



DECEMBER 10, 2020

Revenue Metering Standing Committee

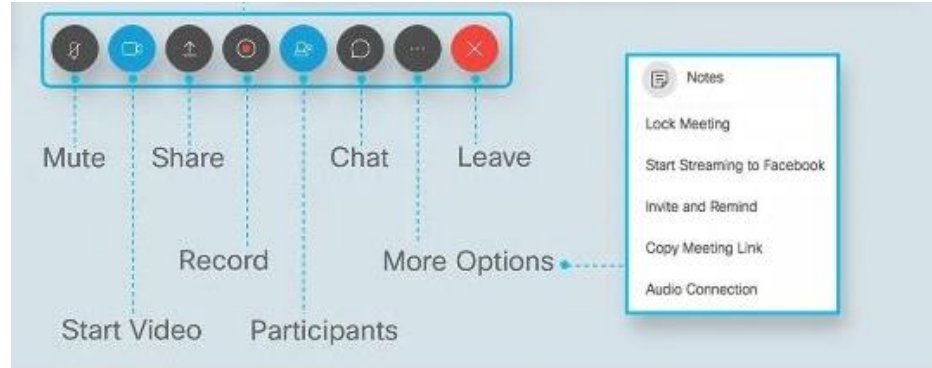
Various Presenters

Meeting Essentials

Please ensure you mute your microphone during the presentation.

If you have a question or comment you may:

- Unmute your microphone; or
- Use the chat feature



Administrative Items

- Review current meeting agenda
- Review and approval of last meeting minutes

Action Items

#	Date	Action	Status	Comments
1	June 2020	IESO to review and have a discussion with MSPs and get some insight regarding issuing a common commissioning template to all MSP's to potentially raise the performance of timely submission of commissioning reports (Measure 11).	In Progress	Dec 10/20: minor progress due to other priorities
2	June 2020	IESO to review the new firmware approval timelines and if possible pull forward the current September date.	Proposed to Close	Approved firmware ION8650 v004.031.002. Updated CML
3	June 2020	IESO to prepare draft Terms of Reference and circulate to committee members for written feedback.	Proposed to Close	Nov 13/20: - draft ToR submitted for feedback

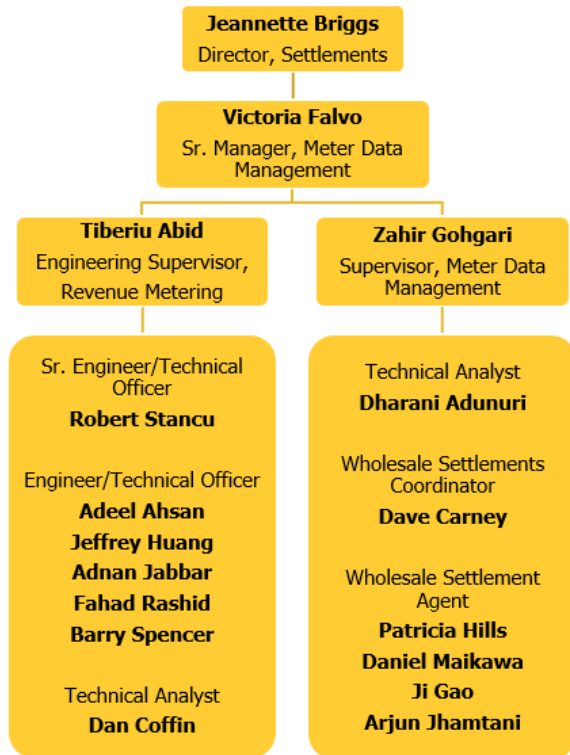
Administrative Items - Updates on action items

#	Date	Action	Status	Comments
4	June 2020	IESO to investigate the potential capability for Online IESO to allow MSPs to submit revised SLDs for in flight registrations.	In Progress	Dec 10/20: minor progress due to other priorities
5	June 2020	IESO to canvas with MSPs prior to next RMSC meeting on which other members in their organization may be interested in joining the WebEx and also if any MSPs are interested in sharing topics of discussion as walk in items.	Proposed to Close	Nov 13/20: email to RMSC members



Metering Installations Status Update

IESO Staff Updates



Changes:

- Cindy Woods, Wholesale Settlements Coordinator – Retired July 30, 2020
- Meter Data Management is in the process of filling the vacancy

Metering Installations by the numbers

There are a total of 2416 metering installations registered in IESO Administered Market (IAM)

Physical Metering Installations

- 2178 physical metering installations
- 1804 registered under the Declaration of Compliance (DOC)
- 374 registered under the Alternative Metering Installation Standard (AMIS)

Metering Installations by the numbers

Virtual Metering Installations

- 238 virtual metering installations
- 68 represent unmetered station service
- 48 represent estimates for the purpose of allocating station services between MMP's
- 122 represent embedded generation for the purpose of transmission tariff (Form 1563)

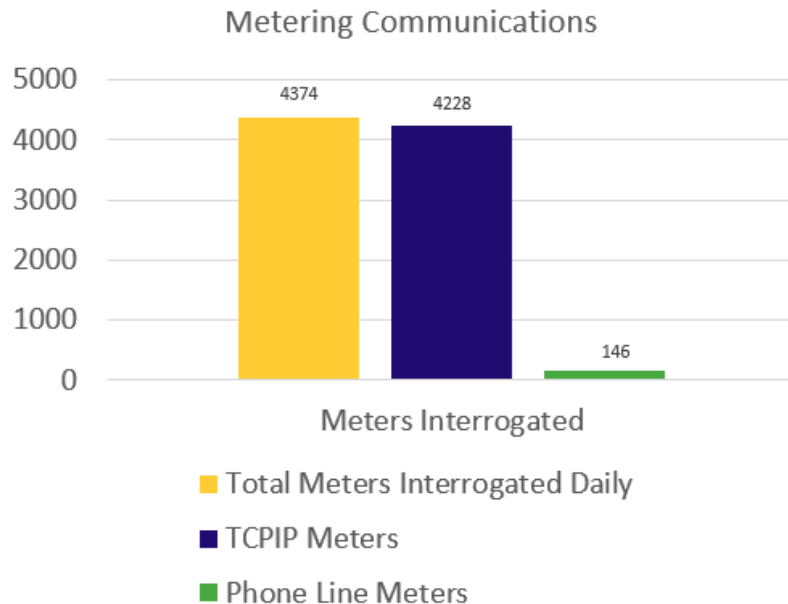
Metering Communications

By The Numbers:

- 4374 Meters interrogated daily
- 4228 via TCPIP (97%)
- 146 via telephone lines (3%)

Open Discussion:

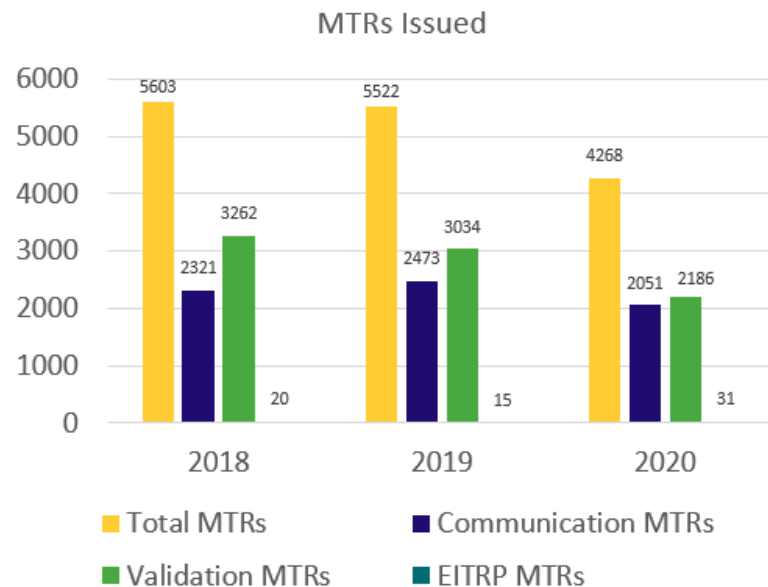
- IESO is interested to understand the status of migrating to TCPIP



Meter Trouble Reports (MTRs) Overview

By The Numbers (January 2020 – November 2020):

- 4268 MTR's issued to date
- 2051 Communication and 2186 Validation MTRs
- 31 EITRP MTRs



Overall MSP Performance Summary

- Positive MSP performance over the last 12 months (September 2019 – September 2020)
- Approximately 94% of the Meter Installations do not experience communication MTRs on a monthly basis (Measure 3)
- Approximately 96% of Meter Installations do not experience validation MTRs on a monthly basis (Measure 4)

Overall MSP Performance Summary

- 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)

Overall MSP Performance Summary

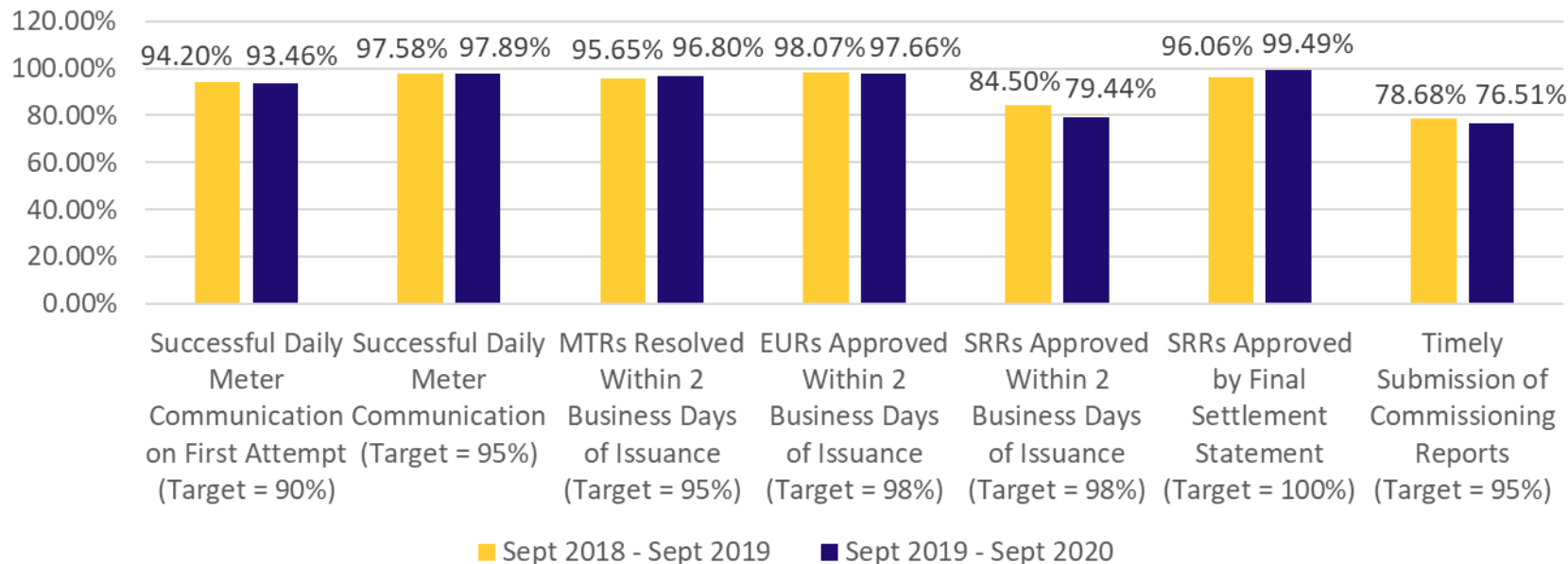
- Registration activity has shown positive results relating to:
 - EURs Approved Within 2 Business Days of Issuance (Measure 8)
 - SRRs Approved By Final Settlement Statement (Measure 10)
- Registration activity has shown low performance relating to:
 - SRRs Approved Within 2 Business Days of Issuance (Measure 9)
 - Timely Submission of Commissioning Reports (Measure 11)

Overall MSP Performance Summary

- Measure 12, “Metering Registry Errors” have been 0 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 Breakdown

All MSPs 12 Month Performance
(Sept 2018 – Sept 2019 vs. Sept 2019 – Sept 2020)



MSP Performance Monthly Breakdown (Sept 2019 – Sept 2020)

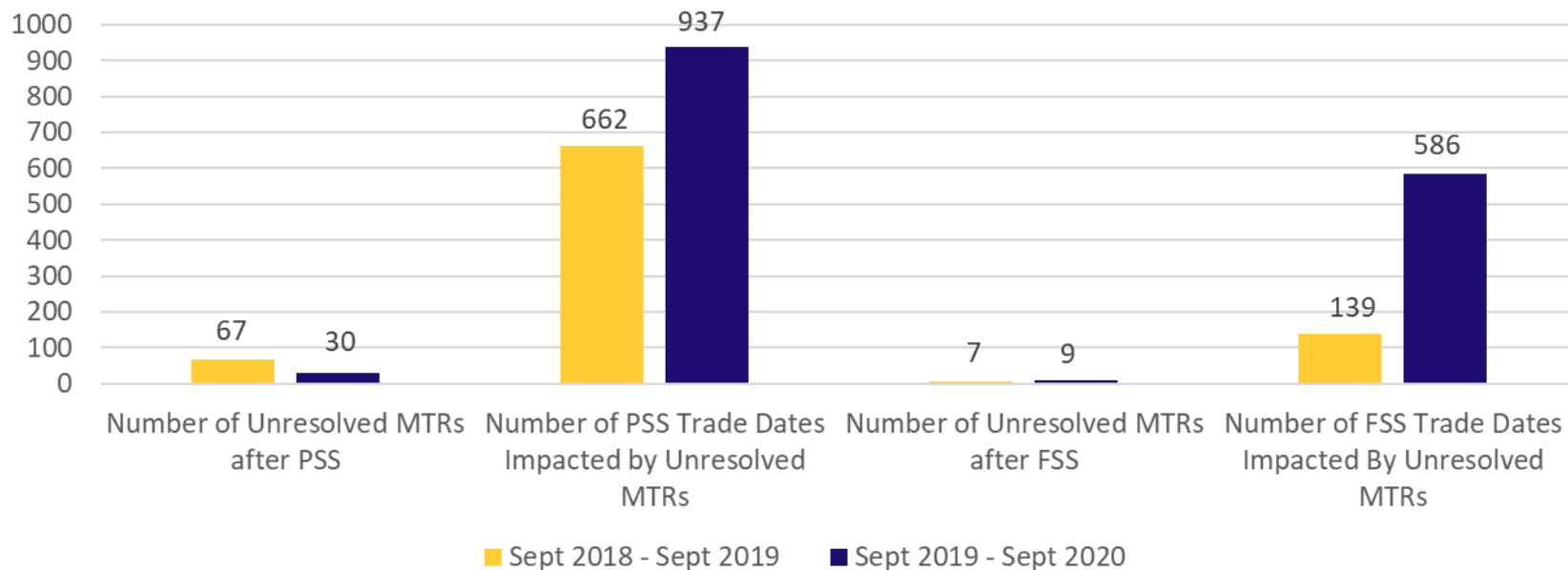
Measure	Target	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sept 2020
1 - Successful Daily Meter Communication on First Attempt	90%	93.6	93.9	91.9	91.6	91.2	92.4	93.0	94.2	94.9	94.9	94.8	94.3	93.9
2 - Successful Daily Meter Communication	95%	97.6	97.6	97.4	98.0	98.3	98.1	97.8	98.1	98.2	98.2	97.9	97.6	97.2
3 - Communication Meter Trouble Reports Issued														
- Number of Communication MTRs Issued	0	198	268	210	146	166	133	160	169	160	196	175	179	210
- % of Meter Installations without communication MTRs issued	100%	92.8	91.4	92.8	95.2	94.9	94.5	94.3	94.9	95.0	93.5	93.8	93.7	91.6

MSP Performance Monthly Breakdown (Sept 2019 – Sept 2020)

Measure	Target	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2019	Jun 2019	Jul 2019	Aug 2019	Sept 2020
4 – Validation Meter Trouble Reports Issued														
- Number of Validation MTRs issued	0	103	139	116	150	88	63	85	77	88	126	92	69	98
- % of Meter Installations without Validation MTRs issued	100%	96.1	94.8	95.5	94.1	96.6	97.5	96.9	96.9	96.5	95.8	96.5	97.3	96.2
5 – Meter Trouble Reports Resolved Within 2 Business Days of Issuance	95%	97.0	96.3	97.6	96.4	98.7	98.9	98.3	97	93.6	97.5	95.4	97.3	95.7

PSS/FSS Performance Overview

All MSPs 12 Month Performance
(Sept 2018 – Sept 2019 vs. Sept 2019 – Sept 2020)



MSP Performance Monthly Breakdown (Sept 2019 – Sept 2020)

Measure	Target	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sept 2020
8 – Engineering Unit Reports Approved Within 2 Business Days of Issuance	98%	98.9	94.9	99.0	96.3	100	100	100	97.9	100	100	93.1	97.1	98.6
9 – Site Registration Reports Approved Within 2 Business of Issuance	98%	80.0	51.0	85.0	90.3	100	100	53.3	100	48.4	90.9	100	87.7	100
10 – Site Registration Reports Approved by Final Settlement Statement	100%	100	100	100	100	100	100	100	100	98.4	100	100	100	94.4

MSP Performance Monthly Breakdown (Sept 2019 – Sept 2020)

Measure	Target	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sept 2020
11 – Timely Submission of Commissioning Reports	95%	80.0	86.0	75.9	87.9	72.1	76.0	84.6	70.0	66.7	26.7	45.4	90.9	82.3
12 - # of Metering Registry Errors	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 - # of Non Conformance Incident	0	0	0	0	0	0	0	7	0	0	0	0	0	0

Commissioning Reports - Improvement Needed

By The Numbers:

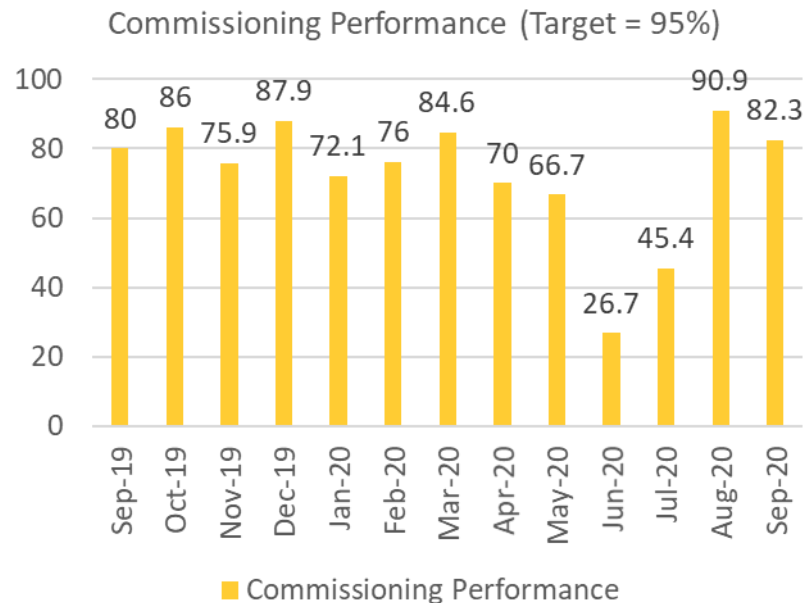
- MSPs 12 month average at 76.51%

Submissions from Jan 2020 – Nov 2020:

- 250 total submissions
- 33 late submissions
- 30 incomplete/rejected submissions

Note:

- MSPs are sent reminders prior to Commissioning Reports due date



New TIM Update

- IESO received the latest Translation Interface Module (TIM – Version 4.0.27.0) used in MV-90 for ION meters
- For the IESO this new TIM allows meter firmware versions with 15 characters (ex. ION8650-4021000 to be viewed in communications log
- New TIM was tested and implemented into IESO systems
- There should be no changes in terms of meter configuration for MSPs.

Conforming Meter List Update

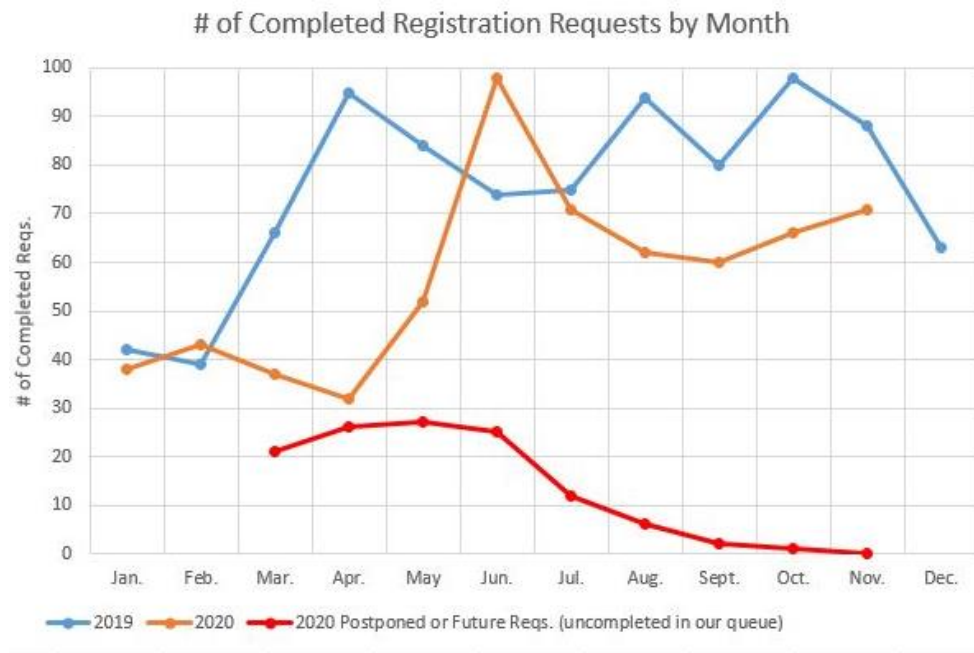
- IESO tested and approved a new version of Schneider ION 8650 meter: ION 8650-V4.031.002
- This new firmware fixes "Error 452" that has been noticed in the ION 8650 meters
- The Conforming Meter List (CML) has been updated to include this new meter
- MSPs can move forward with replacing meters with the new ION 8650-V4.031.002 meters

Conforming Meter List Update

- There are no changes to meter configurations as compared to other ION models approved by the IESO
- There is no change to the commissioning requirements for meter replacements

Meter Registration Hotline Activities & Enhancements

- 645 completed (January 2020 – November 2020)
- Register Metering Installation (16)
- Update Metering Installation (170)
- Like for Like Update (444)
- Deregister Metering Installation (15)



Meter Registration Hotline Activities & Enhancements

- IESO considering changes to Market Manual 3.2 – Appendix C, Table C-1
- Provides MSPs flexibility when faced with equipment constraints in the field
- Potential change from minimum required Injected Load of 2.5A to 0.5A
- Currently provisions exist to allow for deviations from this requirement on a case by case basis
- On bench alternative option still available to MSPs

Table C-1: Acceptable Methods for Engineering Unit Report

Type of Load	Secondary Current	Engineering Unit Report Test Time	Meter Programming
7. True Load	Minimum 0.10A per phase	After <i>meter</i> is installed	Programmed as per Conforming Meter Framework prior being installed
8. Injected Load	Approximately 2.5A per phase	After <i>meter</i> is installed	Programmed as per Conforming Meter Framework prior being installed
		Up to 72 hours prior to <i>meter</i> being installed	Programmed as per Conforming Meter Framework prior to secondary load injection

2020 Audit Program

- Audit site visits → started in July 2020 - completed in October 2020
- Audit reports → target completion by mid-Dec 2020
- Audit planning 2021 → starting in February 2021
 - will consider making up for the audits we didn't do this year

Meter Registration Process - Status

- Objective:- enhance the facility registration process to allow the metering registration tasks to be performed in parallel with the equipment registration tasks
- Benefits:- (1) streamlines the facility registration process and (2) allows MSPs to start the metering registration tasks in advance of the approval of the equipment registration
- Project Status:- testing phase underway; target completion Q1-2021



Proposed Settlement Statements Recalculations Process

Today's Purpose

- Overview of the proposed Settlement Statement Recalculation Process
- Review Next Steps:
 - IESO to issue and present draft detailed design document to stakeholders for feedback
 - IESO to work with sector participants, i.e. Ministry of Energy, Northern Development and Mines (ENDM), and the Ontario Energy Board (OEB) on implementation

Summary

- IESO is modifying its settlement statements recalculation process with the following objectives:
 - Provide more transparency for market participants
 - Make timelines more practical for submitting data and resolving settlement statement disagreements
 - Improve IESO processes, and processing times
- This work is being undertaken as part of the IESO's Replacement of the Settlement System (RSS) project

RSS Project Background

- The RSS project is a strategic priority for the IESO that will sustain and integrate IESO's settlements services by:
 - Addressing technical limitations with the existing settlement solution
 - Enabling the new settlement design requirements to settle the changes as a result of the *Market Renewal Program* ("MRP")
 - Addressing settlement statement disagreements transparently and efficiently

RSS Project Background, continued

- Out of Scope:
 - Changes to systems which are upstream or downstream of the Settlement System including changes to content or cadence of preliminary settlement statements (PSS), final settlement statements (FSS), and monthly invoices
- Status of RSS:
 - Currently in software development phase with Go-Live scheduled for **March 2023** (aligned with MRP implementation)
 - Proposed Settlement Statement Recalculation Process design to be completed by Q4 2020 for software development

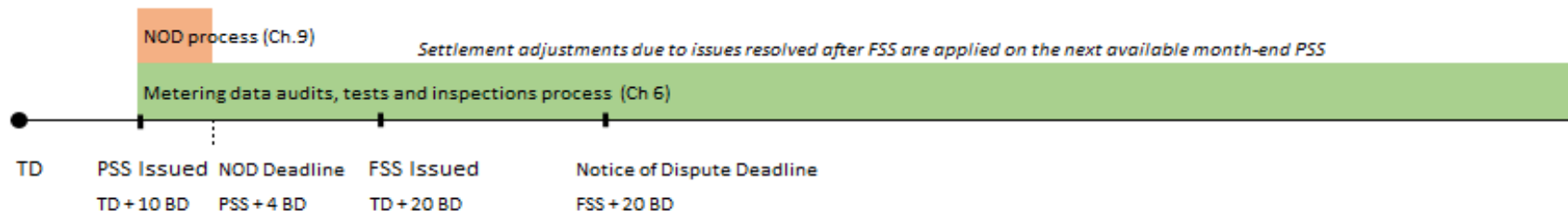
Current Settlement Disagreement Process

- Chapter 9 of the market rules establishes the process and time limits to issue and contest PSS and FSS
- Sections 6.3.10, 6.6.1 and 6.6.2 provide that disagreements with a settlement amount on a PSS may be reported to the IESO through a notice of disagreement (NOD) within four business days of issuance of PSS, i.e. before the charges are calculated as final

Current Settlement Disagreement Process, continued

- Disputes of FSS are subject to the general dispute resolution procedures in section 6.7.7, (within 20 business days of the FSS). If a disagreement is not reported during the NOD window, the market participant can be time-barred from pursuing the matter further
- Chapter 6 of the market rules also includes provisions in Section 10.4 to address errors found as a result of metering tests, inspections, or audits that may result in an error on a settlement statement. In these cases, identification of these errors extend beyond the NOD window

Issues with Current Process



- Limited notice of disagreement (NOD) process scope
- Limited metering audit provisions
- Open-ended recalculation period
- Absence of settlement restatement provisions after FSS (post-final adjustments applied to unrelated PSS)

Proposed Modifications – Design Principles

- Efficiency Enhancements to improve customer experience and reduce administrative time/cost for market participants and the IESO
- Transparency Ensure guidelines are clearly outlined and available to market participants to enable accurate and timely settlements
- Certainty Wherever reasonable, establish boundaries around claim submissions and settlement recalculations
- Alignment Provide a flexible, rule-based settlement platform that meets the market's current and future needs
- Implementability Changes are feasible, practical and supported

Proposed Modifications

- Establish a settlement issues resolution process beyond the current NOD and metering issues process scope
 - Expand NOD scope to recognize different settlement statement adjustment issues
 - Introduce limitation periods for disagreements for each type of issue
- Establish a final recalculation date two years after a trade date for settlement charge recalculations (i.e. over and under payments)

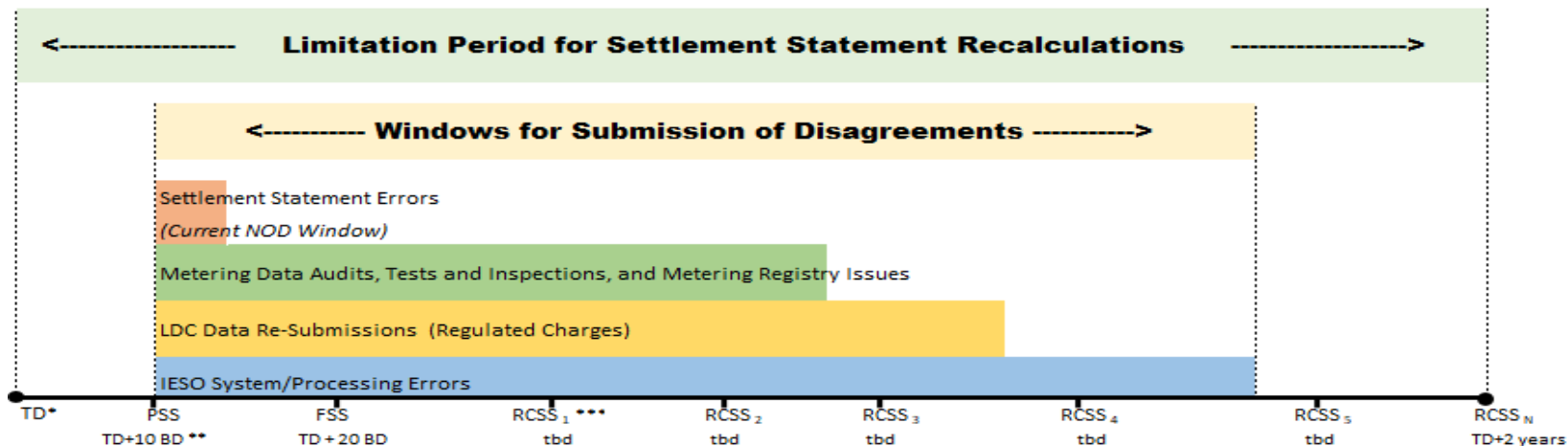
Proposed Modifications, continued

- Some exemptions of the two year recalculation period include:
 - IESO compliance investigations and enforcement actions
 - Applicable contracts where terms provide for longer dispute periods
 - Legal disputes

Proposed Modifications, continued

- New settlement statements between FSS and the end of the limitation period to restate trade date original charges and related recalculations
 - New statements will in effect be “post-final settlement statements”
 - Today, when a NOD is processed after the FSS, the adjustment (debit or credit) is applied to a PSS for a subsequent trade date
 - Combination of current and prior trade date transactions in one settlement statement reduces the ability to trace adjustments
 - The new settlement statements will clearly show the adjusted transactions for the trade date in question

Proposed Design



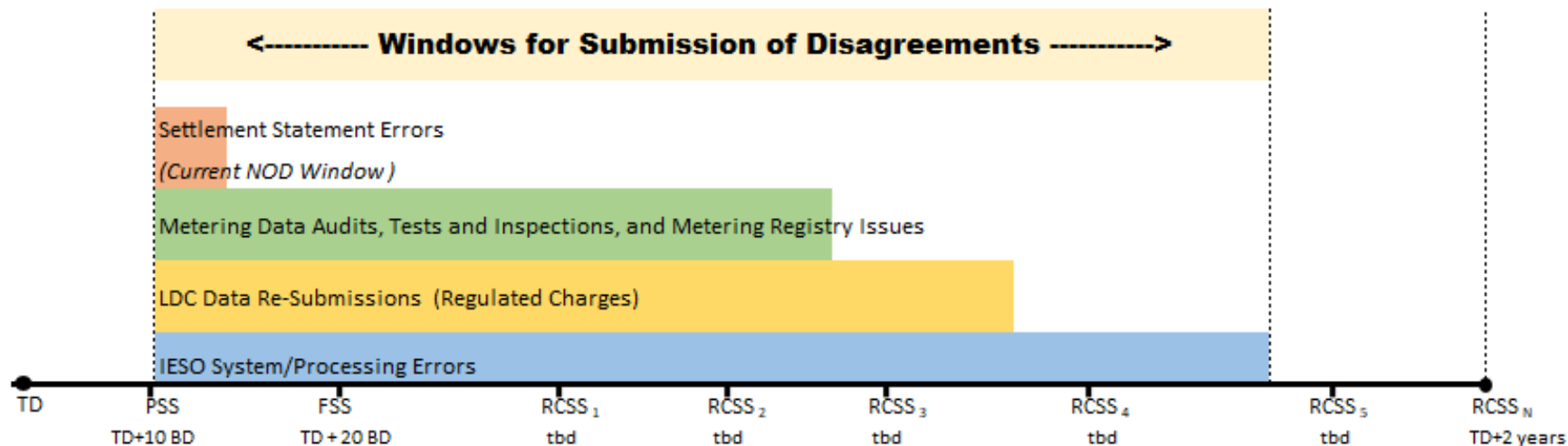
- For NODs resolved prior to FSS, the Notice of Dispute deadline continues to be 20 BD after issuance of FSS
- For NODs resolved after FSS, the Notice of dispute deadline is 20 BD after issuance of the applicable RCSS
- For recalculated charges applied on a RCSS for the first time, a NOD can be filed if the applicable disagreement window is still open for the TD
- RCSS charges are settled on the next applicable Monthly Invoice as per Settlement Statement Physical Calendar

* Trade date (TD)

** Business day (BD)

*** Recalculation Settlement Statement (RCSS)

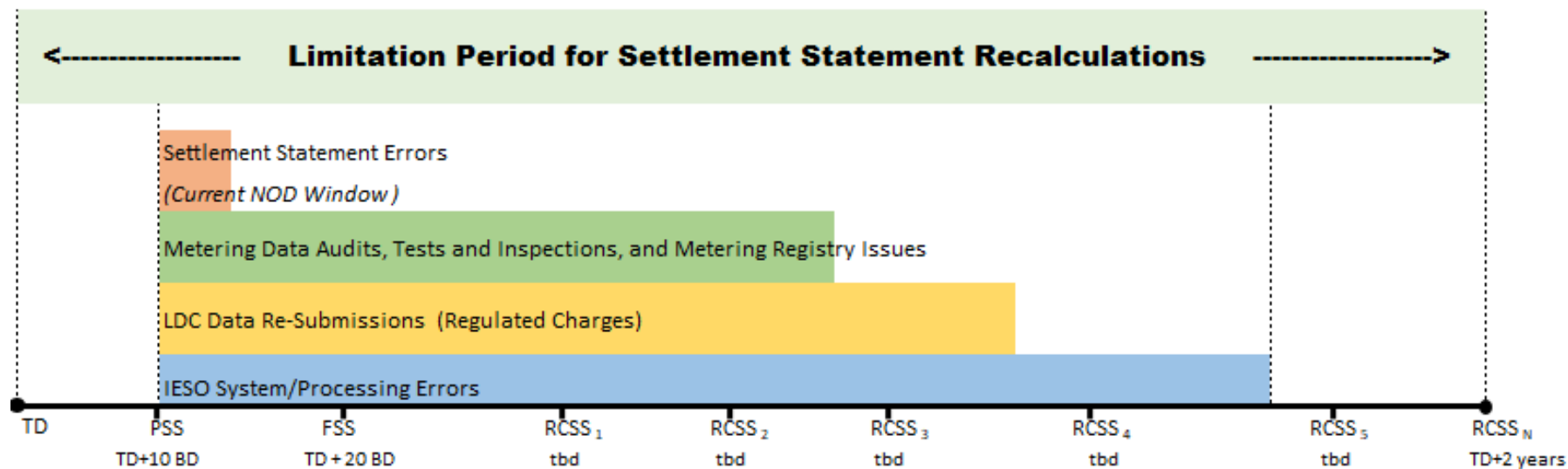
Proposed Design Objectives



Proposed Design Objectives, continued

- Establish settlement statements issues resolution process beyond the current NOD and Metering issues process scope
 - Continue with 4-business day window
 - Metering data issues process to include non-normal power switching conditions
 - Data submissions issues process to include data resubmissions (e.g. embedded generation data from LDCs)
 - Add process for IESO system or processing errors
 - Introduce provisions to exempt certain settlement attributes from being recalculated (e.g. monthly peaks for transmission charges)

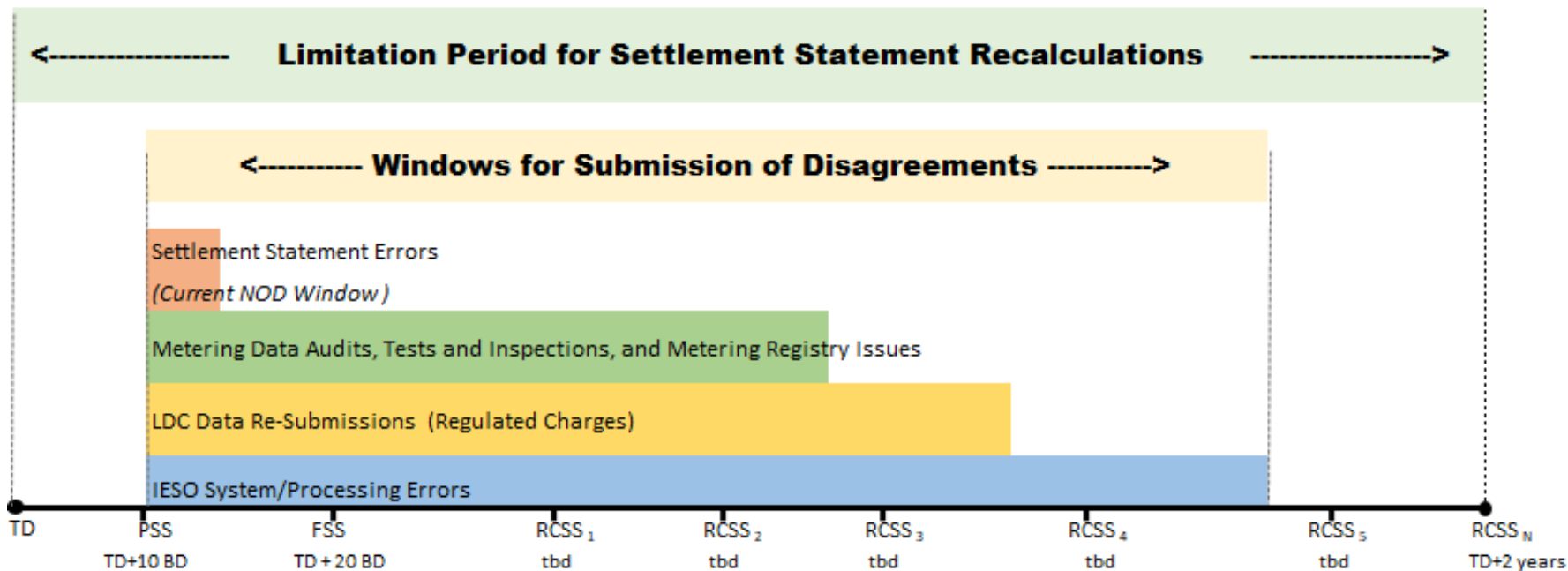
Proposed Design Objectives, continued



Proposed Design Objectives, continued

- Introduce a limitation period for settlement statement recalculations
 - Introduce finality for claims and resettlements (retroactive two years)
 - Add exclusions/exception provisions for:
 - IESO compliance investigations and enforcement actions
 - IESO Contracts other than Participation Agreement/Market Rules
 - Legal Disputes outside the scope of these provisions

Proposed Design Objectives, continued



Proposed Design Objectives, continued

- Establish settlement restatement provisions
 - Introduce two types of recalculated settlement statements (RCSS) between FSS and the trade date's limitation period:
 - Trade Date RCSS: trade date-specific, scheduled as per Settlement Statement Physical Calendar
 - Period RCSS: multiple trade days recalculated in a single run. Each trade date will have its own RCSS, all issued the same day. Designed to manage metering type issues or any issue longer than 90 day impact

Changes to Regulations

- Changes to existing Regulations may be required in order to reflect alignment with the recommended 2-year limitation period
- The IESO will work with the Ministry to:
 - Identify applicable Regulations that may need to change
 - Provide assistance whether individual Regulations are updated or a general limitation in the settlements Regulation is determined for all settlements

Changes to IESO Market Rules

- Changes to IESO Market Rules will also be required
- The IESO will identify potentially impacted support processes (e.g. metering data audits, tests and inspections process timelines)
- Changes to the Market Rules will be reviewed and facilitated by the Technical Panel with proposed rule amendments approved by the IESO Board of Directors

Next Steps

- Early 2021: IESO to publish draft detailed design document that incorporates stakeholder feedback from September 2020 engagement
- Next Year (2021): Updates to the IESO Market Rules will be required to enable the changes for go-live of the Proposed Settlement Statements Recalculations Process. The review of these proposed rule amendments will be aligned with the applicable MRP draft rules to ensure alignment between the two projects.

Roundtable Discussion



Feedback Survey

- Thank you all for joining the virtual RMSC meeting
- Please share your feedback by completing the survey via the hyperlink below (also sent in the chat box).

Hyperlink:

<https://www.surveymonkey.com/r/BK93VZZ>

Thank You

ieso.ca

1.888.448.7777

customer.relations@ieso.ca

engagement@ieso.ca



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Appendix

Legal Authority

- Pursuant to the IESO's rule-making authority under section 32 of the Electricity Act, 1998, the IESO has the authority to make market rules and develop associated processes related to its settlement of the market, including to address alleged errors or deficiencies in the IESO's settlement or market processes and systems
- An exemption is proposed for IESO enforcement actions; and generation, transmission or other contracts outside of the participation agreement/Market Rules that may have a different limitation period for claims

Measurement Canada

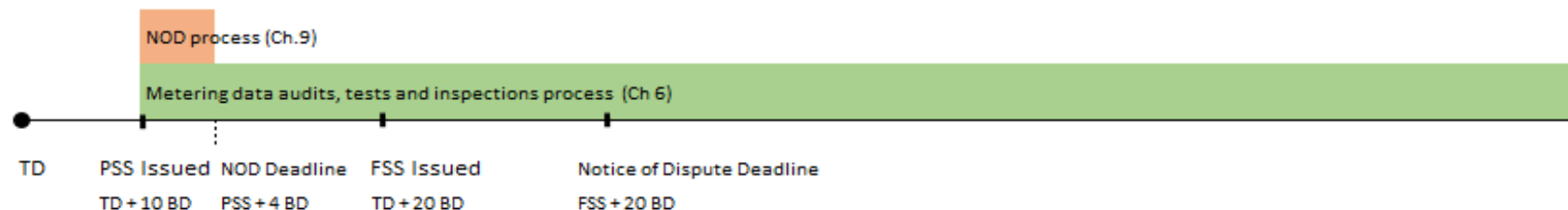
- As per the Electricity and Gas Inspection Act, Measurement Canada (MC) has an obligation to conduct a measurement dispute investigation (if requested) which is limited to the performance, condition and registration of a meter and/or meter installation
- MC's mandate under the Act limits its investigation to the accuracy of electricity meters and to the quantity of electricity declared to have been delivered as established through the meter registrations, and does not include the use of estimation practices or errors found during the review of billing that are not specific to the declared measurement values

Measurement Canada, continued

- Upon completion of a dispute investigation, MC will issue a 'Certificate of Measurement Dispute Investigation Findings'. This is the equivalent of MDM's metering installation Level 3 & 4 audits conducted when the IESO suspects a registration error of an IESO wholesale meter
- MC does not order or arbitrate a settlement of any inequities resulting from a measurement dispute investigation and as a result, the Settlement Statement Recalculation process is outside of Measurement Canada's mandate

Current Process vs. Proposed Design

Current



Proposed

