

Reference number(s)	022 - Inspection Periods
Relevant clause(s)	<p>Table 1 of Schedule 10.1 – Metering installation characteristics and associated requirements</p> <p>Clause 45(1) of Schedule 10.7 – Category 1 metering installation inspection requirements</p>
Problem definition	<p>Clause 45(1) of Schedule 10.7 of the Code requires an MEP to ensure its category 1 metering installations are inspected by an ATH within the period set out in Table 1 of Schedule 10.1. An MEP can choose to have an ATH inspect:</p> <ul style="list-style-type: none"> a) individual category 1 metering installations; or b) a sample of category 1 metering installations. <p><u>Problem 1</u></p> <p>Some participants are waiting until the expiry of a category 1 metering installation’s inspection period before performing the required work to inspect.</p> <p>Conversely, some participants are performing inspections in much shorter timeframes than Table 1 of Schedule 10.1 provides for. The table includes a +/- time, effectively creating a window during which inspections must be performed. As a result, participants performing more frequent inspections are non-compliant with the Code, despite inspecting on a more rigorous schedule.</p> <p><u>Problem 2</u></p> <p>The Code requirements for inspections of category 1 metering installations undertaken using statistical sampling are insufficiently clear as to when and how the sample inspections must be performed and completed. Although the combined effect of clauses 45(1) and (2) cover the requirements, clause 45(1)(b) is not clear that all metering installations in the sample must be inspected within the 12 calendar month period, or that the trigger for the statistical inspection process is the oldest installation in the population reaching the maximum inspection period specified in Table 1 of Schedule 10.1. Additionally, participants have queried the Authority about whether an MEP may create several populations of category 1 metering sites (eg 2 sets of meter types) so they can be inspected/treated separately.</p> <p><u>Problem 3</u></p> <p>Any previously interim-certified metering installations are now expired, but there is still a reference to these installations in clause 45(1)(a).</p>
Proposal	<p><u>Problem 1</u></p> <p>To address problem 1, the Authority proposes to amend the Code to:</p> <ul style="list-style-type: none"> a) clarify that inspections must be <u>completed</u> within the maximum timeframe set out in Table 1 of Schedule 10.1 b) allow participants to inspect metering installations as often as they want, so long as the maximum inspection period is not exceeded, by adjusting Table 1 of Schedule 10.1 to make the +/- a maximum

	<p>period.</p> <p><u>Problem 2</u></p> <p>To address problem 2, the Authority proposes to amend the Code to clarify that if an MEP chooses to use statistical sampling for the inspection of its category 1 metering installations:</p> <ul style="list-style-type: none"> a) the MEP must ensure that: <ul style="list-style-type: none"> (i) the sample is selected from the entire population of the MEP's category 1 metering installations (ii) an ATH inspects all of the selected metering installations between 1 January and 31 December each year b) no inspections based on statistical sampling are required until the certification of one or more of the MEP's category 1 metering installations is at least 84 months old. <p><u>Problem 3</u></p> <p>The reference to interim certified metering installations in 45(1)(a) will be removed, as all of these installations are expired and this reference is no longer valid.</p>
<p>Proposed Code amendment</p>	<p>Refer to attached Table 1 of Schedule 10.1.</p> <p>Schedule 10.7</p> <p>...</p> <p>45 Category 1 metering installation inspection requirements</p> <p>(1) A metering equipment provider must ensure that—</p> <ul style="list-style-type: none"> (a) <u>an ATH has completed an inspection of each category 1 metering installation for which the metering equipment provider it is responsible, other than an interim certified metering installation, has been inspected by an ATH within the period set out in Table 1 of Schedule 10.1, starting from the date of the metering installation's most recent certification or inspection;</u> or (b) for each 12 month period commencing 1 January and ending 31 December, <u>an ATH has completed inspecting within that same 12 month period a sample, selected under subclause (2), of the category 1 metering installations for which the metering equipment provider it is responsible, provided—</u> <ul style="list-style-type: none"> (i) <u>the metering equipment provider ensures that the sample is selected from the entire population of the metering equipment provider's category 1 metering installations; and</u> (ii) <u>no such inspections are required until the certification of one or more of the category 1 metering installations is at least 84 months old</u> <p>has been inspected by an ATH within the period set out in</p>

	<p>Table 1 of Schedule 10.1 starting from the date of the earliest certification date of a metering installation in the group.</p> <p>...</p>
<p>Assessment of proposed Code amendment against section 32(1) of the Act</p>	<p>The proposed Code amendment is consistent with the Authority's objective, and section 32(1)(c) of the Act, because it would contribute to the efficient operation of the electricity industry.</p> <p>Clarifying the requirements for inspecting category 1 metering installations will help ensure ATHs undertake inspections appropriately and in a timely manner, thereby better ensuring the ongoing accuracy of the metering installation.</p> <p>The proposed Code amendment is expected to have no effect on competition or reliability of supply.</p>
<p>Assessment against Code amendment principles</p>	<p>The Authority is satisfied the proposed Code amendment is consistent with the Code amendment principles, to the extent they are relevant.</p>
<p>Principle 1: Lawfulness.</p>	<p>The proposed Code amendment is consistent with the Act, as discussed above in relation to the Authority's statutory objective and the requirements set out in section 32(1) of the Act.</p>
<p>Principle 2: Clearly Identified Efficiency Gain or Market or Regulatory Failure</p>	<p>The proposed Code amendment is consistent with principle 2 because it addresses an identified efficiency gain, which requires a Code amendment to resolve.</p>
<p>Principle 3: Quantitative Assessment</p>	<p>Please refer to the assessment of costs and benefits in section 3 of the consultation paper.</p>
<p>Regulatory statement</p>	
<p>Objectives of the proposed amendment</p>	<p>The objective of the proposal is to clarify the inspection requirements for category 1 metering installations.</p>
<p>Evaluation of the costs and benefits of the proposed amendment</p>	<p>Please refer to the assessment of costs and benefits in section 3 of the consultation paper.</p>
<p>Evaluation of alternative means of achieving the objectives of the proposed amendment</p>	<p>The Authority has not identified any alternatives to the proposed Code amendment that would meet the objectives of the proposal.</p>

Schedule 10.1: Table 1: Metering installation characteristics and associated requirements

Defining Characteristics				Associated Requirements of active energy metering							
Metering installation category	Primary voltage (V)	Primary current (I)	Measuring transformers	Metering installation certification type	Accuracy tolerances		Selected component metering installation minimum IEC class (more accurate components may be used)		Metering installation certification and inspection		
					Maximum permitted error	Maximum site uncertainty	Meter	Current Transformer	Maximum metering installation certification validity period	Maximum sample inspection and recertification period	Maximum inspection period
1	V < 1kV	I ≤ 160A	None	NHH or HHR	± 2.5%	0.6%	2	N/A	180 months	84 months	1260 months ± 6 months
2	V < 1kV	I ≤ 500A	CT	NHH or HHR	± 2.5%	0.6%	2	1	120 months	N/A	1260 months ± 6 months
3	V < 1kV	500A < I ≤ 1200A	CT	HHR only	± 1.25%	0.3%	1	0.5	120 months	N/A	630 months ± 3 months
	1kV ≤ V ≤ 11kV	I ≤ 100A	VT & CT				N/A	N/A			
	11kV < V ≤ 22kV	I ≤ 50A	VT & CT				N/A	N/A			
4	V < 1kV	I > 1200A	CT	HHR only	± 1.25%	0.3%	N/A	N/A	60 months	N/A	330 months ± 3 months
	1kV ≤ V ≤ 6.6kV	100A < I ≤ 400A	VT & CT								
	6.6kV < V ≤ 11kV	100A < I ≤ 200A									
	11kV < V ≤ 22kV	50A < I ≤ 100A									
5	1kV ≤ V ≤ 6.6kV	I > 400A	VT & CT	HHR only	± 0.75%	0.2%	N/A	N/A	36 months	N/A	198 months ± 1 month
	6.6kV < V ≤ 11kV	I > 200A									
	V > 11kV	I > 100A									
	V > 22kV	Any current									