

AMO Paper

Subject	Reverse running meters	
Author	Tom Chevalier, AMO Consultant	
Paper date	25 th Nov 2014	

I Background

In 2013 the AMO developed a list of suspect meters and a technical document explaining the background to the problems resulting from on-site generation at smaller premises. This document provides an update on a recent review request by the Energy UK FiTs meeting.

2 Issues

2.1 Revision of listing

As a result of the meeting's request we have reviewed the meters which were of concern. These have been considered and included where evidence was available to members to support the changes. There is one meter which is still regarded as possibly a problem, but evidence to support that view is still awaited as no meters of that type were available for testing.

It has been suggested that publish two lists. One with the meter types with a concern, and another with all the meters.

2.2 Top ten meters

It has not been possible to identify a 'top ten'. For historic reasons the problems are very regional, so in different parts of the country there are a predominance of a particular meter model/type. So any one MO or Supplier has a different top ten. It is hard to simplify the issue and the members I have spoken to are not actually aware of the numbers of any particular meter type which is being changed as a result of this concern.

2.3 Simplified guide with photos

The AMO document was always intended to be industry facing rather than customer facing. As we are 'techy folk'(!) it is probably not something that the AMO is best placed to produce. But if E.UK wanted some input by review of draft text, etc. for technical accuracy, then this should be possible.

One member proposed the following simplified statement [which I have tweaked a little]:

Certain electricity meters are not appropriate where private generation is installed and may give incorrect readings. The Electricity Supplier should be notified of these instances and will arrange for a replacement, (free of charge). Inappropriate meters are:

Reverse running update 20141125 Page 1 of 2

- Siemens: S2A-100 / S2A-200 / S2AS-100 / S2S600A / S2S601A (which may run backwards resulting in incorrect readings).
- · Iskra ME162 (which may add export to import)
- Segam CX1000-3 CLK (which may add export to import)
- Any meter manufactured before 1985, (which may run backwards resulting in incorrect readings).

This has not been confirmed as compatible with the list.

One aim we were seeking to achieve was to ensure that only meters that were a known problem were identified. We would be criticised by stakeholders if large quantities of acceptable meters were changed unnecessarily.

3 Changes to the listing

Entries for the following meter types have changed (from Aug 2013 to Sept 2014) as result of this review.

Manufacturer 🔻	Type	Stakeholder Comment
AMPY/L+G	5056	May show 'rEd' (reverse Energy detected), but readings are accurate
AMPY/L+G	5077	5077A - 'May show 'rEd' (reverse Energy detected), but readings are accurate
AMPY/L+G	5162	5162E & 5162K - 'May show 'rEd' (reverse Energy detected), but readings are accurate
AMPY/L+G	5192	5192A - 'May show 'rEd' (reverse Energy detected), but readings are accurate
AMPY/L+G	5184	May show 'rEd' (reverse Energy detected), but readings are accurate
AMPY/L+G	5196	5196A & 5196D - 'May show 'rEd' (reverse Energy detected), but readings are accurate
AMPY/L+G	5209	Meter requires changing
AMPY/L+G	5219	5219J - May show 'rEd' (reverse Energy detected), but readings are accurate
AMPY/L+G	5224E	May show 'rEd' (reverse Energy detected), but readings are accurate
AMPY/L+G	5235	5235A - May show 'rEd' (reverse Energy detected) but readings are accurate
AMPY/L+G	5235***	5235D-N - May show 'rEd' (reverse Energy detected), but readings are accurate
AMPY/L+G	5246C-*	May show 'rEd' (reverse Energy detected), but readings are accurate
AMPY/L+G	5258*-*	May show 'rEd' (reverse Energy detected), but readings are accurate
Siemens/L+G/FML/Ferranti	CL7	Meter requires changing, unless "H" or "h" appears in meter type
Siemens/L+G/FML/Ferranti	CL7d	Meter requires changing, unless "H" or "h" appears in meter type, such as CLhd
Siemens/L+G/FML/Ferranti	F2Q-100	Meter requires changing
Siemens/L+G/FML/Ferranti	S2S-700A	Subject to checking - confirm with Meter Operator
Segam	CX1000-3 CLK	Meter requires changing - adds export to import consumption

Reverse running update 20141125 Page 2 of 2