COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF HARDIN COUNTY WATER)	
DISTRICT NO. 1 REQUESTING DEVIATION FROM) CASE NO	
REGULATIONS RELATED TO WATER METER)	CASE NO. 2003-00480
ACCURACY AND TESTING REQUIREMENTS	ĺ	

<u>ORDER</u>

Hardin County Water District No. 1 ("Hardin No. 1") has submitted an application requesting permission to deviate from 807 KAR 5:066, Section 15(2), which provides that all new meters shall be tested for accuracy as specified therein. Hardin No. 1 states in its application that it wants to use an electromagnetic flow meter ("EFM") for the sale of water to Meade County Water District ("Meade District"). Hardin No. 1 currently has three EFMs measuring their sources of supply in order to comply with 807 KAR 5:066, Section 6(1).

The Commission, having reviewed the application and being otherwise sufficiently advised, finds that:

- 1. Hardin No. 1 is not in compliance with 807 KAR 5:066, Section 6(1), which requires the utility to install a suitable measuring device at each source of supply.
- 2. Hardin No. 1 has requested permission to deviate from 807 KAR 5:066, Section 15(2), so that it may use an EFM to measure the sale of water to Meade District.

- 3. The EFM Hardin No.1 proposes to use differs from meters addressed in 807 KAR 5:066, Section 15(2), in that flow velocity is measured by the voltage produced when fluid moves through a magnetic field.
- 4. 807 KAR 5:066, Section 15(2), does not describe testing procedures for determining the accuracy of an EFM. In order for Hardin No.1 to use such a meter, permission to deviate from 807 KAR 5:066, Section 15(2), is therefore required.
- 5. Hardin No.1 asserts that an EFM will provide equal or better accuracy than old technology mechanical meters as referenced in 807 KAR 5:066, Section 15(2), and will lower the cost to purchase, test, and operate over their 20-year life cycle.
- 6. Hardin No. 1's motion should be granted and it should be permitted to install and use an EFM until December 31, 2007 in order to demonstrate the suitability and accuracy of this type of installation.
- 7. Hardin No. 1 should monitor the status and effectiveness of the proposed EFM and be prepared to demonstrate to the Commission the suitability and accuracy of the proposed flow meter installation.
- 8. The proposed plan for annual testing of the meter(s) to ensure and maintain flow accuracy includes the following: performing a drawdown test from the Pirtle WTP clearwell, measuring depth (volume) and time to compute flowrate and total volume; using a portable time-transit flow meter upstream of the proposed finished water electromagnetic flow meter to compare the flows of both meters; and measuring a number of selected parameters in the flow sensor and signal converter, which affect the integrity and accuracy of the flow measurement.

IT IS THEREFORE ORDERED that:

1. Hardin No. 1 is granted permission to deviate from 807 KAR 5:066, Section

15(2).

2. Hardin No. 1 shall have until December 31, 2007 to demonstrate the

suitability and accuracy of its installed EFM.

3. Hardin No. 1 shall monitor the status and effectiveness of the proposed EFM

and be prepared to demonstrate to the Commission the suitability and accuracy of the

proposed flow meter installation.

Nothing contained herein shall limit the authority of the Commission to review the

appropriateness of the flow meter installation approved herein at anytime during the period

that it is in service.

Done at Frankfort, Kentucky, this 4th day of June, 2004.

By the Commission

ATTEST:

Executive Director