Ranking Electricity Meters for Risk – A Summary

The table summarizes the risk rankings of electricity meters, based on a detailed analysis in a longer companion document.[1] "5" is the highest risk. Blank is the lowest risk. Capital letters mark meters with similar, but not necessarily identical, risk rankings. The priorities among the three types of risk addressed are these:

- **Health:** The meters are arranged in descending order by Risk to Health, which the author believes to be the single most important risk factor.
- **Privacy:** The meters with the same Risk to Health are arranged in descending order by Risk to Privacy.
- **Cyber Security:** The meters with the same Risk to Health and the same Risk to Privacy are arranged in descending order by Risk to Cyber Security.

	Meter Category	Type of Communication	wireless	wired	Overall Risk (5 is highest. Blank is lowest.) Risk to Health	Risk to Privacy	Risk to Cyber Security
G	SMART METER	WAN/ HAN	✓		5	5	5
F	AMR Meter	Bubble Up	✓		4	4	
	Analog Meter (plus wireless digital electronics)	Bubble Up	✓		4	4	
E	AMR Meter	Wake Up	✓		3	2	
	Analog Meter (plus wireless digital electronics)	Wake Up	✓		3	2	
D	SMART METER	Internet cable/fiber		✓	2	4	4
	AMR Meter	Internet cable/fiber		✓	2	4	
C	SMART METER	Telephone landline		✓	2	3	3
	AMR Meter	Telephone landline		✓	2	1	
B	Basic Digital Electronic Meter	None			2		
A	Traditional Analog Meter	None					

The Wireless Smart Meter poses the highest risk in all three categories of risk. In contrast, the Traditional Analog Meter poses the lowest risk in all three categories of risk. This meter is also called:

- Traditional Analog Mechanical Meter
- Traditional Analog Electromechanical Meter
- Traditional Analog Mechanical Meter with No Wireless Communications Capability
- Traditional Analog Mechanical Meter with No Electronic Circuitry.

[1] Ronald M. Powell, Ph.D., "Ranking Electricity Meters for Risk to Health, Privacy, and Cyber Security", February 12, 2015.