

METROLOGY PROCEDURE TRAFFIC SIGNAL DIMMING – FINAL DETERMINATION AND REPORT

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FINAL DETERMINATION

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1. Background

1.1 Matter under consultation

The NSW Roads and Maritime Services advised AEMO of its intention to operate its traffic signal installations that are fitted with LED lamps in a dimmed mode to reduce energy consumption. Changes to the Metrology Procedure are also required to formalise the use of a metering data substitution method that is based on an average daily load value.

As a consequence of these changes, the Metrology Procedure is to be updated to incorporate the methodology to facilitate the calculation of metering data for traffic signals operating in dimmed mode and introduce a Type 65 substitution method.

The objectives of this consultation are to:

- Vary the *metrology procedures* to facilitate the introduction of a methodology for the production of calculated metering data for dimmed traffic signals;
- Introduce Type 65 metering data substitution method;
- Align version numbering for Metrology Procedures Part A and Part B;
- Improve clarity and correct errors in the *metrology procedures*; and
- To ensure that Consulted Persons are properly informed about the proposed and the final outcome.

1.2 The consultation and decision-making process

The following table provides an outline of the consultation process to date:

PROCESS	DATE
Notice of First Stage of Rules Consultation issued	18 September 2014
Closing date for submissions received in response to the Notice of First Stage of Rules Consultation	24 October 2014
Publication of this Draft Determination and issue of Notice Of Second Stage of Rules Consultation inviting submissions in response to the Draft Determination	20 November 2014
Closing date for submissions received in response to this Draft Determination	5 December 2014
Publication of the Final Determination	21 January 2015
Effective Date of Metrology Procedure	15 May 2015

AEMO issued a Notice of Second Stage of Rules Consultation on 20 November 2014 (**Second Stage Notice**). A copy of the Second Stage Notice is contained in **Attachment 1**. The Second Stage Notice invited submissions by 5 December 2014. Two submissions were received and there were no meetings held.

AEMO also published drafts of the Metrology Procedure: Part A and Metrology Procedure: Part B indicating proposed changes.

The table below lists the remainder of the steps in the consultation process, together with the proposed dates for their completion. Please note that the proposed dates are subject to change by AEMO.

PROCESS	DATE
Publication of the Final Determination	21 January 2015
Consultation complete	21 January 2015
Effective Date of Metrology Procedure	15 May 2015

2. Consideration of Submissions

2.1 List of submissions received

AEMO received two submissions in response to the Second Stage Notice.

The following table contains a list of respondents:

RESPONDENT	PARTICIPANT TYPE OR OTHER ROLE
AGL	Retailer
Energy Australia	Retailer

All submissions were published on AEMO's website on the same date that this Final Determination and Report was released.

Appendix 1 details the proposed changes to Metrology Procedure: Part A, for each Consulted Person, each issue raised and, for issues AEMO considers to be non-material, AEMO's response.

Appendix 2 details the proposed changes to Metrology Procedure: Part B, for each Consulted Person, each issue raised and, for issues AEMO considers to be non-material, AEMO's response.

Responses from Consulted Persons indicated that there are no further proposals to change Metrology Procedures Part A and Part B – refer to **Appendix 3**.

2.2 Meetings and forums

There were no requests for meetings and no forums were held.

3. Material issues raised by Consulted Persons

There were no material issues raised by respondents as the purpose of this consultation is to amend the Metrology Procedures to reflect the principles and content of introducing traffic signals dimming and a Type 65 substitution method. AEMO, in consultation with the Metrology Reference Group (MRG), developed Final Determination outcomes detailed in Appendices 1, 2 and 3.

4. Determination

Under clause 7.1.4 of the *Rules*, AEMO determines that, in AEMO's opinion, the *metrology procedures* have been amended to reflect the principles and content of the metering data calculation methodology for dimmed traffic signals, Type 65 metering data substitution methodology and the correction of minor errors.

Appendix 1 – Proposed changes to Metrology Procedure: Part A

ITEM	DESCRIPTION	PARTICIPANT RESPONSE TO SECOND STAGE CONSULTATION	FINAL DETERMINATION
1.1	<p>Align version numbering</p> <p>Align version number of Metrology Procedure: Part A with that for Part B to Version 5.30.</p>	<p>AGL – Agree</p> <p>EnergyAustralia – No comment</p>	AEMO notes that respondents supported this proposal.
1.2	<p>Clause 2.4.26</p> <p>Correct clause reference to 2.2.24, i.e. change 2.4.23 to 2.4.24.</p>	<p>AGL – Agree</p> <p>EnergyAustralia – No comment</p>	AEMO notes that respondents supported this proposal.
1.3	<p>3.3.3(d)</p> <p>Italicise <i>calculated metering data</i>.</p>	<p>AAGL – Agree</p> <p>EnergyAustralia – Agree</p>	AEMO notes that respondents supported this proposal.
1.4	<p>Clause 3.9.4</p> <p>Correct clause reference to 3.9.1, i.e. change 3.10.1 to 3.9.1.</p>	<p>AGL – Agree</p> <p>EnergyAustralia – No comment</p>	AEMO notes that respondents supported this proposal.
1.5	<p>Effective Date of the Metrology Procedure: Part A</p>	<p>AGL – AGL agrees with the proposed changes as marked up in the procedures,</p>	AEMO confirms that effective date will be 15 May 2015.

ITEM	DESCRIPTION	PARTICIPANT RESPONSE TO SECOND STAGE CONSULTATION	FINAL DETERMINATION
	<p>The proposed effective date of the Metrology Procedure: Part A is 15 May 2015.</p>	<p>the effective date for the Metrology Procedure will be 15th May 2015</p> <p>The proposed effective date in the response template appears to be incorrect and has been given as 24th April 2014</p> <p>EnergyAustralia – EnergyAustralia agrees with marked up Procedure changes for May 2015.</p> <p>Has the wrong effective date been provided in the response template?</p>	

Appendix 2 – Proposed changes to Metrology Procedure: Part B

ITEM	DESCRIPTION	PARTICIPANT RESPONSE TO SECOND STAGE CONSULTATION	FINAL DETERMINATION
1.1	<p>Type 65 Substitution</p> <p>Table 1.8</p> <p>Change “Type 65 EST” to “Type 65 SUB or EST”.</p>	<p>AGL – Agree</p> <p>EnergyAustralia – EnergyAustralia provided comment to this as part of round one consultation which the Draft Determination Report contains the outcome. EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p> <p>EnergyAustralia is therefore unsure why this is again being consulted on.</p>	<p>AEMO notes that respondents supported this proposal.</p> <p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>
1.2	<p>Type 65 Substitution</p> <p>Clause 4.2.7</p> <p>The <i>Metering Data Provider</i> may use type 65 substitution or forward <i>estimation</i> type 65 only when the <i>metering data</i> from the same, or similar, <i>meter</i> reading period last year or the <i>metering data</i> from the previous <i>meter</i> reading period is not available (i.e.</p>	<p>AGL – Agree</p> <p>EnergyAustralia – EnergyAustralia provided comment to this as part of round one consultation which the Draft Determination Report contains the outcome. EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p>	<p>AEMO notes that respondents supported this proposal.</p> <p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>

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	when type 61 and type 62 <i>substitution or</i> forward <i>estimation</i> methods cannot be used).	EnergyAustralia is therefore unsure why this is again being consulted on.	
1.3	<p>Type 65 Substitution</p> <p>4.2.9(a)</p> <p><i>Substitutions</i> may be type 61, 62, 63, 64, 65, 66, 67 or 68.</p>	<p>AGL – Agree</p> <p>EnergyAustralia – EnergyAustralia provided comment to this as part of round one consultation which the Draft Determination Report contains the outcome.</p> <p>EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p> <p>EnergyAustralia is therefore unsure why this is again being consulted on.</p>	<p>AEMO notes that respondents supported this proposal.</p> <p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>
1.4	<p>Type 65 Substitution and replace “meter reading” with “energy consumption”</p> <p>4.3.5</p> <p>Type 65 – Forward Estimation by ADL Method</p>	<p>AGL – AGL agrees with the proposed change as marked up in the procedures.</p> <p>The change in the response template however appears to be incorrect, the wording should align with what was agreed in consultation with the MRG and captured in the response report and also what has</p>	<p>AEMO confirms that the changes to this clause are in accordance with the marked Draft Determination version of the procedure, i.e. clause 4.3.5 is to be:</p> <p>Type 65 – Forward Estimation by ADL Method</p>

ITEM	DESCRIPTION	PARTICIPANT RESPONSE TO SECOND STAGE CONSULTATION	FINAL DETERMINATION
	<p>The <i>Metering Data Provider</i> must provide a <i>substitution or forward estimation</i> of the <i>meter reading energy consumption</i> in accordance with the following formula:</p> <p>Meter-Reading Energy Consumption = Average Daily Load * number of days required.</p>	<p>been updated in the proposed marked up procedure. .</p> <p>The wording should read as;</p> <p>Type 65 – Forward Estimation by ADL Method</p> <p>The <i>Metering Data Provider</i> must provide a <i>substitution or forward estimation</i> of the <i>meter reading by calculating the energy consumption</i> in accordance with the following formula:</p> <p>Meter-Reading Energy Consumption = Average Daily Load * number of days required.</p> <p>EnergyAustralia – EnergyAustralia provided comment to this as part of round one consultation which the Draft Determination Report contains the outcome.</p> <p>EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p>	<p>The <i>Metering Data Provider</i> must provide a <i>substitution or forward estimation</i> of the <i>meter reading by calculating the energy consumption</i> in accordance with the following formula:</p> <p>Meter-Reading Energy Consumption = Average Daily Load * number of days required.</p> <p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>

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		EnergyAustralia is therefore unsure why this is again being consulted on.	
1.5	<p>Replace “meter reading” with “energy consumption”</p> <p>4.3.1</p> <p>Type 61 - Previous Year Method (Average Daily Consumption method)</p> <p><i>The Metering Data Provider must provide a substitution or forward estimation of the meter reading energy consumption as per the following formula:</i></p> <p style="text-align: center;">Meter-Reading Energy Consumption = ADC_{LY} * number of days required</p> <p style="text-align: center;">where</p> <p>ADC_{LY} = average daily consumption from the same or similar <i>meter</i> reading period last year.</p>	<p>AGL – AGL agrees with the proposed changes as marked up in the procedures.</p> <p>The change in the response template however appears to be incorrect, the wording should align with what was agreed in consultation with the MRG and captured in the response report and also what has been updated in the proposed marked up procedure. .</p> <p>The wording should read as;</p> <p>Type 65 – Forward Estimation by ADL Method</p> <p>The <i>Metering Data Provider</i> must provide a <i>substitution or forward estimation of the meter reading by calculating the energy consumption</i> in accordance with the following formula:</p>	<p>AEMO confirms that the changes to this clause in accordance with the marked Draft Determination version of the procedure, i.e. clause 4.3.1 is to be:</p> <p>Type 61 - Previous Year Method (Average Daily Consumption method)</p> <p>The <i>Metering Data Provider</i> must provide a <i>substitution or forward estimation of the meter reading by calculating the energy consumption</i> as per the following formula:</p> <p>Meter-Reading Energy Consumption = ADC_{LY} * number of days required</p> <p>where</p> <p>ADC_{LY} = average daily consumption from the same or similar meter reading period last year.</p>

ITEM	DESCRIPTION	PARTICIPANT RESPONSE TO SECOND STAGE CONSULTATION	FINAL DETERMINATION
		<p>Meter-Reading Energy Consumption = Average Daily Load * number of days required.</p> <p>EnergyAustralia – EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p> <p>EnergyAustralia is therefore unsure why this is again being consulted on.</p>	<p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>
1.6	<p>Replace “meter reading” with “energy consumption”</p> <p>4.3.2 Type 62 - Previous Meter Reading Method (Average Daily Consumption Method)</p> <p>The <i>Metering Data Provider</i> must provide a <i>substitution</i> or <i>forward estimation</i> of the meter reading energy consumption as per the following formula:</p>	<p>AGL – AGL agrees with the proposed changes as marked up in the procedures.</p> <p>The change in the response template however appears to be incorrect, the wording should align with what was agreed in consultation with the MRG and captured in the response report and also what has been updated in the proposed marked up procedure. .</p> <p>The wording should read as;</p> <p>Type 65 – Forward Estimation by ADL Method</p>	<p>AEMO confirms that the changes to this clause are in accordance with the marked Draft Determination version of the procedure, i.e. clause 4.3.2 is to be:</p> <p>Type 62 - Previous Meter Reading Method (Average Daily Consumption method)</p> <p>The <i>Metering Data Provider</i> must provide a <i>substitution</i> or <i>forward estimation</i> of the <i>meter reading</i> by calculating the energy consumption as per the following formula:</p>

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	<p style="text-align: right;">Meter-Reading Energy Consumption = ADC_{PP} * number of days required.</p> <p style="text-align: center;">where</p> <p>ADC_{PP} = average daily consumption from the previous <i>meter</i> reading period.</p>	<p>The <i>Metering Data Provider</i> must provide a <i>substitution</i> or forward estimation of the <i>meter reading by calculating the energy consumption</i> in accordance with the following formula:</p> <p style="text-align: right;">Meter-Reading Energy Consumption = Average Daily Load * number of days required.</p> <p>EnergyAustralia – EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p> <p>EnergyAustralia is therefore unsure why this is again being consulted on.</p>	<p style="text-align: right;">Meter-Reading Energy Consumption = ADC_{PP} * number of days required</p> <p>where</p> <p>ADC_{PP} = average daily consumption from the previous meter reading period.</p> <p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>
1.7	<p>Replace “meter reading” with “energy consumption”</p> <p>4.3.3</p> <p>Type 63 Customer Class Method</p>	<p>AGL – AGL agrees with the proposed changes as marked up in the procedures.</p> <p>The change in the response template however appears to be incorrect, the wording should align with what was agreed in consultation with the MRG and captured</p>	<p>AEMO confirms that the changes to this clause are in accordance with the marked Draft Determination version of the procedure, i.e. clause 4.3.3 is to be:</p> <p>Type 63 – Customer Class Method</p>

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	<p>The <i>Metering Data Provider</i> must provide a <i>substitution</i> or forward <i>estimation</i> of the meter reading <i>energy consumption</i> as per the following formula:</p> <p style="text-align: center;">Meter-Reading Energy Consumption = ADC_{CC} * number of days required</p> <p style="text-align: center;">where</p> <p>ADC_{CC} = average daily consumption for this customer class with the same type of usage.</p>	<p>in the response report and also what has been updated in the proposed marked up procedure. .</p> <p>The wording should read as;</p> <p>Type 65 – Forward Estimation by ADL Method</p> <p>The <i>Metering Data Provider</i> must provide a <i>substitution</i> or forward <i>estimation</i> of the meter reading <i>by calculating the energy consumption</i> in accordance with the following formula:</p> <p>Meter-Reading Energy Consumption = Average Daily Load * number of days required.</p> <p>EnergyAustralia – EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p> <p>EnergyAustralia is therefore unsure why this is again being consulted on.</p>	<p>The <i>Metering Data Provider</i> must provide a <i>substitution</i> or forward <i>estimation</i> of the meter reading <i>by calculating the energy consumption</i> as per the following formula:</p> <p>Meter-Reading Energy Consumption = ADC_{CC} * number of days required</p> <p>where</p> <p>ADC_{CC} = average daily consumption for this customer class with the same type of usage.</p> <p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>

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1.8	<p>Correction</p> <p>14.3.3(a)(v) – change “shall” to “must” to be consistent with 14.4.3(a)(iii).</p> <p>If a device is shared with another <i>NMI</i>, the proportion of <i>load</i> that is agreed by affected <i>Registered Participants</i> to be attributable to that <i>NMI</i> (k). Each k factor will be less than 1. The sum of the k factors for a shared device across each respective <i>NMI</i> shall must be equal to 1,</p>	<p>AGL – Agree agrees with the proposed changes as marked up in the procedures.</p> <p>The change in the response template however appears to be missing the other Change included in the proposed marked up procedure and also included in the response report.</p> <p>AEMO, in consultation with the MRG, determined that a new sub-clause will be included under 14.3.3(a) and 14.4.3 (a) as follows:</p> <p>viii. If a device is not shared with another NMI, the k factor must be equal to 1.</p> <p>EnergyAustralia – EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p> <p>EnergyAustralia is therefore unsure why this is again being consulted on.</p>	<p>AEMO confirms that the changes to this clause are in accordance with the marked Draft Determination version of the procedure, i.e. clause 14.3.3(a)(v) is to be:</p> <p>If a device is shared with another <i>NMI</i>, the proportion of <i>load</i> that is agreed by affected <i>Registered Participants</i> to be attributable to that <i>NMI</i> (k). Each k factor will be less than 1. The sum of the k factors for a shared device across each respective <i>NMI</i> shall must be equal to 1,</p> <p>New sub-clause (vi) is to be:</p> <p>If a device is not shared with another NMI, the k factor must be equal to 1.</p> <p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>

ITEM	DESCRIPTION	PARTICIPANT RESPONSE TO SECOND STAGE CONSULTATION	FINAL DETERMINATION
1.9	<p>Correction</p> <p>14.3.3(b) – clarify apportioning of shared devices.</p> <p>Each device in the <i>inventory table</i> is a unique combination of physical hardware, time control classification and shared portion, for example, if a device is shared with another <i>NMI</i>, the individual portion(s) of the device(s) must be included in the <i>inventory table</i> as a separate device type.</p>	<p>AGL – AGL agrees with the proposed changes as marked up in the procedures.</p> <p>The change in the response template appears to be missing the other Change included in the proposed marked up procedure and also included in the response report.</p> <p>14.3.3(b) – clarify apportioning of shared devices.</p> <p>Each device in the <i>inventory table</i> is a unique combination of physical hardware, time control classification and shared portion, for example, if a device is shared with another <i>NMI</i>, the individual portion(s) of the device(s) must be included in the <i>inventory table</i> as a separate device type on each NMI</p> <p>EnergyAustralia – EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p>	<p>AEMO confirms that the changes to this clause are in accordance with the marked Draft Determination version of the procedure, i.e. clause 14.3.3(b) is to be:</p> <p>Each device in the <i>inventory table</i> is a unique combination of physical hardware, time control classification and shared portion; fFor example, if a device is shared with another <i>NMI</i>, the individual portions of the device(s) must be included in the <i>inventory table</i> as a separate device type on each NMI.</p> <p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation</p>

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		EnergyAustralia is therefore unsure why this is again being consulted on.	process and is included in the Second Stage of Consultation.
1.10	<p>Correction</p> <p>14.3.5(b) – use <i>Rules</i> defined term <i>Eastern Standard Time</i>.</p> <p>The <i>responsible person</i> must ensure that the appropriate sunset times and sunrise times are obtained from the Australian Government Geoscience website (www.ga.gov.au/geodesy/astro/sunrise.jsp), based on the longitude and latitude of the relevant town as specified below, and Australian Eastern Time <i>Eastern Standard Time</i>:</p>	<p>AGL – Agree</p> <p>EnergyAustralia – EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p> <p>EnergyAustralia is therefore unsure why this is again being consulted on.</p>	<p>AEMO notes that respondents supported this proposal.</p> <p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>
1.11	<p>Correction</p> <p>14.3.5(b) – change “SP AusNet” to “AusNet Services” in latitude/longitude table to reflect entity name change.</p>	<p>AGL – Agree</p> <p>EnergyAustralia – EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p>	<p>AEMO notes that respondents supported this proposal.</p> <p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation</p>

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		EnergyAustralia is therefore unsure why this is again being consulted on.	process and is included in the Second Stage of Consultation.
1.12	<p>Correction</p> <p>14.3.4(b) – clarify apportioning of shared devices</p> <p>Each device in the <i>inventory table</i> is a unique combination of physical hardware, time control classification and shared portion, for example, if a device is shared with another <i>NMI</i>, the individual portion(s) of the device(s) must be included in the <i>inventory table</i> as a separate device type.</p>	<p>AGL – AGL agrees with the proposed changes as marked up in the procedures.</p> <p>The change in the response template however appears to be incorrect, the number in the response template should read as 14.4.3 (b) rather than 14.3.4 (b) to align with the marked up procedures.</p> <p>The change in the response template appears to be missing the other Change included in the proposed marked up procedure and also included in the response report.</p> <p>The template should read as;</p> <p>Each device in the <i>inventory table</i> is a unique combination of physical hardware, time control classification and shared portion, for example, if a device is shared with another <i>NMI</i>, the individual portion(s) of the device(s) must be included in the</p>	<p>AEMO confirms that the changes to clauses are in accordance with the marked Draft Determination version of the procedure, i.e. clauses 14.4.3(b) and 14.4.3(a) are to be:</p> <p>14.4.3(b)</p> <p>Each device in the <i>inventory table</i> is a unique combination of physical hardware, time control classification and shared portion; fFor example, if a device is shared with another <i>NMI</i>, the individual portions of the device(s) must be included in the <i>inventory table</i> as a separate device type on each NMI.</p> <p>14.4.3(a)</p> <p>iv. If a device is not shared with another</p>

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		<p><i>inventory table</i> as a separate device type on each NMI</p> <p>In addition the change in the response template appears to be missing the other Change included in the proposed marked up procedure and also included in the response report.</p> <p>AEMO, in consultation with the MRG, determined that a new sub-clause will be included under 14.3.3(a) and 14.4.3 (a) as follows:</p> <p><i>viii. If a device is not shared with another NMI, the k factor must be equal to 1.</i></p> <p>EnergyAustralia – EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p>	<p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>

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		EnergyAustralia is therefore unsure why this is again being consulted on.	
1.13	<p>Insert new section 14.6 – Traffic signal dimming</p> <p>New section 14.6 added to Metrology Procedure: Part B facilitate the calculation of metering data for traffic signals operating in dimmed mode – refer to change marked version of Metrology procedure: Part B included with consultation document package.</p>	<p>AGL – AGL agrees with the proposed changes as marked up in the procedures,</p> <p>The response pack template should show the words included in the new section as marked up in the procedures.</p> <p>14.6 Traffic signal dimming</p> <p>14.6.1 Application of clause 14.6</p> <p>(a) This clause 14.6 applies only to jurisdictions where traffic signals are classified as a market load. Traffic signals that are dimmed have characteristics of both “controlled unmetered loads” and “uncontrolled unmetered loads”. These traffic signals loads are similar to “controlled unmetered loads” as they have specifically defined periods that calculated metering data is based on full load values and dimmed load values. These loads are also similar to “uncontrolled unmetered loads” as they do not have a constant load and</p>	<p>AEMO confirms that 14.6 is a new section and is shown as marked up in the change marked version of the Final Determination of Metrology Procedure: Part B v 5.30.</p>

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		<p>calculated metering data is based on an annual energy consumption for the load. Note:</p> <p>(b) The effective date of clause 14.6 is 1 July 2015.</p> <p>(c) The methodology for production of calculated metering data for dimmed traffic signals must be applied to periods from the clause 14.6 effective date stated in (b).</p> <p>(d) Revision of calculated metering data for periods before the clause 14.6 effective stated in (b) must be undertaken in accordance with the methodology detailed in clause 14.4.</p> <p>EnergyAustralia – EnergyAustralia provided comment to this as part of round one consultation which the Draft Determination report contains the outcome. EnergyAustralia agrees with the proposed changes as marked up in the procedures.</p>	<p>AEMO acknowledges that this proposal was supported in the First Stage of Consultation, however this item is still part of the consultation process and is included in the Second Stage of Consultation.</p>
1.14	Effective Date of the Metrology Procedure: Part B	AGL – AGL agrees with the proposed changes as marked up in the procedures,	AEMO confirms that effective date for the Metrology Procedures will be 15

ITEM	DESCRIPTION	PARTICIPANT RESPONSE TO SECOND STAGE CONSULTATION	FINAL DETERMINATION
	<p>The proposed effective date of the Metrology Procedure: Part B is 15 May 2015.</p> <p>Effective Date for Clause 14.6:</p> <p>Proposed effective date for 14.6 is 1 July 2015.</p>	<p>the effective date for the Metrology Procedure will be 15th May 2015 and the 1st July 2015 for clause 14.6.</p> <p>The proposed effective date in the response template appears to be incorrect and has been given as 24th April 2014 whereas the marked up procedure shows the effective date as 15th May 2015.</p> <p>EnergyAustralia – EnergyAustralia agrees with marked up Procedure changes for May 2015 and 1st July 2015 for clause 14.6. Has the wrong effective date been provided in the response template?</p>	<p>May 2015 and the effective date for section 14.6 will be 1 July 2015.</p>

Appendix 3 – Other consultation related issues – Metrology Procedure: Part A and Part B

ITEM	ISSUE/COMMENT		FINAL DETERMINATION
	AGL – No comment EnergyAustralia – No comment		AEMO notes that there are no further proposed changes to Metrology Procedures: Part A and Part B.

Attachment 1 – Copy the Notice of Second Stage of Rules Consultation

NOTICE OF SECOND STAGE OF RULES CONSULTATION

INTRODUCTION OF TRAFFIC SIGNAL DIMMING and TYPE 65 SUBSTITUTIONS – AMENDMENT TO THE METROLOGY PROCEDURE

This Notice of Second State of Rules Consultation informs all Consulted Persons of the second stage of consultation on the *metrology procedures*

The consultation is being conducted under clause 7.1.4 of the National Electricity Rules (**Rules**) in accordance with the *Rules consultation procedures* in clause 8.9 of the *Rules*.

Date of notice

This Notice of Second Stage of Rules Consultation was issued on 20 November 2014.

First Stage of Consultation

AEMO issued the Notice of First Stage of Rules Consultation on 18 September 2014, together with a draft procedure.

Four submissions were received. All non-confidential submissions have been published on the AEMO website.

There were no requests for meetings.

AEMO has considered the issues raised in the submissions and has now produced a Draft Determination and Report.

The Draft Determination and Report is now available to all Consulted Persons for their consideration.

Objectives of the consultation

The objectives of the consultation are to:

- Vary the *metrology procedures* to facilitate the introduction of a methodology for the production of calculated metering data for dimmed traffic signals;
- Introduce Type 65 metering data substitution method;
- Align version numbering for Metrology Procedures Part A and Part B;
- Improve clarity and correct errors in the *metrology procedures*; and

- To ensure that Consulted Persons are properly informed about the proposed and the final outcome.

Background

The NSW Roads and Maritime Services advised AEMO of its intention to operate its traffic signal installations that are fitted with LED lamps in a dimmed mode to reduce energy consumption.

As traffic signals in NSW are classified as market unmetered loads, the Metrology Procedure is to be updated to incorporate the methodology to facilitate the calculation of metering data for traffic signals operating in dimmed mode.

Changes to the Metrology Procedure are also required to formalise the use of a metering data substitution method that is based on an average daily load value.

The recommended procedure changes under this consultation will become Metrology Procedure:

- Part A National Electricity Market Version 5.30,
- Part B: Metering Data Validation, Substitution and Estimation Procedure for Metering Types 1 – 7 Version 5.30.

Matter under consultation

Clause 7.1.4 of the *Rules* requires AEMO to conduct the *Rules consultation procedures* for amendments to the *metrology procedures*.

The *metrology procedures* are to be amended to support the introduction of traffic signal dimming, Type 65 metering data substitutions and correct minor errors.

The consultation process

The following table contains an outline of the remaining consultation process, including key dates. Please note that some of these dates are proposed dates and may be subject to change by AEMO.

PROCESS	DATE
Closing date for submissions received in response to this Notice of Second Stage of Rules Consultation	5 December 2014
Publication of the Final Determination	Currently, proposed date is 21 January 2015
Effective date	15 May 2015

Invitation to make submissions

AEMO invites submissions on the Draft Determination and Report on the *National Electricity Market metrology procedures*: Part A and Part B.

Comments are also invited on any other issues relating to the subject matter of the consultation.

Submissions should identify any information considered to be confidential and reasons why information is to be treated as confidential should be provided. AEMO reserves the right to publish material that it does not consider to be confidential, despite a submission stating so.

It should also be noted that material identified as confidential may be accorded less weight in the decision-making process than material that is published.

Closing date for submissions

Submissions in response to this Notice of Second Stage of Rules Consultation should reach AEMO by **5:00pm EST on 5 December 2014**.

AEMO has discretion to consider late submissions. Any late submission should explain:

- the reason for the lateness; and
- the detriment to you if AEMO fails to consider your submission.

Contact details

AEMO prefers that submissions be forwarded in electronic format (both pdf and Word) as they will be published on the AEMO website.

Please send all e-mail submissions to Roy Kaplan at roy.kaplan@aemo.com.au.

Date of Second Stage Rule Consultation publication: 20 November 2014.