



S T O L L · K E E N O N · O G D E N
P L L C

300 WEST VINE STREET
SUITE 2100
LEXINGTON, KY 40507-1801
MAIN: (859) 231-3000
FAX: (859) 253-1093
www.skofirm.com

LINDSEY W. INGRAM III
DIRECT DIAL: (859) 231-3982
DIRECT FAX: (859) 246-3672
L.Ingram@skofirm.com

February 28, 2011

HAND DELIVERED AND ELECTRONICALLY FILED

Jeff Derouen
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40601

Re: *In the Matter of: Kentucky American Water Company's Request for Permission to Deviate from 807 KAR 5:066, Section 16(1), Case No. 2009-00253*

Dear Mr. Derouen:

At the December 2, 2010 Informal Conference in this matter, Commission Staff requested this firm's client, Kentucky American Water ("KAW"), to provide some information in follow-up to Commission Staff's prior information requests. Specifically, Commission Staff made four additional information requests that were reduced to writing in Virginia Gregg's December 20, 2010 Informal Conference memorandum. The four requests and KAW's response to each one are set forth below.

1. In KAWC's "Meter Sampling Procedure" dated September 1996, Section 3.3 describes two types of statistical analysis that would be performed: means analysis and failure rate analysis. In KAWC's "Pilot Sampling Plan for Meters Older than Ten Years" dated June 1997, Section 3.3, Test Procedure, the failure rate analysis standard was eliminated, leaving means analysis as the only determination of meter accuracy. Staff noted its concern that, without an analysis of how many meters actually fail, it is possible that when 200 meters are tested, half could fail on the low side and half could fail on the high side, but if averaged, the results would indicate that the meters had passed. In light of this, why was the decision made by KAWC to eliminate half of the testing protocol originally contained in the September 1996 "Meter Sampling Procedures"?

Answer: Due to staff changes since 1996, no information was found as to reasons for any variations between prior meter sampling procedure drafts and the approved meter pilot program. KAW conducted all meter testing according to the approved meter pilot program, "Pilot Sampling Plan for Meters Older than Ten Years" dated June 1997.

Jeff Derouen
February 28, 2011
Page 2

2. Does KAWC consider the testing results of the pilot program supportive of keeping the meters in service for more than 10 years? Please explain for meters tested at 11 years, 12 years, 13 years, 14 years, and 15 years.

Answer: KAW proposed a meter pilot program entitled "Pilot Sampling Plan for Meters Older than Ten Years" dated June 1997. Per approval by the PSC, KAW conducted analysis in accordance with this meter pilot program. Meter test data results are found to be favorable for meters up to 15 years of age per this analysis. KAWC also notes that the Certificate of Warranty provided by Neptune Technology, Inc. for 5/8" x 3/4" T-10 meters guarantees that those meters will perform per AWWA Standard C700-95 for repaired meter accuracy for a period of 15 years. Please see the attached warranty. If the PSC chooses a different analysis than what was previously approved, meters older than 10 years may show different results.

3. Why did KAWC use 90 percent, instead of 95 percent, for the low-flow minimum in its pilot testing when Commission regulations require 95 percent?

Answer: Due to staff changes since 1996, no information was found as to reasons for using 90% as the low flow minimum. AWWA Standard C700-95 for repaired meter accuracy is 90% for low flow and a Certificate of Warranty is provided by Neptune Technology, Inc. for 5/8" x 3/4" T-10 meters guaranteeing that they will perform per AWWA Standard C700-95 for repaired meter accuracy for a period of 15 years.

4. Do meter failures have an impact on non-revenue water? Describe why or why not.

Answer: Meter failures may or may not have an impact on non-revenue water. Impact would be dependent on the level of over or under registration. As a group, the meters tested within acceptable standards, so there is no meter failure effect on non-revenue water.

Should Commission Staff have further questions about the above, please do not hesitate to contact me. Thank you for your assistance in this matter.

Very truly yours,

Stoll Keenon Ogden PLLC



Lindsey W. Ingram III

Enclosure
cc: Virginia Gregg (with enclosure)

Neptune Certificate of Warranty

Neptune T-10, HP Turbine, Tru/Flo® Compound Cold Water Meters

1. Terms of Limited Warranty.

With respect to its Neptune T-10, HP TURBINE, TRU/FLO COMPOUND Water Meters (collectively the “Water Meters”), Neptune Technology Group Inc. (“Neptune”) warrants the following on meters sold on or after 11/1/92:

The Water Meters will be, at the later of (i) the date of original purchase from Neptune or (ii) the date of original shipment from Neptune-authorized distributor of Water Meters (that later date is referred to as “the Date of Shipment”) and will remain for a period of 18 months from the Date of Shipment, or 12 months from date of installation, free from manufacturing defects in workmanship and material.

- (a) **Maincase.** The no-lead high copper alloy or Brass maincase of the Water Meters will be at the Date of Shipment free from manufacturing defects in workmanship and material for the life of the Water Meter.
- (b) **Frost Protection.** All Neptune T-10 Cold Water Meters shipped with a synthetic polymer or cast iron bottom cap will, commencing upon the Date of Shipment, be warranted against chamber damage for a period of 10 years.
- (c) **Registers.** Standard, roll sealed registers of the Water Meters will be at the Date of Shipment, and shall remain for the following periods, free from manufacturing defects in workmanship and material for a period of 10 years. The performance of the Water Meters Pulser RM remote is guaranteed for 1 year from Date of Shipment. The ARB®, ProRead™ (ARB VI), and E-Coder™ (ARB VII) system registers are warranted for 10 years from Date of Shipment. All ProRead encoder receptacles shipped after January 1, 2001 shall be warranted for five years from the Date of Shipment. All other components and parts are covered under Neptune’s standard one year material and workmanship guarantee.
- (d) **Meter Accuracy for Neptune T-10.** Neptune T-10 Meters are warranted to meet or exceed, as listed herein, accuracy standards of the AWWA Standard C700-95 for a period of: (i) five (5) years from Date of Shipment for 5/8”, 3/4” and 1” meters; (ii) for a period of two (2) years from the Date of Shipment for 1 1/2” and 2” meters; or (iii) the applicable registration shown below, whichever occurs first. Neptune further guarantees that the Neptune T-10 will perform to at least Repaired Meter Accuracy Standards, according to AWWA Manual M-6 Chapter 5 (1999) Table 5.3 for an additional ten (10) years or the registration shown below, whichever occurs first:
- (e) **Meter accuracy for HP Turbine and TRU/FLO.** The HP Turbine and TRU/FLO Compound Cold Water Meters will perform, for a period of one (1) year from the Date of Shipment, to American Water Works Association (“AWWA”) accuracy standards for new water meters.

SIZE	EXTENDED LOW FLOW ACCURACY	NEW METER ACCURACY	REPAIRED METER ACCURACY
5/8 & 5/8” x 3/4”	1/8 US gpm @ 95% 5 years or 500,000 gallons	500,000 gallons	1,500,000 gallons
3/4”	1/4 US gpm @ 95% 5 years or 750,000 gallons	750,000 gallons	2,250,000 gallons
1”	3/8 US gpm @ 95% 5 years or 1,000,000 gallons	1,000,000 gallons	3,000,000 gallons
1 1/2”	3/4 US gpm @ 95% 2 years or 1,600,000 gallons	1,600,000 gallons	5,000,000 gallons
2”	1 US gpm @ 95% 2 years or 2,700,000 gallons	2,700,000 gallons	8,000,000 gallons



2. Warranty Return.

If a Neptune Water Meter fails an accuracy test during an applicable warranty period, it may be returned to Neptune for repair or replacement at Neptune's option. An accuracy test shall be conducted by the customer according to AWWA standards. If foreign material causes the meter not to perform appropriately, all such material shall be removed prior to the customer conducting the test. Any meter being returned for repair to Neptune under this performance guarantee must be returned with a copy of the customer's test results. If the meter is returned to Neptune without a copy of the test results or if Neptune's factory test shows the meter to meet current AWWA standards the customer will be charged a nominal testing fee by Neptune in such cases. Neptune will repair or replace the meter at Neptune's option after the meter has been tested by Neptune. Meters repaired or replaced under the performance guarantee will be guaranteed to perform to AWWA repaired meter accuracy standards.

3. Warranties are exclusive.

THE WARRANTIES SET FORTH IN THIS CERTIFICATE OF LIMITED WARRANTY ARE IN LIEU OF ANY OTHER WARRANTY, GUARANTEE OR REPRESENTATION, WHETHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

4. Damages limited to costs of replacement and repair.

If the Water Meter fails to meet the warranties set forth in Paragraph 1 of this Certificate of Limited Warranty, Neptune, at its option shall, without charge of labor or materials, repair or replace the Water Meter or part thereof, provided that (a) the Water Meter is delivered to a Neptune representative, (b) the Water Meter is accompanied by a Material Return Authorization, and (c) all costs of delivery to Neptune are assumed by the purchaser of the Water Meter. Neptune's liability is limited to its costs of replacement and repair of the defective water meter. Damages resulting from miscalculation of water usage or lost revenue or profit are not recoverable from Neptune. It is the responsibility of the customer to periodically verify the operation and accuracy of its meters.

5. Warranties are inapplicable under certain conditions.

The warranties set forth in this Certificate of Limited Warranty do not apply to any Water Meter that has been damaged by, or subjected to, conditions which, in the opinion of Neptune, have affected the Water Meter's ability of performance, including but not limited to; misuse; improper handling, application or installation; excessive operating conditions; foreign materials in the water; aggressive water conditions; tampering or unauthorized repairs or modifications; accidental or intentional damage; acts of God. This Certificate of Limited Warranty shall not apply if product is placed in non-recommended installation, is connected or altered by other than Neptune recommended procedures, is used with other than genuine Neptune meter registers and components or read by equipment not approved or licensed by Neptune. Neptune makes no claims concerning operability and/or compatibility or third party reading systems. In addition, this Certificate of Limited Warranty shall not apply if third party reading equipment is believed to have caused damage to the meter or register. In order to determine its liability, if any, under this certificate of Limited Warranty, Neptune shall have the right to inspect any Water Meter or part thereof that is claimed to be defective at Neptune or other location designated by Neptune.

NEPTUNE'S LIABILITY WITH RESPECT TO BREACHES OF THE FOREGOING LIMITED WARRANTY SHALL BE LIMITED AS STATED HEREIN. NEPTUNE'S LIABILITY SHALL IN NO EVENT EXCEED THE PURCHASE PRICE. NEPTUNE SHALL NOT BE SUBJECT TO AND DISCLAIMS THE FOLLOWING: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY NEPTUNE, OR ANY UNDERTAKINGS, ACT OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL, SPECIAL, MULTIPLE, EXEMPLARY, AND PUNITIVE DAMAGES WHATSOEVER.