

WATTSBAR UTILITY UFR PILOT SUMMARY:

04-03-09

From June 6-10, 2008, Watts Bar Utility installed UFRs in 35 locations on Little Johnson Valley Rd in Kingston, TN. Each location has 5/8x3/4" volumetric meter with radio read. Each meter is approximately 4 years old. The 35 locations are supplied water that runs through a 3 inch master meter with no other active accounts being supplied by the master meter. The UFR was incorporated into a 10-303NNU- x72x950 resetter.

Each meter was removed, placed in the 10-203NNU- x72x950 resetter and the resetter was installed in the meter box. Each meter remained with its original service line. The line pressure at the meters varied from 40 to 85 PSI, depending on location.

A review of the hourly readings revealed 35% of the homes with the UFR had consistent leaks. This consists of a leak that was not registering before the UFR was installed but is after installation or the amount of water being registered by the meter increased after the UFR was installed.

A more accurate evaluation of the performance in the UFR is based on the percentage of unaccounted for water based off the monthly readings. Unaccounted for water is the sum of all 35 readings registered by the individual home meters divided by the reading of the master meter. All values since the beginning of 2007 (17 months) were used to determine the base value for unaccounted for water. The values for June, 2008 were omitted as part of the month was with the UFR installed and part was prior to UFR installation. The table below displays the monthly results since installing the UFR pilots.

Month	Improvement in Unaccounted for Water
July, 2008	10.4%
August, 2008	9.5%
September, 2008	4.9%
October, 2008	11.9%
November, 2008	7.6%
December, 2008	8.9%
January, 2009	3.9%
February, 2009	8.4%
March, 2009	11.6%

AVERAGE IMPROVEMENT 8.6%

Based on the results of the pilot, Watts Bar Utility has incorporated the UFR into its specifications for new construction.

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