

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF NORTHERN KENTUCKY)
WATER DISTRICT FOR APPROVAL OF)
CONSTRUCTION AND ISSUANCE OF A)
CERTIFICATE OF CONVENIENCE AND) CASE NO. 2008-00119
NECESSITY FOR THE PURCHASE AND)
INSTALLATION OF AUTOMATED METER)
READING EQUIPMENT)

ORDER

Northern Kentucky Water District (“NKWD”) has applied for a Certificate of Public Convenience and Necessity to install an automated meter reading (“AMR”) system throughout its water distribution system. Having reviewed the application and the evidence of record and being otherwise sufficiently advised,¹ the Commission finds that:

1. As of July 2005, approximately 64,770 of NKWD’s total meters were touch-read meters. Touch-read meters allow a meter reader to gather a meter reading through an outside meter reading device, usually a touch pad that is connected to a meter register. A meter reader must visit every meter to obtain the meter reading with a touch-read device. Readings are collected when contact is made between the handheld reading device and the outside reading device.

¹ NKWD filed its application on April 2, 2008. The Attorney General (“AG”) is the only party to intervene in this matter. Upon NKWD’s response to requests for information from the AG and the Commission, this matter stood submitted for decision on May 23, 2008.

2. As of July 2005, virtually all² of the remaining portion of NKWD's meters were either manually read or pin-read³ meters.

3. NKWD proposes to retrofit approximately 81,000 existing water meters with transmitters and antennas to support a drive-by AMR system consisting of drive-by radio reading equipment and software.

4. The proposed AMR system enables a meter reader to collect meter readings while driving by a meter equipped with a radio frequency ("RF") reading device. A battery powers the RF device. When the meter reader is in the vicinity of the RF reading device, it transmits a signal that activates the RF device to transmit the meter reading data. Drive-by AMR systems generally are capable of reading between 5,000 and 10,000 meters daily. The reading productivity depends upon a number of factors including meter population density, location of the RF device, weather, temporary obstructions, and driving speed.

5. Water utilities in several major U.S. cities, including Chicago, Houston, Richmond, Memphis, and Charlotte, are currently using drive-by AMR systems.

6. Based upon the responses to its requests for bids, NKWD has selected Badger Meter, Inc. to provide and install the drive-by AMR system.

² According to a study that NKWD commissioned in 2005, NKWD had approximately 8,000 manually read meters and 6,500 pin-read meters. HDR Engineering, Inc. estimated in this report that NKWD would replace these meters with touch-read meters within 2 years. See Application, Exhibit A at 10. As of May 2008, NKWD still had 3,300 pin-read meters in service. See NKWD's Response to AG's Information Request, Item 2.

³ Pin-read meters are an earlier system of touch-read meters. They use a series of metal pins inside a receptacle mounted near the meter or on the side of a structure where the meter is housed. A meter reader gathers readings by plugging a portable handheld reading unit into this receptacle. NKWD's Response to AG's Information Request, Item 2.

7. NKWD projects the total cost of the project to be approximately \$7,500,000.⁴

8. NKWD has already allocated \$1,600,000 of the proceeds of previous bond issuances to finance the cost of the proposed project⁵ and proposes to finance remaining project costs through the issuance of bond anticipation notes and a loan from the Kentucky Infrastructure Authority.

9. NKWD currently reads customer meters and issues customer bills on a quarterly basis.

10. Installation and use of the proposed drive-by AMR system will:

a. Enable NKWD to expand the frequency of its billing from its present quarterly billing to monthly billing;

b. Reduce the number of employees whose duties are devoted to meter reading;

c. Expand NKWD's ability to perform consumption analysis, peaking trends, and distribution modeling; and

d. Enhance NKWD's ability to discover meter tampering.

⁴ Application at ¶ 7. NKWD reports that the bid of Badger Meter, Inc., to whom NKWD awarded the proposed project, was \$7,351,656.79. Application at Exhibit C. NKWD subsequently reported estimated project costs as \$4,743,195 for equipment; \$2,445,917 for labor; and \$162,544 for other expenses including bonds, management fees, and training. NKWD's Response to the Commission's Order of April 30, 2008, Item 4.

⁵ See Case No. 2005-00148, Application of Northern Kentucky Water District for (A) An Adjustment of Rates; (B) A Certificate of Convenience and Necessity for Improvements to Water Facilities If Necessary; and (C) Issuance of Bonds (Ky. PSC April 28, 2006); Case No. 2007-00135, Application of Northern Kentucky Water District for an Adjustment of Rates and Issuance of Bonds (Ky. PSC Dec. 21, 2007).

11. Upon full implementation, the proposed drive-by AMR system is projected to reduce annual meter reading costs by more than \$878,000. If NKWD continues with quarterly meter reading and billing, NKWD expects to recover project costs within 17 years. If NKWD implements monthly meter reading and billing, NKWD expects to recover project costs within 8 years.

12. The use of the proposed AMR system will result in a reduction of NKWD's physical inspection or examination of metering pits and installations and may reduce NKWD's ability to detect water leaks or potentially damaging or hazardous conditions.

13. The public convenience and necessity require NKWD's installation of the proposed AMR system.

14. Installation of the proposed AMR system will not result in the wasteful duplication of existing facilities or excessive investment in utility facilities.

IT IS THEREFORE ORDERED that:

1. NKWD is granted a Certificate of Public Convenience and Necessity to install the AMR system as set forth in its application.

2. NKWD shall obtain approval from the Commission prior to performing any additional construction not expressly authorized by this Order.

3. Any deviation from the construction approved shall be undertaken only with the prior approval of the Commission.

4. NKWD shall furnish documentation of the total costs of this project, including the cost of construction and all other capitalized costs (engineering, legal, administrative, etc.), within 60 days of the date that construction is substantially completed. Construction costs shall be classified into appropriate plant accounts in

accordance with the Uniform System of Accounts for water utilities prescribed by the Commission.

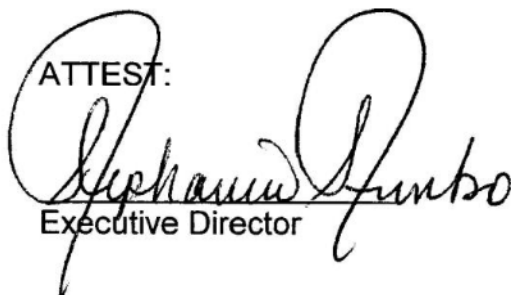
5. Upon installation of the proposed AMR system, NKWD shall physically inspect or examine all meter pits and installations at least once annually.

6. Should NKWD issue any evidences of indebtedness whose proceeds will be used to finance the purchase and installation of the AMR system, and KRS 278.300 requires prior Commission approval of such issuance, NKWD shall obtain such approval prior to the issuance of those evidences of indebtedness.

7. In its financial and statistical report for calendar year 2008 and for each following year, NKWD shall provide a written report on the status of the installation of the proposed AMR system and NKWD's efforts to transition to monthly meter reading and billing. This report should include, at a minimum, NKWD's most recent analyses on the cost and benefits of monthly billing in light of the present number of installed drive-by AMR meters.

Done at Frankfort, Kentucky, this 29th day of July, 2008.

By the Commission

ATTEST:

Executive Director