

Advanced Metering Infrastructure (AMI) Opt-Out Recommendation

Agenda

- AMI Water Meter Transmissions
- AMI Opt-Out Options
- Opt-Out Fees
- Updated Recommendation
- Closing Statement on Health Impacts
- Questions



Comparison of Electric and Water AMI

- WSSC Water reached out to six AMI water meter manufacturers to find the typical frequency, duration and power density of transmissions
- Each meter provides ability to configure transmission of data
- WSSC Water's Request for Proposal: Ability to configure transmissions to once per day

Factor	Electric AMI	Water AMI
Number of Transmissions	Est. 12,288 per day	Typically 4-6 times per day
Duration of Transmissions	Seconds per day	Milliseconds per day
Power Density of Transmission	38 microwatts/sq. cm	0.08 microwatts/sq. cm
Network Model	Mesh (communication from meter to meter)	Point-to-Point (each meter communicates to a collector)
Power Source	AC Power	DC Battery Power



Radio Frequency Power Density Comparison

Comparison of RF Power Density in the Everyday Environment

(Microwatts per Square Centimeter)

Adjacent to a Gas Smart Meter (1 Foot)	0.00166
Adjacent to an Electric Smart Meter (10 Feet)	0.1
Adjacent to an Electric Smart Meter (I Foot)	8.8
Microwave oven nearby (3 Feet)	10
Wireless Routers, laptop computers, cyber-cafes, etc. Maximum (~I meter for Laptops, 2-5 meters for access points)	10 to 20
Cell Phone (at head)	30 to 10,000
Walkie Talkie (at head)	500 to 42,000
Adjacent to a Water Smart Meter (I Foot)	0.08



AMI Opt-Out Options

Considerations for Opt-Out Program

- I No Opt-Out
 All customers are required to accept the AMI equipment
- Opt-Out with No Fee*

 Customers can decide not to receive the AMI equipment; however all customers bear the additional costs associated with manual meter reads
- Opt-Out with Manual Reads

 Customers can decide not to receive the AMI equipment, but are required to pay a fee to cover utility expenses associated with manual meter reads. This fee is assessed for each read and is in perpetuity when opting out.
- 4 Opt-Out Meter Relocation Customers with inside meters would have option to relocate AMI device to their property line. For a nominal fee we will relocate the meter to the outside of their home.

^{*} Maryland PSC has ordered that all electric and gas companies implementing AMI must assess a fee for customers choosing to opt out to comply with rate making principles. Case 9208, Order 85294.

Opt-Out Fees

Opt-Out Fee:

- Opt-Out Fee for Manual Reads:
 - \$209 for touchpad installation paid over a year
 - \$8.87 per read for manual meter reading fee in perpetuity
 - Waiver for Customer Assistance Program (CAP) customers
- Opt-Out Meter Relocation Fee:
 - \$300 for relocation, paid by customer over one year
 - WSSC Water assumes 90% of relocation cost
 - Waiver for CAP customers



Updated Recommendation

- #3. Opt-Out With Manual Reads (fee) or
- #4. Opt-Out Meter Relocation (fee)
 - Opt-Out with Manual Reads requires two meter reading systems but provides an option for those who do not want AMI
 - Opt-Out Meter Relocation keeps all meter reads on one system and provides the option for an AMI meter to be relocated to the property line



Closing Statement on Health Impacts

American Cancer Society:

o Because the amount of RF radiation you could be exposed to from a smart meter is much less than what you could be exposed to from a cell phone, it is very unlikely that living in a house with a smart meter increases risk of cancer

World Health Organization:

- To date, scientific evidence does not support a link between [electromagnetic hypersensitivity] symptoms and exposure to electromagnetic fields
- There is little scientific evidence to support the idea of electromagnetic hypersensitivity
- O Despite extensive research, to date there is no evidence to conclude that exposure to low level electromagnetic fields is harmful to human health



Questions?



