. Engineering Unit Reports Approved Within 2 Business Days of Issuance	98%	100.0	89.2	100.0	100.0	100.0	98.8	98.8	100.0	98.9	100.0	98.2	-
9. Site Registration Reports Approved Within 2 Business Days of Issuance	98%	77.8	95.7	100.0	100.0	100.0	100.0	100.0	95.2	86.0	100.0	75.0	-
10. Site Registration Reports Approved by Final Settlement Statement	100%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-
11. Timely Submission of Commissioning Reports	95%	86.4	87.5	96.2	84.6	92.7	54.1	88.9	81.0	84.0	73.3	55.6	-

# MSP Performance Breakdown

All MSPs 12 Month Performance  
(Nov 2022 - Oct 2023 vs. Oct 2023 - Sep 2024)



# Overall MSP Performance Summary – Theme 4

Over the last 12 months (October 2023 – September 2024):

- Measure 12, “Metering Registry Errors” have been 0 and over the last couple of years
- Measure 13, “Non-conformance incidents” resulting from R&P audits will continue to be reported (seeing positive impact from R&P audits conducted to date)

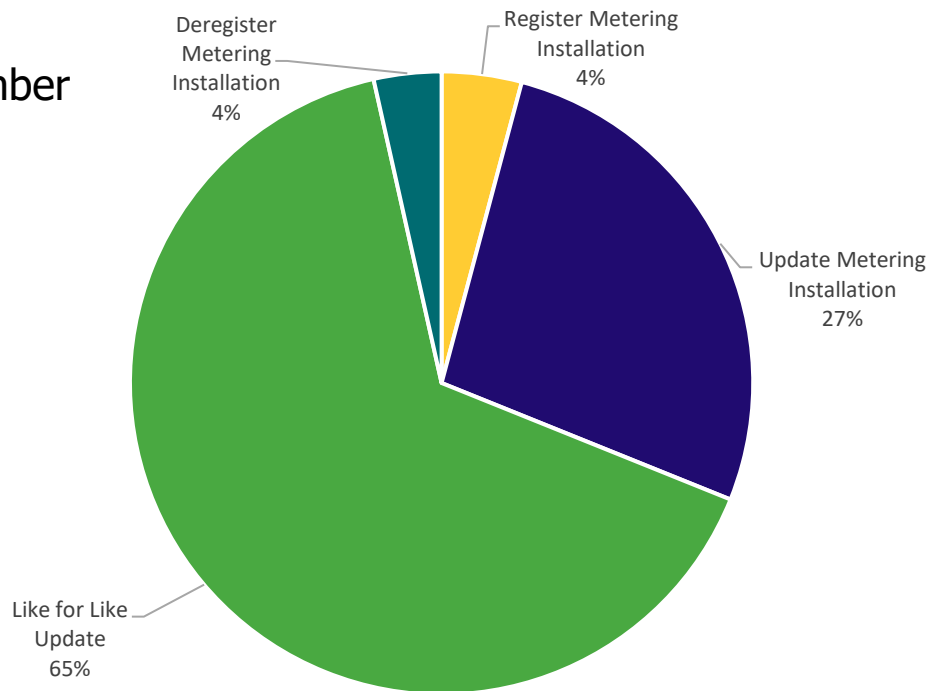
# MSP Performance Monthly Breakdown

## (Period: November 2023 – September 2024)

Measure	Target	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024	Jul 2024	Aug 2024	Sep 2024	Oct 2024
12. # of Metering Registry Errors	0	0	0	0	0	0	0	0	1	0	0	0	-
13. # of Non-Conformance Incidents	0	0	0	0	0	0	0	0	0	0	0	0	-

# Meter Registration Hotline Activities – Part 1

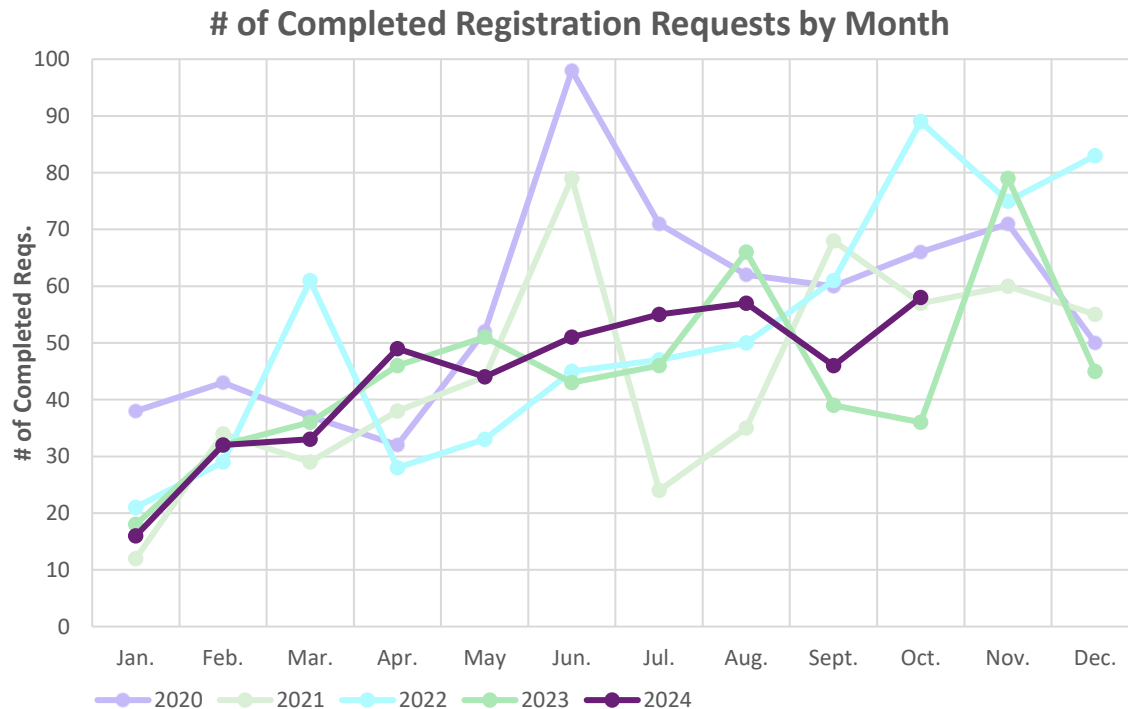
- 627 total completed (January 2024 – November 2024)
- 410 Like for Like Update (65%, ■)
- 169 Update Metering Installation (27%, ■)
- 26 Register Metering Installation (4%, ■)
- 22 Deregister Metering Installation (4%, ■)





# Meter Registration Hotline Activities – Part 2

- Note: Graph does not include update metering installation requests
- **IESO MTR Hotline:**  
905-855-6441
- **IESO Meter Registration Hotline:**  
905-855-6490





# Sector and IESO Projects Updates



# Wholesale Metering Project Updates

## **Commissioning Test Report Extension Process Enhancement**

Dharani Adunuri | Engineer, Metering Registration & Integration

# Existing Commissioning Report Submission Process

## ➤ Commissioning Verification Report:

- Deadline: Within 90 days of the approval date of the Engineering Unit Report.
- No submission extensions are possible. MSPs expected to submit within deadline.

## ➤ Commissioning Test Report:

- Deadline: Within 90 days of the approval date of the Engineering Unit Report.
- Submission extensions are possible with a valid reason (Ex. not enough load).
- 1<sup>st</sup> extension request is made via online IESO, subsequent requests are made by emailing IESO MR&I staff for new deadline.

# New Commissioning Report Submission Process

## ➤ Commissioning Verification Report:

- No change

## ➤ Commissioning Test Report:

- No change to deadlines.
- All extension requests are made via Online IESO, eliminating need for emails to IESO staff.
- Request extension task will be generated 10 days prior to deadline in Online IESO along with email reminder notices.
- New process go-live estimated Q1/Q2 2025, MSPs will be notified prior to implementation.

# New Commissioning Report Submission Process (cont'd)

## Request Extension for Commissioning Test Report


### Request Details

Organization ID:		Meter Installation ID:	
Organization Name:		Meter Installation Name:	
Request number:	23745	Facility Name:	
		Proposed Effective Date	12/17/2024

### Commissioning Elements

- ☒ Conduct Visual Check
- ☒ Test Secondary Wiring
- ☒ Verify Meter Configuration
- ☒ Conduct Ratio And Polarity Tests
- ☒ Conduct Cross Phase Test
- ☒ Conduct Instrument Transformer Checks

### Request Extension Period for Test Report

Original due date:	11/21/2024 10:26 AM EST	Previous Extension Date	11/22/2024
Proposed Extension Date	<input type="text" value="11/26/2024"/> 		
Extension Reason *	<div></div>		
Rejection Reason *	<p>Please provide a valid reason why test cannot be preformed.</p> <p>Click on the button below to send an extension request for test report submission</p>		

REQUEST EXTENSION



# Wholesale Metering Project Updates

## **MIRT Project**

Jeffrey Huang | Supervisor, Meter Data Management

# IESO MIRT Project – Overview of New Tool

New tool went live in online IESO production on September 24, 2024!

Development since June 2023

Core Features and Improvements:

- Masterfile is created, submitted and downloadable in online IESO
- Certain parameters are pre-populated based on device, element config and pkg 1 info
- Validations are built in with preloaded templates
- Supported by IESO internal IT group

No change to Masterfile and meter programming requirements



# IESO MIRT Project – Next Steps

IESO continues to monitor the performance of new tool in all request types

IESO continues to update any remaining documentation referencing the old MIRT tool

Form 1488 is embedded in Online IESO and no longer required separately

Old MIRT tool is retired

Project is expected to close within 2024



# Wholesale Metering Project Updates

## **Meter Data Management System Replacement Project**

Tiberiu Abid | Supervisor Engineering, Metering Registration and Integration

# Meter Data Management System Replacement Project

- Replace existing Meter Data Management Solution (MDMS) a.k.a. LPS
- Current project scope does not consider any changes to upstream or downstream processes and/or systems/tools, e.g., MV-90, MIRT/MVT, Online IESO, CRS
- Project Status:
  - Planning phase
  - Procurement ongoing

# MDMS Replacement Project (cont'd)

## Impact:

- Minimum or no impact on MSPs/MMPs
- Impact on IESO's Wholesale Metering resources:
  - Multiple resources need to be assigned to work on the project
  - Reduce support to some metering core activities, e.g., metering installation audits, etc. (level of reduction to be further assessed)

Reference: [Meter Data Management System Replacement](#)

- <https://www.ieso.ca/Sector-Participants/Engagement-Initiatives/Engagements/Meter-Data-Management-System-Replacement>

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# Sector and IESO Projects - Updates

Tiberiu Abid | Engineering Supervisor, Revenue Metering

# Topics

- Measurement Canada (Sector)
- Resource Adequacy (IESO Project)
- Enabling Resources Program (IESO Project)
- Market Renewal Project (IESO Project)

# Measurement Canada (MC)

- Electric Process Advisory Committee (EPAC) meetings are back
- Electricity Canada - Metering Technology and Policy Committee (MTPC) has resumed regular meetings with MC, focusing on Complex Metering Initiatives Joint Working Group (CMI JWG) and Advanced Metering Infrastructure (AMI)
- MC consultation process is still ongoing

**Metering Impact:** - Opportunity of getting involved to provide advice and support to various MC initiatives, committees and working groups

# Resource Adequacy

## **E-LT1 RFP and LT1 RFP**

- Procurement for electricity capacity has now concluded. Currently in process of connecting the new resources to ICG - scheduled to come into service by 2028
- Increased metering workload for both IESO and MSPs

**LT2 RFP** – ongoing, the final set of draft documents for the first LT2 RFP window is expected to be posted in Q1 of 2025.

Reference: [Long-Term 2 RFP](#)

(<https://www.ieso.ca/Sector-Participants/Resource-Acquisition-and-Contracts/Long-Term-2-RFP>)



# Enabling Resources Program (ERP)

- Scope is focus on incorporating electricity storage (“storage”), hybrid generation-storage pairings (“hybrids”), and small and aggregations of dispatchable Distributed Energy Resources (DER) (together the “ERP Resources”) into the IESO-administered markets, tools, and processes
- The IESO encourages all interested parties to participate in this engagement – refer to [Enabling Resources Program](https://www.ieso.ca/Sector-Participants/Engagement-Initiatives/Engagements/Enabling-Resources-Program)

(<https://www.ieso.ca/Sector-Participants/Engagement-Initiatives/Engagements/Enabling-Resources-Program>)

# Enabling Resources Program (ERP) (cont'd)

## **Metering Impact:**

- Wholesale Metering resource availability to support the program detail design and implementation
- May impact market rules, requirements, hardware standards and policies

# Market Renewal Program

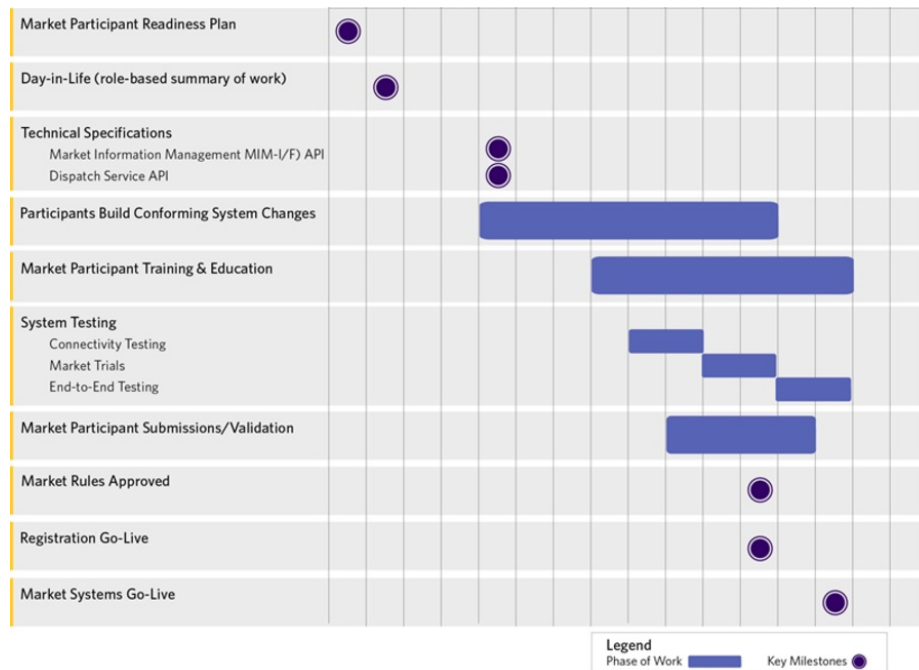
The Market Renewal Program (MRP) will deliver more efficient markets, ensuring that all Ontarians have a stable and reliable supply of electricity at the lowest cost

## Metering Impact:

There is no direct impact to metering processes due to MRP implementation and Go-Live activities

Metering market manuals may be updated to align with MRP – no material changes expected

Market Renewal Project [Market Renewal \(ieso.ca\)](https://www.ieso.ca)



# Roundtable Discussion



# Thank You

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