SCHEDULE 1

Authorised Manufacturers' and authorised repairers' tests and testing methods for alternating current watthour meters

Non-registration test

2. Induction meters

(1) Induction meters shall be tested to ensure that when the current circuits are open and a voltage of 110% of the declared system voltage is applied to the voltage circuits, rotors cease to rotate before completing one complete revolution.

Static meters

(2) Static meters shall be tested for non-registration by one of the following methods—

Method 1

(a)   (i) When subjected to the test conditions specified in paragraph 2(1), the meter shall not emit more than one output pulse over the minimum test period determined in paragraph (ii);

   (ii) the minimum test period (t) shall be computed by the formula:

$$t \geq \frac{480 \times 10^6}{k.m.V.Im} \text{ minutes}$$

where:

    k = number of pulses per kWh emitted by the meter

    m = number of elements

    V = declared system voltage

    Im = marked maximum current.

Method 2

(b) When static meters are fitted with inhibiting circuits, they may be tested for non-registration with a current, which is less than the threshold current in respect of a meter of that type, applied to the current circuits and a voltage of 100% of the declared system voltage applied to the voltage circuits of the meters under test. Meters shall not emit more than one output pulse over the minimum test period (t) determined as follows—

$$t = \frac{126000}{V \times I \times k \times pf} \text{ minutes}$$

where:

    V = declared system voltage

    I = total current of all phases

    k = number of pulses emitted per kWh by the meter

    pf = power factor.

Method 3

(c) The period calculated for Method 1 or Method 2 may be halved if the meters under test do not emit any output pulses during the period of the test.