

<b>9</b>	<b>Ability to meet the specified Safety and Security requirements</b>	
<b>9.1</b>	<b>Safety – Meters</b>	
9.1.1	<p>In addition to transient, short duration, line surges, as described in the referenced ANSI and IEEE standards, energized meters may be exposed to 60 Hz power frequency overvoltage, across their line side terminals, for several seconds. This is typically due to distribution transformer insulation failure or accidental contact between transmission voltage, primary voltage or secondary voltage circuits. For each proposed meter manufacturer/model, what are the maximum per unit 60 Hz overvoltage magnitudes and time durations, applied across the line side terminals, that an energized meter can sustain without:</p> <ul style="list-style-type: none"> <li>(a) Impacting accuracy;</li> <li>(b) Failing, i.e. the metrology, display, FAN (or WAN direct) NIC, HAN gateway or protective surge arrestors fail; and</li> <li>(c) Failing catastrophically, i.e. the metrology, display, FAN (or WAN direct) NIC, HAN gateway, or protective surge arrestors fail catastrophically to the extent that personnel or property could be jeopardized.</li> </ul> <p>Note – This is not the condition specified in ANSI C12.1 section 4.7.3.1 which is applicable to de-energized meters. Rather, it is the condition where the system voltage rises and is applied across the meter line side terminals, power supply and potential sensing coil(s).</p>	2.0
9.1.2	Describe the meter design features that will minimize, and contain, the impact of a catastrophic overvoltage failure, e.g. due to a sustained 60 Hz overvoltage incident, the protective surge arrestors rupture and considerable energy is dissipated within the meter case.	1.0
9.1.3	What is the flammability rating of the meter, e.g. UL94 rating V-0?	0.5
9.1.4	<p>Service disconnect switches have the potential to significantly contribute to worker safety by permitting the meter to be installed or removed under “no load” with the disconnect switch open. However, this would require that meters be shipped with the disconnect switch open.</p> <ul style="list-style-type: none"> <li>(a) Describe the steps, and how long it would take, for the meter installer to close the service disconnect switch. Specifically, would the meter need to first register on the metering system?</li> <li>(b) If this time is excessive, could the disconnect switch be programmed to automatically close 30 seconds initial energization?</li> </ul>	1.0
9.1.5	For ANSI Form 2S meters used on a 120/240 V, single phase, 3 wire services, describe how the meters detect, and prevent the service disconnect switch from closing, if a 120 V load side backfeed is applied between one pole only and the neutral of an open service disconnect switch.	2.0
9.1.6	Describe how the meter load side voltage detection circuit distinguishes between an applied voltage and phantom voltages associated with an open customer load side switch.	1.0
<b>9.2</b>	<b>Security – General</b>	
9.2.1	Provide details on your overall security policy and strategy and provide a copy of your security road map and Security System Architecture. Include details on your participation in any security validation and/or security testing activities.	3.0