Solar Analytics Smart Monitor - Certification and Approvals
Certification

The Solar Analytics Solar Smart Monitor (SSM) is certified to the following standards:

<table>
<thead>
<tr>
<th>Description</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>AS/NZ60950.1:2011</td>
</tr>
<tr>
<td>Conducted Emissions</td>
<td>AS/NZS CISPR 22:2009 ClassB</td>
</tr>
<tr>
<td>Electrostatic discharge</td>
<td>Level III (IEC 61000-4-2)</td>
</tr>
<tr>
<td>Immunity to radiated fields</td>
<td>Level III (IEC 61000-4-3)</td>
</tr>
<tr>
<td>Immunity to fast transients</td>
<td>Level IV (IEC 61000-4-4)</td>
</tr>
<tr>
<td>Immunity to impulse waves</td>
<td>Level IV (IEC 61000-4-5)</td>
</tr>
<tr>
<td>Active energy</td>
<td>Class 1 as defined by IEC 62053-21</td>
</tr>
</tbody>
</table>

The SSM has not been NMI pattern approved as this is only required for non-exempt energy retailers when providing the sole energy billing functions.

Billing and LGCs

The Australian Energy Regulator (AER) has confirmed in writing that Solar Power Purchase Agreement (SPPA) exempt sellers are not required to use an NMI approved meter (refer to Appendix A) in order to bill customers.

Furthermore, the Clean Energy Regulator (CER) has confirmed in writing that (refer to Appendix B):

a) The SSM can be used for the purpose of creating LGCs, and
b) Since the SSM is rated as Class 1 (see above), the LGCs can be claimed at the full rate determined by the SSM.
Appendix A – AER Communications re NMI

Sent: Thursday, 18 February 2016 7:05 PM
To: AER Inquiry
Subject: Solar metering

Dear Sir/madam,

We have a number of customers who are solar system installers. These customers have all applied for, and been granted, a retail electricity exemption for the sale of electricity through Solar PPAs.

Most have indicated that they will use a variety of methods to measure the quantum of electricity generated. Some of these are NMI M6 pattern approved meters, some are revenue grade accuracy non NMI approved, and some base it simply on the inverter readout.

Can you please confirm that an exempt solar PPA energy retailer does NOT have to use a NMI M6 pattern approved meter to bill a customer for the solar PPA.

AER Inquiry <aerinqusry@aer.gov.au>  
Fri, Feb 19, 2016 at 2:06 PM  
To: Stefan Jarnason <stefan@solaranalytics.com.au>  
Cc: AER Inquiry <aerinqusry@aer.gov.au>

Dear Mr Jarnason,

Thank you for your email of 18 February.

SPPA exempt sellers are not subject to any conditions under the retail exemption framework that require them to use a particular type of meter in order to bill a customer.

Regards,

Fiona  
AER Inquiry
Appendix B – CER Communications re LGC

Stefan Jarnason <stefan@solaranalytics.com.au>  Thu, Jul 23, 2015 at 12:23 PM
To: CER - RET - Powerstations <CER-RET-Powerstations@cleanenergyregulator.gov.au>
Bcc: FollowUpThen <wednesday@followupthen.com>

Hi Phoebe,

Thank you for the response. It has not quite answered my question though. My question is:

"Can you please clarify the metering requirements for creating Large Generation Certificates (LGCs)? Specifically, if a meter is used to measure the electricity that is Class 1, i.e. the same level of accuracy as required under the AER NMI M6 requirements, but the meter is not certified as NMI M6 due to it having a non standard form factor, is this meter sufficient to register the LGCs? Are there any other requirements the meter must satisfy?"

If you are able to send me the relevant section of the applicable regulations that would also be greatly appreciated.

Stefan Jarnason
Co-Founder & Managing Director

CER - RET - Powerstations <CER-RET-Powerstations@cleanenergyregulator.gov.au>  Thu, Jul 23, 2015 at 12:05 PM
To: "stefan@solaranalytics.com.au" <stefan@solaranalytics.com.au>

Hi Stefan,

Apologies for the delay in responding to your enquiry. I thought my colleague had responded to the original request from Jacqui (see email below).

As discussed in our telephone conversation, a meter that is accepted by a electricity retailer for the sale of electricity will also be accepted by the Clean Energy Regulator for the purpose of creating LGCs. In addition, lower accuracy meter or inverter data may also be used, with a deduction of 1-3% depending on the accuracy of the system.

Please let me know if you have any further questions.

Regards

Phoebe Chadwick-Masters
Regulatory Officer
**Stefan Jarnason** <stefan@solaranalytics.com.au>  
**To:** CER - RET - Powerstations <CER-RET-Powerstations@cleanenergyregulator.gov.au>  
**Tue, Nov 3, 2015 at 7:42 AM**

Dear Phoebe or John,

Are you able to clarify the below question, namely:

You stated in a previous email that we can use a non NMI M6 meter for the purpose of LGC creation, and that we need to reduce the measurement based on the accuracy of the energy meter.

For the purpose of LGC creation, if we use a non NMI M6 pattern approved energy meter that meets the same Class 1 accuracy required by an NMI M6 meter, is the measurement reduction therefore 0%? If not what is the appropriate value?

Regards

Stefan Jarnason  
CEO and Founder

**CER - RET - Powerstations** <CER-RET-Powerstations@cleanenergyregulator.gov.au>  
**To:** Stefan Jarnason <stefan@solaranalytics.com.au>  
**Tue, Nov 3, 2015 at 11:35 AM**

Hi Stefan,

If the meter meets the class accuracy of the National Electricity Rules there will be no deduction applied.

Regards,

Phoebe

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**Phoebe Chadwick-Masters**  
**Regulatory Officer**

Renewables and Waste  
Technical Assessment and Support, Scheme Entry and Entitlement

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www.cleanenergyregulator.gov.au