

Supplemental Checklist – Non-routine Meter Replacement

Non-routine meter replacement is defined as either:

1. Upgrade in meter technology (manual read upgraded to AMR or AMI, or AMR upgraded to AMI).
2. Accelerated replacement of meters that, on average, are less than 18 to 20 years old.

Routine meter replacement, including the replacement of utility meters based on depreciation and periodic meter testing, remain exempt from PSC approval. For example, if a utility's meter replacement program includes replacing 100 meters with an average age greater than 18 to 20 years old, then it would be considered routine replacement that does not require PSC approval.

The application should include the following items:

1. State the reason for the meter replacement program including the existing and proposed methods for reading meters (e.g. manual read, AMR, and AMI).
2. How will the program, data software, and data management be used?
3. List the number of water customers from the utility's most recent annual report.
4. How many meters will be replaced?
5. What is the average age of the meters that will be replaced?
6. List the type and brand of meters to be installed.
7. List the type and brand of the electronic read / transmitter heads to be installed.
8. What type of read system will be installed, AMR/AMI?
9. Describe the software and data management system that will be installed?
10. Describe the proposed meter replacement schedule including replacement rate.
11. Who will do the meter replacements, contractors or utility staff?
12. Describe any other work that will be dovetailed with the meter replacement program, e.g. cross-connection inspections.
13. List the cost of the replacement program per USOA including: total costs and yearly costs. The initial capital costs must be itemized in the application, such as meters, computers and software, meter signal antennae, installation labor, etc.
14. How is the meter replacement program to be funded?
15. What is the transition plan from old meters to full replacement (e.g. meter reading, meter testing, emergency change outs)?

16. What are the program benefits to the utility customer?

If installing AMR then check all boxes that apply:

- Reduce labor and costs associated with meter reading
- Reduce meter reading and billing errors
- Reduce or eliminate estimated billing
- Expedite special meter reads and/or final meter reads
- Timely notify of abnormally high and low consumption readings
- Timely detect leaks and notify of leaks
- Reduce water loss
- Captures maximum day and maximum hour usage for large customers
- Other (Explain)

If installing AMI then check all boxes that apply:

- Reduce labor and costs associated with meter reading
- Reduce meter reading and billing errors
- Reduce or eliminate estimated billing
- Expedite special meter reads and/or final meter reads
- Timely notify of abnormally high and low consumption readings
- Timely detect leaks and notify of leaks
- Detect tampering
- Detect backflow or reverse flow
- Reduce water loss
- Provide the Utility access to real-time meter data
- Customer access to real-time meter data through web-application
- Provide daily and hourly demand data for use in ratemaking
- Demand-side management initiatives (Explain)
- Other (Explain)

17. When does the utility anticipate it will be able to utilize each of these benefits to create a tangible impact on the customer? Please identify which of the benefits listed above would be immediately realized following deployment of the AMI network, and which will be realized in the future.

18. For those benefits that would not be realized immediately following deployment of the AMI network, please provide the utility's plan to implement the benefit(s), and expected date by which implementation would occur. For example, if leaks are to be detected by the system, by what date does the utility anticipate having the software capability and business process in place to promptly notify customers of leaks as they occur? For each future benefit, please describe utility's current plan to implement the benefit, including completing software programming, business process updates, and other work required.
19. What features, if any, is the utility unsure that its technology will support, but is included as a justification for the upgrade and its associated costs?
20. Does the utility confirm, following deployment of its new AMI system, that utility billing and metering practices will be consistent with the requirements of Wis. Admin. Code chs. PSC185, (and 113 and 134 if applicable)?
21. When implementing new AMI, some utilities have offered the option for customers to opt-out and maintain analog meters. Does the utility plan to request an opt-out, or nonstandard meter tariff for these situations? What other options, if any, does the utility plan to offer?
22. If a web-based portal is offered, then how will customers without access to the web-based portal benefit from additional features provided by the AMI system? How many customers does the utility reasonably expect to utilize the portal and how will the utility market this portal in order for customers to benefit from its features and information?