

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

WESTERN KENTUCKY GAS COMPANY)	
REQUEST FOR DEVIATION FROM)	CASE NO. 94-325
807 KAR 5:022, SECTION 13(17)(g)(3))	

O R D E R

On September 21, 1993, Western Kentucky Gas Company ("Western") requested a deviation from 807 KAR 5:022, Section 13(17)(g)(3), attached as Appendix A. This regulation requires that separately odorized gas systems with 10 or fewer customers be tested for proper odorant level at least once each 95 days.

Western provides natural gas service to 3 of the larger cities in Kentucky and 105 smaller communities. In addition, Western also serves approximately 1,300 single customer units which are receiving gas directly from Texas Gas Transmission pipelines. These 1,300 single meter units require odorant test by instrument every 95 days. It is only to these single meter units that this deviation would apply.

On November 17, 1993, David Kinman, a gas safety investigator with the Commission's Gas Pipeline Safety Branch, conducted a field investigation to monitor the methods and procedures used to provide odorized gas to these 1,300 customers. The investigative report is attached as Appendix B.

Western provides three sizes of odorant tanks for its separately odorized customers. The most common size holds 1.69

pounds of odorant, the others hold 2.5 pounds and 6.7 pounds of odorant. The amount of odorant provided to the consumer is controlled by a pitot tube arrangement in the odorant bottle. Odorant levels verified by instrument range from .18 to .30 which exceed the minimum standard by a substantial margin.¹ Western has been using the pitot tube odorant delivery system for 10 years with no instance of failure or malfunction.

Western proposes in its response, attached as Appendix C, to check separately odorized systems with one customer for proper odorant level in the odorant bottle annually, not to exceed 15 months. Western will conduct quarterly random samplings of its customer odorized systems to assure detectability requirements are met. Ten percent of these systems will be tested annually by instrument for detectability. A different 10 percent will be tested each year.

After consideration of the evidence of record and being otherwise sufficiently advised, the Commission finds that granting Western's request for a deviation from 807 KAR 5:022, Section 13(17)(g)(3), should be granted. However, this deviation should apply only to single meters receiving odorant through a pitot tube delivery system.

¹ 807 KAR 5:022, Section (17)(a), Combustible gas in a distribution line shall contain a natural odorant or be odorized so that at a concentration in air of one-fifth (1/5) of the lower explosive limit (approximately one (1) percent by volume) gas is readily detectable by a person with a normal sense of smell.

IT IS THEREFORE ORDERED that:

1. Western be and it hereby is granted a deviation from 807 KAR 5:022, Section 13(17)(g)(3).

2. Western shall check the odorant level in the 1,300 individually odorized delivery systems for proper liquid level annually, not to exceed 15 months.

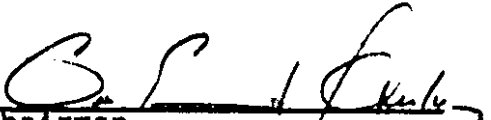
3. Western shall conduct quarterly random samplings of separately odorized systems with one customer for detectability.

4. Western shall test 10 percent of these systems annually by instrument to determine the actual odorant level. A different 10 percent shall be tested each year.

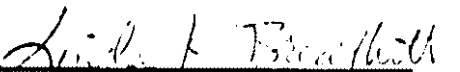
5. Western shall immediately report to the Commission any failure of a pitot tube odorant delivery system.

Done at Frankfort, Kentucky, this 14th day of September, 1994.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:


Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 94-325 DATED September 14, 1994

Western Kentucky Gas Company



September 21, 1993

RECEIVED

Chief Engineer, Gas Section
Mr. Scott Smith
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

SEP 22 1993
DIVISION OF UTILITY
ENGINEERING & SERVICES

Dear Mr. Smith:

Western Kentucky Gas Company would formally like to request a deviation from 807 KAR 5:022, Section 13 (17) (g) (3), pertaining to odorization of gas. This particular regulation states that separately odorized systems with 10 or fewer customers shall be sampled for proper odorant level at least once each ninety-five (95) days.

The Western Kentucky Gas system comprises three (3) of the State's largest cities. The remainder of the service area is spread over approximately 105 rural communities averaging less than 800 customers each. Western Kentucky Gas also serves approximately 1,300 single customer services.

Western proposes that:

- (1) Separately odorized systems with one (1) customer be checked for proper odorant level in the odorant bottle at least once annually, not to exceed fifteen (15) months.
- (2) A random sampling be conducted quarterly, of separately odorized systems with one customer, for detectability.

Western Kentucky Gas will provide supporting data to assure the Commission that the same level of protection is afforded its customers as specified in 807 KAR 5:022, Section 13 (17) (g) 3. Western would also invite a Commission representative to review the sampling and testing procedure.

Very truly yours,

A handwritten signature in black ink, appearing to read "David H. Doggett".

David H. Doggett
V.P. Engineering and Meas.

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 94-325 DATED September 14, 1994



COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKLE LANE
POST OFFICE BOX 615
FRANKFORT, KY. 40602
(502) 564-3940

M E M O R A N D U M

TO: Western Kentucky Gas File

THROUGH: Claude G. Rhorer, Jr. *CR*
E. Scott Smith *ESS*
Larry L. Amburgey

FROM: David B. Kinman

DATE: November 19, 1993

SUBJECT: Western Kentucky Gas Company Deviation Request

On September 21, 1993, Western Kentucky Gas Company (WKG) requested a deviation from 807 KAR 5:022, Section 13(17)(g)(3). This regulation requires that separately odorized systems with 10 or fewer customers be tested for proper odorant level at least once each 95 days. WKG would apply this deviation only to farm tap customers receiving unodorized gas from Texas Gas Transmission Company pipelines. WKG has approximately 1,300 of these single meter farm taps in the Madisonville, Owensboro, and Bowling Green districts.

I conducted a field investigation on November 17, 1993 to monitor testing procedures and documentation of odorant levels in the gas stream downstream of the odorizer. The testing procedure was witnessed in Madisonville, accompanied by Mr. Roger Garms, manager. Meetings were held, and design and testing procedures discussed in the Owensboro office with Vice Presidents Roy Pearson and Dave Doggett; and Staff Engineers Gene Baker and Clyde Fogle.

WKG has three sizes of odorant tanks for its farm tap customers. The size of the tank used is determined by the annual gas consumption of the customer. The most common size is a 2 1/2 inch bottle holding 1.69 pounds of odorant, a 3-inch bottle holds 2.5 pounds, and the 4-inch size holds 6.7 pounds of odorant. The amount of odorant injected into the gas stream is controlled by pitot tubes in the odorant bottle assembly (see attached drawing). Odorant levels tested by machine indicate that the gas is detectable by smell in far smaller concentrations than is required by 807 KAR 5:022, Section 17. This regulation requires that odor be detectable at one-fifth of the lower explosive level or

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approximately one percent gas in air. WKG's odorometer readings range from .18 to .30 which exceed the requirement by a substantial margin.

WKG proposes to physically check the odorant level in each bottle annually not to exceed 15 months and to conduct random samples of the odorant level in the gas stream quarterly.

Because WKG has never found a bottle to be empty of odorant during its inspections and the reliability of the pitot tube system of delivery, it is my opinion that granting this deviation would not impact on public safety.

However, I feel if it is granted that WKG should be required to annually test 10 percent of its farm taps by instrument with a different ten percent tested each year. These recommendations were made with the advice and participation of Scott Smith and Larry Amburgey.

DBK/ml1
Attachments

Western Kentucky Gas Company



March 10, 1994

Mr. E. Scott Smith, Manager
Gas Pipeline Safety Branch
Public Service Commission
P.O. Box 615
Frankfort, KY 40602

Dear Mr. Smith:

Western Kentucky Gas Company would formally like to request a deviation from 807 KAR 5:022, Section 13 (17) (g) (3), pertaining to odorization of gas. This particular regulation states that separately odorized systems with 10 or fewer customers shall be sampled for proper odorant level at least once each ninety-five (95) days.

The Western Kentucky Gas system comprises three (3) of the State's largest cities. The remainder of the service area is spread over approximately 105 rural communities averaging less than 800 customers each. Western Kentucky Gas also serves approximately 1,300 single customer services.

Western proposes that:

- (1) Separately odorized systems with one (1) customer be checked for proper odorant level in the odorant bottle at least once annually, not to exceed fifteen (15) months.
- (2) A random sampling be conducted quarterly, of separately odorized systems with one customer, for detectability.
- (3) Annually, 10 percent of these systems will be tested by instrument. A different group of systems will be tested each year.

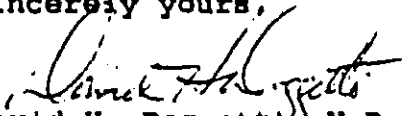
Mr. E. Scott Smith

-2-

March 7, 1994

Western Kentucky Gas will provide supporting data to assure the Commission that the same level of protection is afforded its customers as specified in 807 KAR 5:022, Section 13 (17) (g) 3. Western would also invite a Commission representative to review the sampling and testing procedure.

Sincerely yours,


David H. Doggette, V.P.
Engineering & Measurement

DHD:ck

cc: Jay Carnahan
Roy Pearson
Phil Springer