



JUNE 23, 2026

Revenue Metering Standing Committee



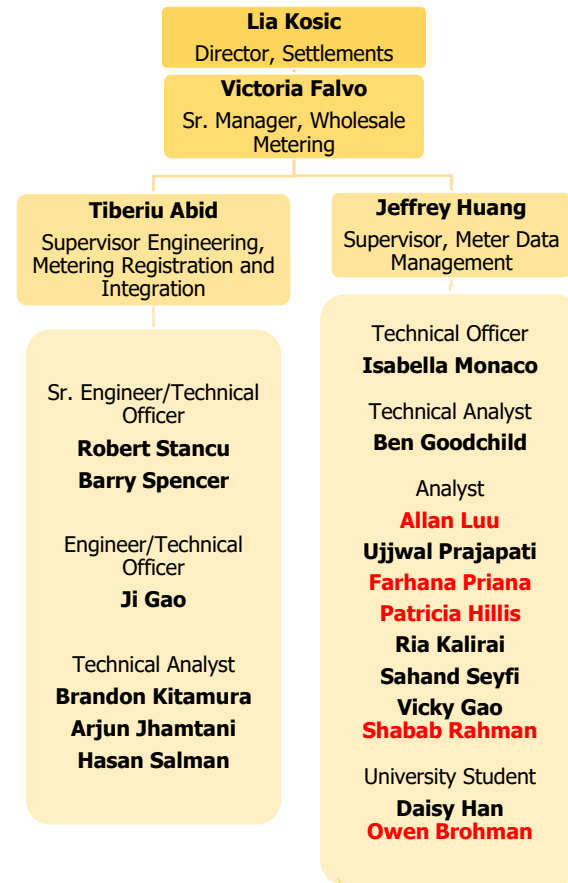
Welcome Remarks

Victoria Falvo | Sr. Manager, Wholesale Metering

IESO Org and Staff Updates

Changes:

- **Allan Luu** – Left IESO
- **Farhana Priana** – On leave
- **Patricia Hillis** – On leave
- **Shabab Rahman** – Analyst (Rotation), MDM
- **Owen Brohman** – New MDM Student





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

Isabella Monaco | Technical Officer, Meter Data Management

Metering Installations by the Numbers – Part 1

Total of 2605 metering installations (2276 physical + 329 virtual) registered in IESO Administered Market (IAM)

Physical Metering Installations

- 2276 physical metering installations
- 1938 registered under the Declaration of Compliance (DOC)
- 338 registered under the Alternative Metering Installation Standard (AMIS)

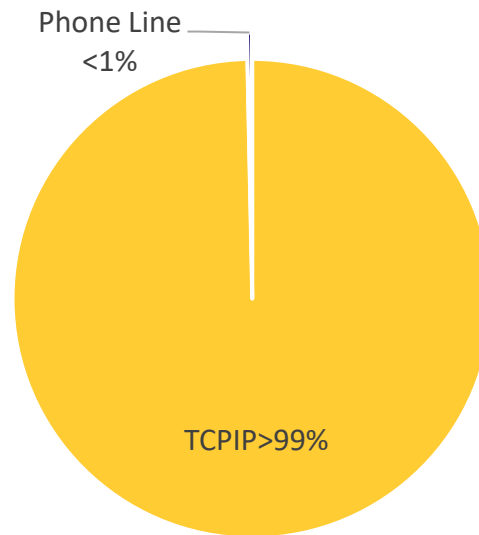
Metering Installations by the Numbers – Part 2

Virtual Metering Installations

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

Metering Communications

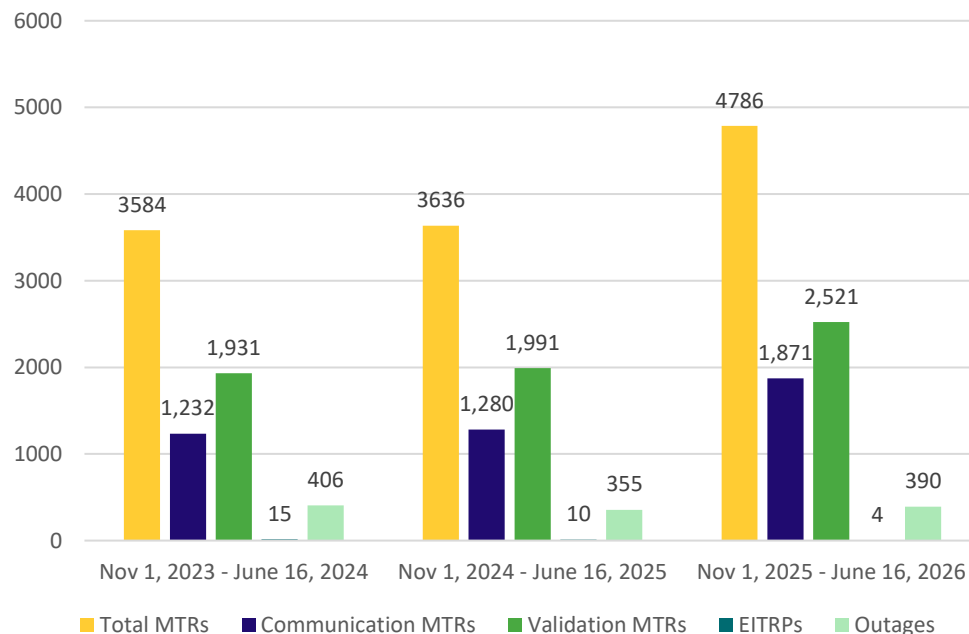
- 4572 Meters interrogated daily
- 4559 via TCPIP (>99%, ■)
- 13 via telephone lines (<1%, ■)



Meter Trouble Reports (MTRs) Overview

From Nov 1, 2025 – Jun 16, 2026

- 4786 MTRs issued
 - 1871 Communication MTRs
 - 2521 Validation MTRs
 - 4 EITRP MTRs
 - 390 Outage MTRs opened





MSP Performance Metrics and Registration Updates

Ben Goodchild | Technical Analyst, Meter Data Management

Introduction to MSP Performance Reports - Part 1

- Part of conformance monitoring
 - Defined by market rules: **Market Manual 3.9**
- MSP performance reports released monthly for **two** months preceding
 - Access via: Online IESO>Reports>MSP Performance Reports
- Overall, positive MSP performance over the last 12 months (May 2025 - April 2026)

Introduction to MSP Performance Reports - Part 2

Four main themes:

1. Communications and Validations
2. MTRs
3. Registration
4. Errors/Conformance

Overall MSP Performance Summary – Theme 1

Over the last 12 months (May 2025 - April 2026):

- 94% Successful Daily Meter Communication on First Attempt (Measure 1)
- 97% Successful Daily Meter Communication (Measure 2)
- Approximately 93% of the Meter Installations do not experience communication MTRs monthly (Measure 3)
- Approximately 96% of Meter Installations do not experience validation MTRs monthly (Measure 4)

Overall MSP Performance Summary – Theme 2

Over the last 12 months (May 2025 - April 2026):

- Overall MTR responses have 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 (May 2025 - April 2026)

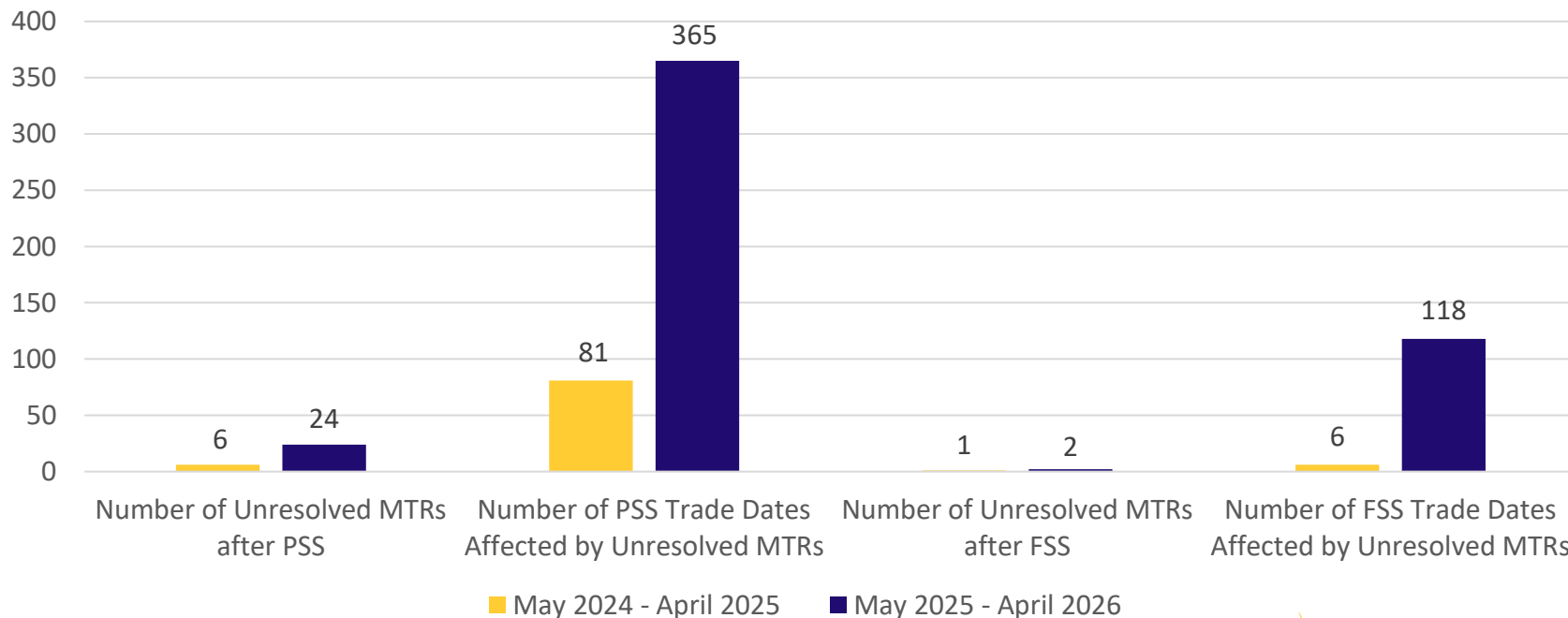
Measure	Target	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Jan 2026	Feb 2026	Mar 2026	Apr 2026
1. Successful Daily Meter Communication on First Attempt (%)	90	94	94	95	94	94	94	92	94	94	93	93	95
2. Successful Daily Meter Communication (%)	95	97	97	98	97	97	97	96	97	97	97	96	97
3. Communication Meter Trouble Reports Issued													
- # of communication MTRs issued	0	216	214	187	212	243	296	266	196	183	201	204	190
- % of meter installations without communication MTRs issued	100	93	93	94	93	93	90	92	94	94	94	94	94

MSP Performance Monthly Breakdown (May 2025 - April 2026)

Measure	Targ et	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Jan 2026	Feb 2026	Mar 2026	Apr 2026
4. Validation Meter Trouble Reports Issued													
- # of validation MTRs issued	0	139	125	111	118	141	149	169	119	121	117	149	111
- % of meter installations without validation MTRs issued	100	95	96	96	96	95	95	95	96	96	96	95	96
5. Meter Trouble Reports Resolved Within 2 Business Days of Issuance (%)	95	99	97	96	98	97	97	97	99	94	94	97	95

PSS/FSS Performance Overview

All MSPs 12-Month Performance
(May 2024 - April 2025 vs. May 2025 - April 2026)



Overall MSP Performance Summary – Theme 3

Over the last 12 months (May 2025 - April 2026):

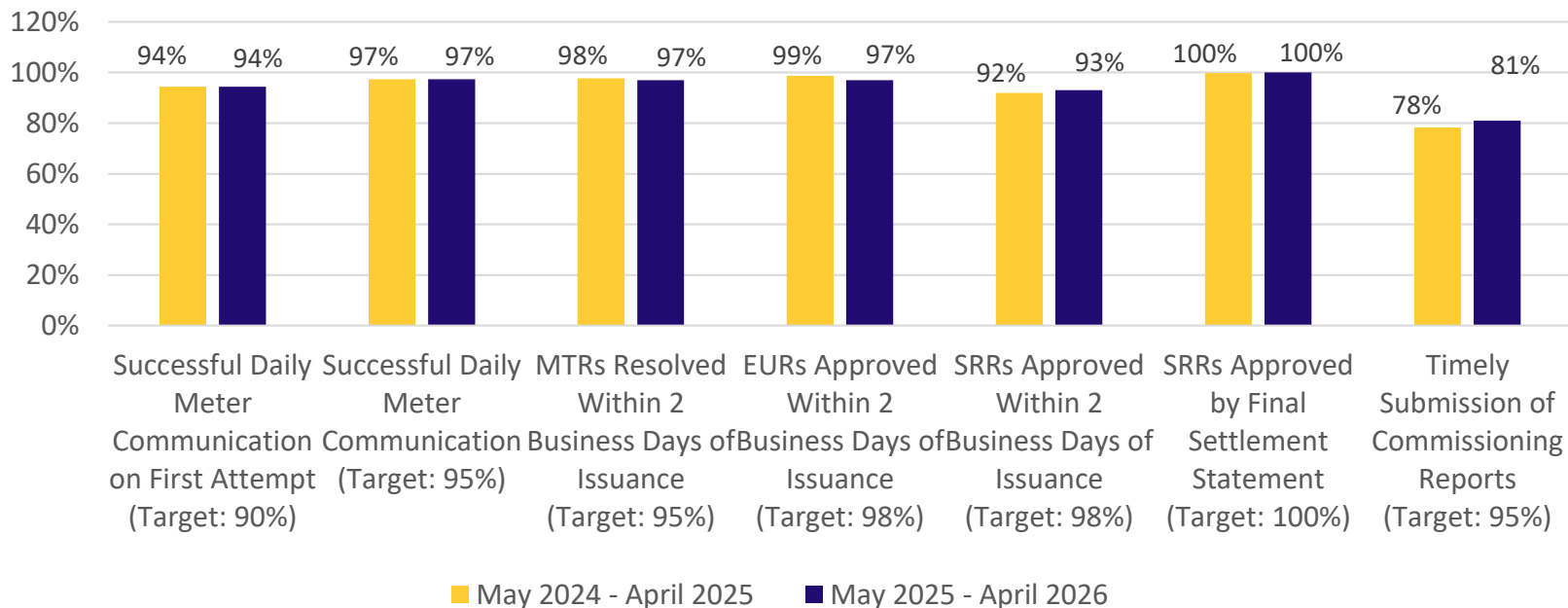
- Registration activity has shown positive results relating to:
 - EURs Approved Within 2 Business Days of Issuance (Measure 8)
 - SRRs Approved By Final Settlement Statement (Measure 10)
- Registration activity has shown lower performance relating to:
 - Timely Submission of Commissioning Reports (Measure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

MSP Performance Monthly Breakdown (May 2025 - April 2026)

Measure	Target	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Jan 2026	Feb 2026	Mar 2026	Apr 2026
8. Engineering Unit Reports Approved Within 2 Business Days of Issuance (%)	98	100	99	99	100	95	96	94	100	100	89	100	96
9. Site Registration Reports Approved Within 2 Business Days of Issuance (%)	98	90	100	100	89	88	100	94	88	98	86	98	84
10. Site Registration Reports Approved by Final Settlement Statement (%)	100	100	100	100	100	100	100	100	100	98	100	100	95
11. Timely Submission of Commissioning Reports (%)	95	59	73	96	78	96	89	73	84	89	59	88	88

MSP Performance Breakdown

All MSPs 12 Month Performance
(May 2024 - April 2025 vs. May 2025 - April 2026)



Overall MSP Performance Summary – Theme 4

Over the last 12 months (May 2025 - April 2026):

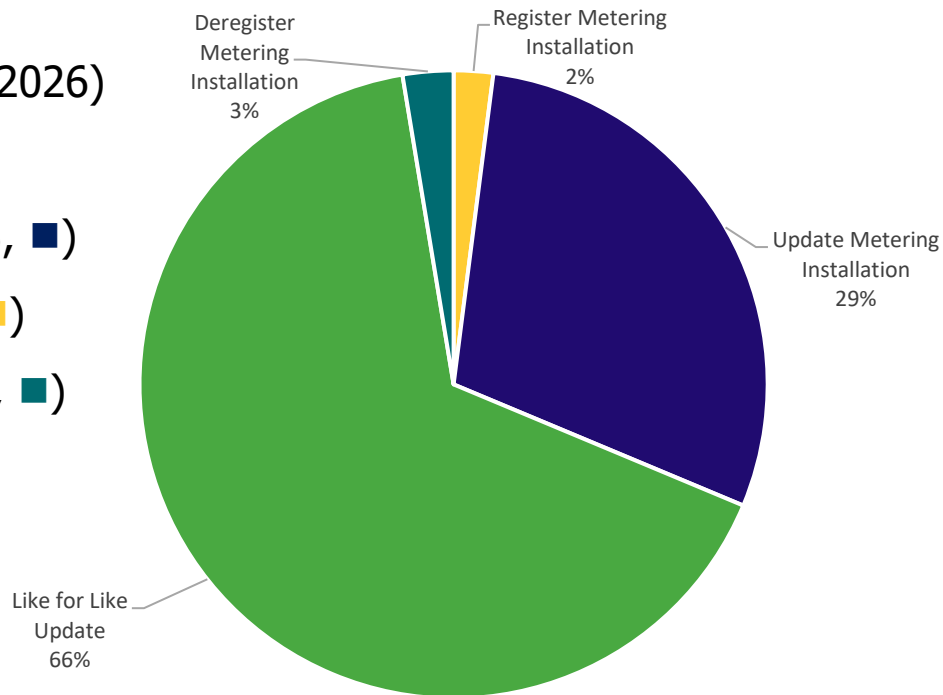
- Measure 12, “Metering Registry Errors” have been 0 and over the last couple of years
- Measure 13, “Non-conformance incidents” resulting from R&P audits will continue to be reported (seeing positive impact from R&P audits conducted to date)

MSP Performance Monthly Breakdown (May 2025 - April 2026)

Measure	Targ et	May 2025	Jun 2025	Jul 2025	Aug 2025	Sep 2025	Oct 2025	Nov 2025	Dec 2025	Jan 2026	Feb 2026	Mar 2026	Apr 2026
12. # of Metering Registry Errors	0	0	0	0	0	0	0	0	0	0	0	0	0
13. # of Non-Conformance Incidents	0	0	0	0	0	0	0	0	0	0	0	0	0

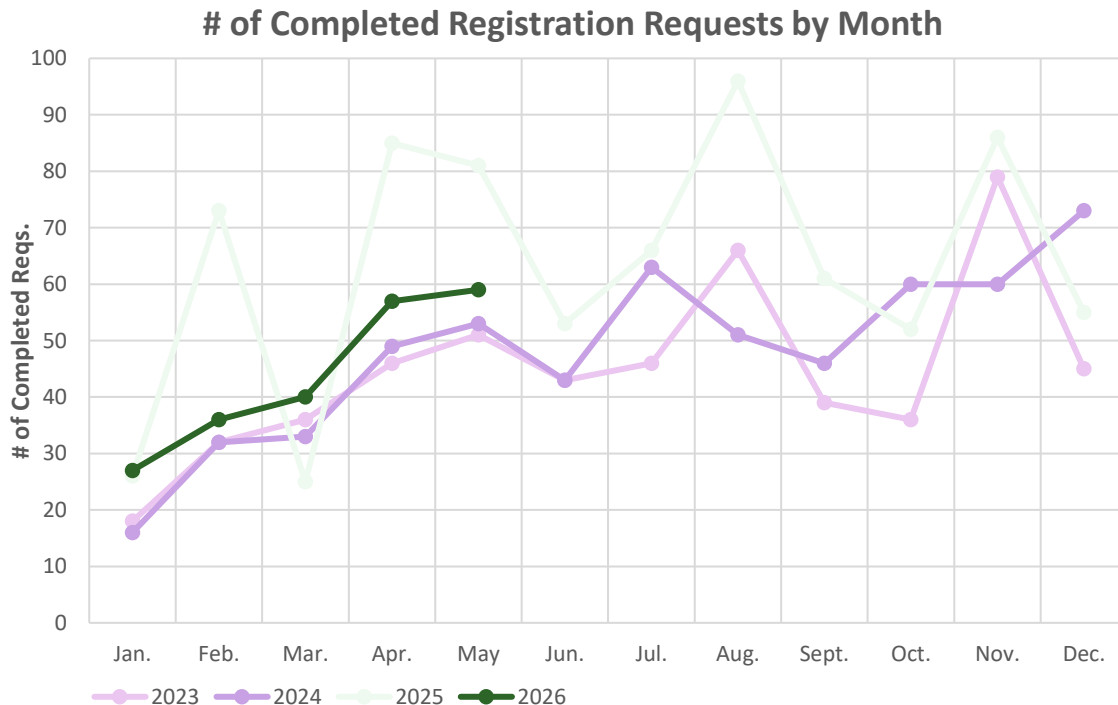
Meter Registration Hotline Activities – Part 1

- 345 total completed (Jan 2026 – June 16, 2026)
 - 228 Like for Like Update (66%, ■)
 - 101 Update Metering Installation (29%, ■)
 - 7 Register Metering Installation (2%, ■)
 - 9 Deregister Metering Installation (3%, ■)



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





IESO Projects and Initiatives Updates

Various Presenters

SEL-735 CML APPLICATION UPDATE

- Schweitzer Engineering Laboratories (SEL) submitted CML application for SEL-735 as an alternate meter
- SEL-735 is a Pannel Meter, expected to be formally added to the IESO CML later this year
- Review Status:
 - Bench Testing Complete
 - Finalizing Conforming Meter Framework Document
 - MDAS Accommodation for New Meter Model



IESO MV90 Version Upgrade

- In first half of 2026, IESO tested and deployed MV90 V8 into production
- No changes to functional specifications or business processes
- No changes to meter TIMs
- IESO is looking into the next window of opportunity to test and update meter TIMs in MV90

MTR Ready for Resolution Reminder

- As per Market Manual 5.2 section 1.3.4.1, MTR is resolved when:
 - Root cause of the issue is identified
 - Plan in place to resolve the identified issue with timeline
 - Plan to look after the data has been agreed upon with the IESO
- MSPs are reminded to click the “Ready for Resolution” button when responding to MTR with resolution.

Bell 3G Network Decommissioning

- IESO is made aware of upcoming decommissioning of Bell's 3G/HSPA cellular network in early 2027
- If MSPs have large volume of modem changes to upgrade communication network, please share tentative schedule with IESO to ensure IESO registration hotline has enough capacity to process and test the communication changes.
- If new IP addresses are not part of existing VPN setup, please reach out to IESO in advance so our telecom team can establish new VPN tunnel.

Update to Voltage/Current Threshold Review

- For voltage and current validations, MSPs may request local validation threshold exceeding the default parameters for IESO review and implementation if approved.
- Historically the maximum duration of local validation threshold is 3 years.
- To align with the 2-year recalculation limitation period established with the RSS project/new CRS, and the resulting requirement of IT Spot check every 18 month, the maximum duration of local voltage and current validation thresholds will be **18 month**.
- Local voltage and current validation threshold and duration remains to be reviewed on a case-by-case basis.

Meter Data Management System Replacement Project

- Replace existing Meter Data Management Solution (MDMS) i.e. LPS
- Current project scope does not consider any changes to upstream or downstream processes and/or systems/tools e.g. MV90, MIRT/MVT, Online IESO, CRS
- Project Status:
 - Completed Analyze Phase
 - Currently in Construct Phase – review of Functional Design Documents, testing strategy/planning, edge systems and integrations development (ETLs), etc.
 - Anticipated Go-Live in 2027
- Reference: <https://www.ieso.ca/Sector-Participants/Engagement-Initiatives/Engagements/Meter-Data-Management-System-Replacement>

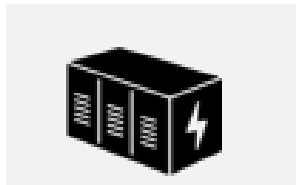


IESO's Approach to Distributed Energy Resources

Tiberiu Abid | Supervisor Engineering, Metering Registration and Integration

IESO Definition of DERs

Distributed Energy Resources (DERs) are resources that **generate** electrical energy, **store**, and discharge electrical energy, or dynamically **modify load**, and that are connected directly to a utility distribution system or to an end-use customer's premises **within a distribution (Dx) system**.



Why Do DERs Matter?

Speed of Deployment

Fewer Siting Challenges

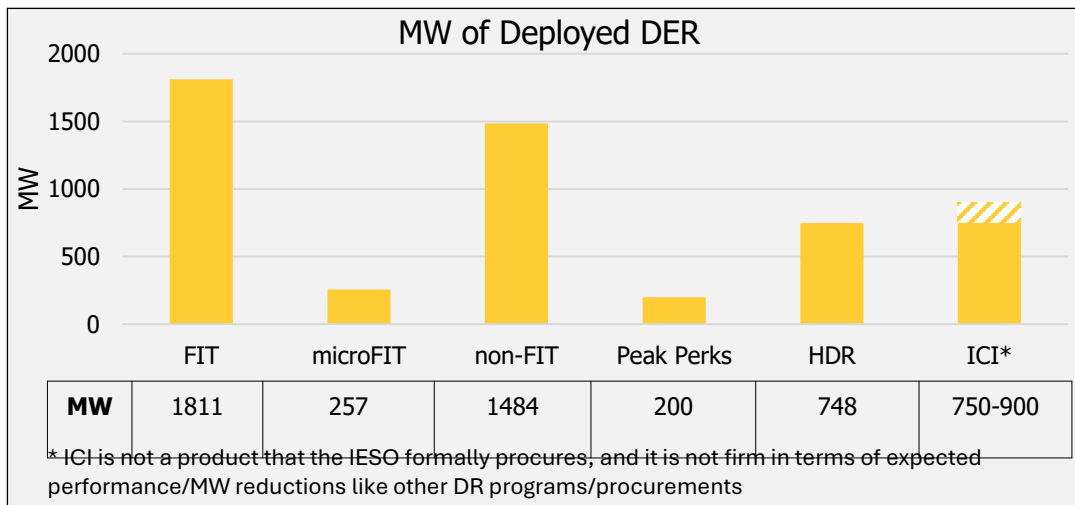
Leverage “Steel in the Ground”

Distribution System Benefits

Customer Choice

Policy Expectations

Risks of not integrating DERs include **missed deferral** of infrastructure investment, inefficient or **higher-cost procurement** of capacity and ancillary services, **reduced visibility** and controllability, and fewer options to relieve **localized congestion**



DERs: A Shared Responsibility

IESO		LDCs		OEB		Ministry of Energy	
	Planning		Dx Planning		Adjudication		DER Policy
	Procurement and Markets		Dx Acquisitions and Markets		Rate Regulation		Issue Directives to IESO/OEB
	Operational Coordination with LDCs		Operational Coordination with IESO		Guidance		Regulatory Changes
	Research and Pilots				DER Policy		

IESO Approach to DERs

IESO's focus is:

Bulk system
reliability and
efficiency

Enabling
participation
in wholesale
markets

Acquisition for
bulk system
needs

Implementing
effective value
stacking
opportunities

Supporting
LDCs and OEB
in developing
value streams
for Dx services

Major IESO DER Initiatives

Demand Side Management Programs

- \$10.9B 12-year funding commitment
- Includes Peak Perks and Commercial HVAC DR Program
- eDSM Stream 2 will enable value stacking by allowing LDC-led programs

Resource Adequacy Framework (RAF)

- DER > 1 MW can participate in existing procurements (MT, LT)
- Local Generation Program (LGP) acquiring small FTM DERs
- >1 MW FTM DER and BTM aggregations eligible for Capacity Auction

Enabling Resources Program (ERP)

- Enable 5-min dispatchable DER aggregations
- Provides market access for smaller DERs and portfolios of F/BTM resources
- Unlocks additional opportunities in RAF



Enabling Resource Program (ERP)

ERP Overview

The Enabling Resources Program (ERP) is a set of integrated projects that will further enhance the renewed market.

ERP's proposed changes will unlock new opportunities for storage, hybrid, and distributed energy resources to compete, helping to meet system needs in a reliable and cost-effective manner.

ERP will benefit the sector by supporting grid reliability, increasing economic efficiency and encouraging resource innovation.

Resource Types



Electricity Storage
("Storage")



Hybrid Generation-
Storage Pairings
("Hybrids")



Distributed Energy
Resources (**DERs**)



Storage & Hybrid Integration Project

Storage and Hybrid Integration Project

Drivers for change:



~**3,000MW** of contracted storage resources are scheduled to be in service by 2028



Limitations of the current two-resource model is creating **operational challenges** and reducing market efficiency

The project is taking a **phased approach** to fast-track key storage design features that will improve scheduling, reduce manual work for the Control Room, and enhance operations for **battery storage** market participants.

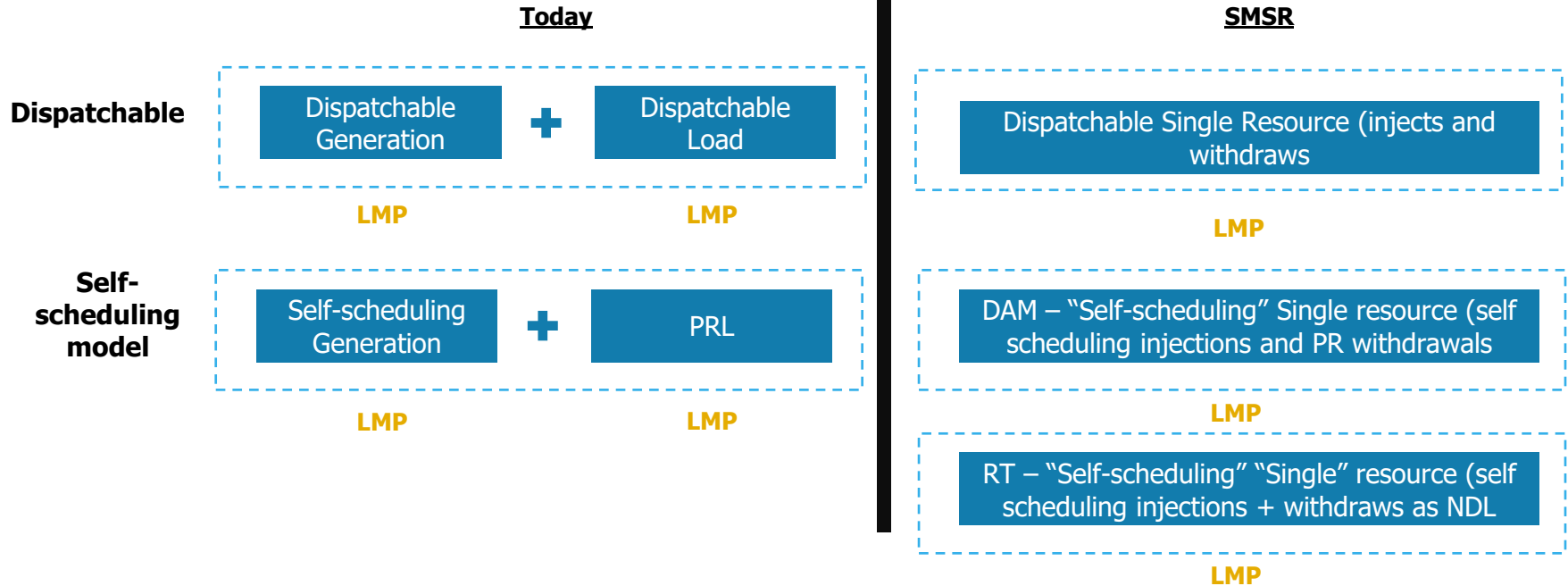
Phase 1 (2028)

- ✓ Single model storage resource (SMSR) for energy and OR
- ✓ State of Charge management

Phase 2 (TBD)

- ✓ Frequency regulation from storage resources
- ✓ Uplift exemptions
- ✓ Additional features and improvements

Single Model Storage Resource (SMSR)





Distributed Energy Resources (DER) Integration Project

Distributed Energy Resources Integration Project

Drivers for change:



As demand for electricity grows, DERs can play an important role in **cost effectively meeting system needs**.



Policy direction set by Ministry of Energy and Mines to **plan, acquire, and enable DERs**.

The initiative creates opportunities for DER operators and Local Distribution Companies (LDCs) to drive local energy solutions while contributing valuable services that strengthen the provincial grid and deliver long-term benefits.

Phase 1 (2027)

- ✓ Report back on Integrated Energy Plan Directive 14.1
- ✓ Bi-directional operational visibility

Phase 2 (2029)

- ✓ New market participation models, including transmission-distribution operational coordination
- ✓ Static planning data

What DER Integration intends to do?

ERP intends to create *market participation model(s)* for **Aggregations** of DERs represented at a point of connection to the ICG

- 1) **Aggregations** with quick-start, 5-min dispatchable capabilities to be enabled to provide energy and/or operating reserve (OR)
- 2) **Aggregations** to be treated as a *single market resource*:
 - 1) Dispatch data reflects the representative **Aggregation**
 - 2) IESO schedules & dispatches the representative **Aggregation**
 - 3) IESO settles the representative **Aggregation**

Roundtable Discussion



**Virtual
Round
Tables**

Thank You

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