

Stakeholder Comment Matrix
Additional Feedback for New Section 502.10, Revenue Metering Technical Requirements



<p>Period of Comment: May 21, 2020 through June 26, 2020</p> <p>Comments From: ATCO Electric</p> <p>Date: 2020-06-26</p>	<p>Contact: Dan Bamber</p> <p>Phone: 780-918-0986</p> <p>Email: Dan.bamber@atco.com</p>
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The AESO is seeking additional comments from Stakeholders on the following topics for the proposed New Section 502.10 of the ISO rules, *Revenue Metering Technical Requirements* (“Section 502.10”):

	Question	Stakeholder Comments and/or Alternate Proposal
1. “revenue meter” Definition	<p>Further to the comments raised during the December 11, 2019 stakeholder session, as detailed in the meeting minutes posted on the AESO website, please indicate any additional concerns regarding the proposed defined term and definition “revenue meter” and provide suggested wording revisions including any physical components that should be included in the definition.</p> <p>“revenue meter” means the apparatus that measures active energy or reactive energy at intervals defined by the ISO for the purpose of financial settlement with the ISO.</p>	No comment
2. “revenue metering system” Definition	<p>Please identify the components that should be included in the definition of “revenue metering system” beyond the components identified above for “revenue meter”.</p> <p>Additionally, for each component indicated to be part of the “revenue metering system” please note the requirement in proposed new Section 502.10 that makes the component necessary.</p> <p>“revenue metering system” means the metering equipment, including the revenue meter, for acquisition, processing, delivery and</p>	No comment

	storage of the interval data that is used for financial settlement with the ISO .	
3. Rental Meters	a) Please describe the circumstances under which your business would choose to install rental meters.	<i>ATCO Electric does not have rental meters.</i>
	b) Additionally, would any exceptions to the minimum technical requirements need to be considered in the proposed Section 502.10? If so, please detail and explain the impacts.	<i>No comment</i>
4. Back-up Meters	a) Please describe the circumstances under which your business would choose to install a back-up meter.	<i>ATCO Electric installs back-up meters for transmission customer metering with load greater than 5 MW. For majority of our substations, we have installed ION meters at a bus level that used as check meters.</i>
	b) Does your organization support the addition of requirements pertaining to backup meter installation in the proposed draft Section 502.10? If so, detail the criteria needed.	<i>ATCO Electric does not see additional requirement for back-up meters.</i>
	c) Additionally, please provide the estimated installation and operating costs for a back-up meter as well as annual maintenance costs, if any.	<i>Initial cost estimate (\$) / back-up meter = 1500 (meter) + 550 (enclosure) + 1000 (installation, testing, materials) + 500 (design) = \$4000 - \$5000 Annual operating and maintenance service charges is estimated at \$1000+</i>
5. Shared Current Transformers	a) Please indicate whether your organization has installed meters that share CTs. If so, how many and under what conditions?	<i>For revenue metering CT circuits, the AMR Inbound Pickup Units (IPUs) shares the CT with revenue meter in majority applications. For transmission customers with load greater than 5MW, backup meters share the CT circuits with primary meters.</i>
	b) Have you experienced any issues with the meters that share CTs, such as increased meter measurement error?	<i>No. In ATCO practice, CT secondary burden is carefully assessed during engineering stage.</i>
	c) Does your organization think the proposed Section 502.10 should incorporate requirements regarding the sharing of CTs?	<i>If the standard does not incorporate the requirements, are we still able to share CTs with IPU and backup meter in future? We want the flexibility and no mitigation for our existing installations</i>

<p>6. MW Class Determination</p>	<p>a) How is MW class currently being calculated for in-situ testing.</p>	<p><i>Actual Intervals = Number of kWh normal intervals in the reporting period.</i></p> <p><i>Actual Energy = Sum of absolute values of the kWh energy flow in each normal interval in the reporting period.</i></p> <p><i>Annual Intervals = Number of intervals in the 12-month reporting period.</i></p> <p><i>Annual Energy = Actual Energy * Annual Intervals / Actual Intervals</i></p> <p><i>Interval Measured Average Demand = Annual Energy * intervals per hour / Actual Intervals</i></p>
	<p>b) Please provide your organizations view on the following:</p> <ul style="list-style-type: none"> i. Should Section 502.10 set out a standard timeframe to be used for the data set used in the calculation of MW class. For instance, should the AESO adopt a November to November timeframe. Or does the month to month period selected not impact the data set; ii. If a standard timeframe is included in proposed Section 502.10 that does not align with your organizations current practices and systems please provide an estimate of the cost implications; iii. Should 0 MW intervals be factored into the methodology when determining MW class; iv. Should there be notification requirements for when a measurement point for a unit crosses the MW class threshold. Additionally, when should the first in-situ test be performed once the MW class changes; v. Does your organization support the 2 and 4 year testing frequency requirements based on MW class; and 	<ul style="list-style-type: none"> i. <i>Standard timeframe is not necessary, and it limits when the meter owners can plan the testing cycle. For instance, if the November to November timeframe is adopted, the meter owners can only make plan in December.</i> ii. <i>If a standard timeframe is included in proposed Section 502.10, our systems is flexible to accommodate the standard timeframe assuming it is still based on a 12-month period.</i> iii. <i>0 MW measured intervals should be included into the methodology when determining MW class. If they are not included, system change is required, and some cost will be incurred.</i> iv. <i>We already have notification in a form of reporting. When a measurement point for a unit crosses the MW class threshold, a notification helps to ensure the testing is completed ASAP.</i> v. <i>AE supports the 2 and 4 year testing frequency requirements based on MW class. Current requirements should exceed the 2 and 4 year testing frequency requirements so we are not expecting any issue.</i> vi. <i>Based on our past diversity studies, metering points with higher demands are low in diversity against our system peak and contributes more to the grid peak demand. So in essence we are already testing metering point that impacts the grid most frequently due to its high average demand. If a real-time impact to the grid is required, then this requires major system and monitoring upgrade.</i>

	<p>vi. Should a metering point with a higher impact on the grid when it is operational be tested more frequently or should it be based on the average throughout the year?</p>	
<p>7. In-situ Testing</p>	<p>In performing in-situ testing at the commissioning stage, what should the “reasonable methods” be? Should the AESO be more prescriptive?</p>	<p><i>Commissioning tasks include wire checks, secondary and primary injections, phase rotation, and voltage checks. AE believes these are adequate in ensuring metering accuracy.</i></p>
<p>8. Measurement data errors</p>	<p>In subsection 9 of proposed new Section 502.10, should the AESO set a threshold for the measurement data error?</p>	<p><i>The limits of error, as is specified in the Electricity and Gas Inspection Regulations (EGIR) section 46, are 3% of the amount of electricity or gas supplied. New threshold is not required. The AESO may refer to the EGIR.</i></p>
<p>9. Do you have any other comments regarding the proposed new Section 502.10?</p>		<p>Ref: 4(2) The legal owner of a revenue meter must submit to the ISO the information prescribed by the ISO when applying for a new or amended measurement point definition record in accordance within subsection 4(1).</p> <p><i>We think that section 4(2) should specify what the minimum information that the ISO requires to create/update the measurement point definition record.</i></p> <p>Ref: 9(1) The legal owner of a revenue meter must, if the legal owner discovers an error in measurement data that has been submitted to the ISO for financial final {do you mean final or financial?} settlement, notify the ISO of the error as soon as practicable in the form the ISO specifies.</p> <p>or</p> <p>Ref: 9(1) The legal owner of a revenue meter must, if the legal owner discovers an a metering error that results in a restatement of measurement data that has been submitted to the ISO for financial settlement, notify the ISO of the error as soon as practicable in the form the ISO specifies.</p> <p>Error in measurement data can happen very often because there is no communication to the meter. When there is no communication to the meter, we send estimate data. If we must notify the ISO of every error in measurement data before final settlement, there will be too many notifications and delay the publication of data. We have to spend a lot of effort to track them.</p>

