National Trade Measurement Amendment Regulation 2012 (No. 1)'

Select Legislative Instrument 2012 No. 302

I, QUENTIN BRYCE, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following regulation under the National Measurement Act 1960.

Dated 6 December 2012

QUENTIN BRYCE
Governor-General

By Her Excellency’s Command

GREG COMBET
Minister for Industry and Innovation
Section 1

1 Name of regulation
This regulation is the National Trade Measurement Amendment Regulation 2012 (No. 1).

2 Commencement
This regulation commences on 1 January 2013.

3 Amendment of National Trade Measurement Regulations 2009
Schedule 1 amends the National Trade Measurement Regulations 2009.

Schedule 1 Amendments
(section 3)

[1] Paragraph 5.6 (b)
substitute
(b) electricity meters installed before 1 January 2013;
(ba) electricity meters installed on or after 1 January 2013, other than electricity meters that measure less than 750 MWh of energy per year;

[2] Paragraph 5.6 (d)
substitute
(d) water meters installed on or after 1 July 2004, other than cold water meters with a maximum continuous flow rate capacity of not more than 4 000 litres per hour.
[3] **Schedule 1, Part 3, Division 2, clause 1**

*substitute*

1 For in-service inspection of instruments with digital indication, add 0.5 scale interval to the maximum permissible error for in-service inspection that applies to an analog instrument.

1A However, item 1 does not apply to an instrument with digital indication if the scale interval for the instrument is less than or equal to 0.2 dm².

[4] **Schedule 1, Part 3, Division 6, clause 5**

*substitute*

5 The maximum permissible error for any load equal to or greater than the minimum capacity and equal to or less than the maximum capacity in automatic operation is:

(a) if the national instrument test procedures that apply to catch weighers eliminate the need for digital rounding—the maximum permissible error set out in table 13 minus a verification scale interval of 0.5 e; or

(b) in any other case—set out in table 13.

*Note* The national instrument test procedures are defined in the Act and are available at [www.nmi.gov.au](http://www.nmi.gov.au).

[5] **Schedule 1, Part 3, Division 11**

*omit*

Table 1 **Maximum permissible errors for water meters**

*insert*

Table 17 **Maximum permissible errors for water meters**
[6] Schedule 1, Part 3, after Division 11

*insert*

Division 12  Electricity meters

1 In this Division:
   \( I_b \), for an electricity meter of a kind mentioned in clause 3, is the basic current.
   \( I_{\text{max}} \), for an electricity meter of a kind mentioned in clause 3 or 4, is the maximum current.
   \( I_n \), for an electricity meter of a kind mentioned in clause 4, is the nominal current.

Accuracy classes

2 Electricity meters are classified into the following accuracy classes:
   (a) 0.2;
   (b) 0.5;
   (c) 1;
   (d) 1.5.

Maximum permissible errors—direct-connected electricity meters

3 The maximum permissible errors for the following kinds of electricity meters are set out, for an item, in columns 4 and 5 of table 18:
   (a) single phase direct-connected electricity meters with an accuracy class mentioned, for the item, in column 4 or 5 of that table;
   (b) polyphase direct-connected electricity meters with an accuracy class mentioned, for the item, in column 4 or 5 of that table.

4 The maximum permissible errors mentioned in column 4 or 5 of table 18 apply at the current rate and power factor mentioned, for an item, in column 2 and 3 of that table.
Table 18 Single phase and polyphase direct-connected electricity meters

<table>
<thead>
<tr>
<th>Item</th>
<th>Current range</th>
<th>Power factor</th>
<th>Maximum permissible error (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Accuracy class 1</td>
</tr>
<tr>
<td>1</td>
<td>0.05 I_b ≤ I &lt; 0.1 I_b</td>
<td>1</td>
<td>±1.5%</td>
</tr>
<tr>
<td>2</td>
<td>0.1 I_b ≤ I ≤ I_max</td>
<td>1</td>
<td>±1.0%</td>
</tr>
<tr>
<td>3</td>
<td>0.1 I_b ≤ I &lt; 0.2 I_b</td>
<td>0.5 inductive</td>
<td>±1.5%</td>
</tr>
<tr>
<td>4</td>
<td>0.1 I_b ≤ I &lt; 0.2 I_b</td>
<td>0.8 capacitive</td>
<td>±1.5%</td>
</tr>
<tr>
<td>5</td>
<td>0.2 I_b ≤ I ≤ I_max</td>
<td>0.5 inductive</td>
<td>±1.0%</td>
</tr>
<tr>
<td>6</td>
<td>0.2 I_b ≤ I ≤ I_max</td>
<td>0.8 capacitive</td>
<td>±1.0%</td>
</tr>
</tbody>
</table>

Maximum permissible errors—transformer-operated electricity meters

5 The maximum permissible errors for the following kinds of electricity meters are set out, for an item, in columns 4, 5 and 6 of table 19:

(a) single phase transformer-operated electricity meters with an accuracy class mentioned, for the item, in column 4, 5 or 6 of that table;

(b) polyphase transformer-operated electricity meters with an accuracy class mentioned, for the item, in column 4, 5 or 6 of that table.

6 The maximum permissible errors mentioned in column 4, 5 or 6 of table 19 apply at the current rate and power factor mentioned, for an item, in column 2 and 3 of that table.

Table 19 Single phase and polyphase transformer-operated electricity meters

<table>
<thead>
<tr>
<th>Item</th>
<th>Current range</th>
<th>Power factor</th>
<th>Maximum permissible error (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Accuracy class 0.2</td>
</tr>
<tr>
<td>1</td>
<td>0.01 I_n ≤ I &lt; 0.05 I_n</td>
<td>1</td>
<td>±0.4%</td>
</tr>
<tr>
<td>2</td>
<td>0.02 I_n ≤ I &lt; 0.05 I_n</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Item</td>
<td>Current range</td>
<td>Power factor</td>
<td>Maximum permissible error (%)</td>
</tr>
<tr>
<td>------</td>
<td>---------------</td>
<td>--------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Accuracy class 0.2</td>
</tr>
<tr>
<td>3</td>
<td>$0.05 I_n \leq I \leq I_{max}$</td>
<td>1</td>
<td>$\pm0.2%$</td>
</tr>
<tr>
<td>4</td>
<td>$0.02 I_n \leq I &lt; 0.1 I_n$</td>
<td>0.5 inductive</td>
<td>$\pm0.5%$</td>
</tr>
<tr>
<td>5</td>
<td>$0.02 I_n \leq I &lt; 0.1 I_n$</td>
<td>0.8 capacitive</td>
<td>$\pm0.5%$</td>
</tr>
<tr>
<td>6</td>
<td>$0.05 I_n \leq I &lt; 0.1 I_n$</td>
<td>0.5 inductive</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>$0.05 I_n \leq I &lt; 0.1 I_n$</td>
<td>0.8 capacitive</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>$0.1 I_n \leq I \leq I_{max}$</td>
<td>0.5 inductive</td>
<td>$\pm0.3%$</td>
</tr>
<tr>
<td>9</td>
<td>$0.1 I_n \leq I \leq I_{max}$</td>
<td>0.8 capacitive</td>
<td>$\pm0.3%$</td>
</tr>
</tbody>
</table>

[7] Schedule 2, Part 1, subitems 5.1 to 5.3

*substitute*

5.1 Fuel dispensers used for petroleum products other than LPG
5.2 Flow meters used for petroleum products
5.3 Flow meters used for liquids other than petroleum products

[8] Schedule 2, Part 1, subitems 10.1 and 10.2

*substitute*

10.1 Fuel dispensers used for LPG, other than cryogenic liquids
10.2 Flow meters used for LPG, other than cryogenic liquids

[9] Schedule 2, Part 1, subitems 15.1 to 15.3

*substitute*

15.1 Grain
15.2 Cane sugar
15.3 Wine grapes
Note