## September 21, 1976

Mr. Ralph Nery State of North Carolina Utilities Commission Raleigh, North Carolina 27602

# Dear Mr. Nery:

This refers to the Commission's Order in Docket No. G-23, Sub 1, issued June 22, 1976, granting the City of Monroe (1) a waiver from compliance with the cathodic protection requirements of 49 CFR 192.457(b) until January 1, 1977, for 15 miles of mains installed before August 1, 1971, and (2) a waiver from compliance with the cathodic protection requirements of 49 CFR 192.457(a) (2) until January 1, 1977, for 2 miles of coated and wrapped mains installed since July 31, 1971. The order has been assigned OPSO Docket No. NC-76-2

As you know, the authority of a State agency under Sec. 3(e) of the Natural Gas Pipeline Safety Act of 1968 to grant waivers from the Federal standards is conditioned upon the State agency gibing the Secretary "written notice at least 60 days prior to the effective date of the waiver." Sec. 3(e) further provides that if the Secretary objects n writing before the effective date of a waiver the State agency action granting the waiver will be stayed. Normally, the 60-day or longer period within which the Secretary may object begins to run when the Department receives a letter transmitting a State agency waiver for our review. In our normal business routine, that letter and waiver is then immediately assigned for acknowledgement and response within a designated time. In this docket, however, the Commission's Order, which we received by mail on June 24, 1976, was not accompanied by a letter of transmittal. As a consequence, the matter was not immediately assigned for actions in the course of our normal business routine, and we did not begin our review until recently. Under these circumstances, we believe that the Secretary's statutory period for review of the Commission's action began when we identified the Order as a State waiver requiring our review and that the period has not yet expired.

We have reviewed the Order and substantiating information. We find that the City of Monroe has not presented any cogent reasons to show how Sections 192.457(a)(2) and 192.457(b) are inappropriate or why it could not meet the modified deadlines for compliance with respect to the mains involved. Since a waiver is intended fro situations where a pipeline safety standard of general applicability is inappropriate in a specific situation, we, therefore, object tot eh Commission's Order granting the waivers.

Because the City of Monroe appears to have made a substantial effort to comply with Sections 192.455(a)(2) and 192.457(b), the Commission may wish to take this into account in determining the nature of its enforcement actions.

In accordance with Section 3(e) of the Act, the Commission's action is hereby stayed. The Commission may appeal this decision and request an opportunity for a hearing within 60 days from the date of this letter.

Sincerely, SIGNED Cesar DeLeon Acting Director Office of Pipeline Safety Operations

# STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH, NORTH CAROLINA

## DOCKET NO. G-23, SUB 1

#### BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	
The City of Monroe, North Carolina - Request for	) ORDER
Waiver of Effective Date for Complying with	) GRANTING
Subpart I, Title 49 Cole of Federal Regulations	).WAIVER

BY THE COMMISSION: The minimum Federal safety standards for pipeline facilities and the transportation of gas, 49 CFR 192, 21 §11., were made applicable to all natural gas public utilities and municipal natural gas facilities in North Carolina by Commission Order in Docket No. G-100, Sub 13, dated December 30, 1970, and issued pursuant to G.S. 62-50. The Commission has entered into an agreement with and has been certified by the United States Department of Transportation, pursuant to 49 USCA §1674 (a) and (b), to regulate and/or inspect all natural gas and pipeline facilities in North Carolina for compliance with the minimum Federal safety standards.

49 USCA 41672(e) provides in part as follows:

"[a] State Agency with respect to which there is in effect a certification pursuant to section 1674(a) of this title or an agreement pursuant to section 1674 (b) of this title, may waive compliance with a safety standard in the same manner as the Secretary [of Transportation], provided such State Agency gives the Secretary written notice at least sixty days prior to the effective date of the waiver."

On May 28, 1976, the City of Monroe, North Carolina (hereinafter referred to as "Monroe" or "the City"), filed with this Commission a petition seeking waiver of the effective date for compliance with certain requirements of the minimum Federal safety standards, to wit: 49 CFR 192, Subpart I, dealing with external corrosion control of buried or submerged pipelines.

Section 192.455(a) of Subpart I requires all submerged pipelines installed after July 31, 1971, to have an external protective coating applied and a cathodic protection system installed within one year after completion of construction. Section 192.457(b) provides that buried or submerged distribution pipelines installed prior to August 1, 1971, must, not later than August 1, 1976, be cathodically protected "in areas in which active corrosion is found." it further provides that "the operator shall determine the Areas of active corrosion by electrical survey, or where electrical survey is impractical, by the study of corrosion and leak history records, by leak detection survey or by other means."

Monroe requests the Commission to waive the August 1, 1976, deadline to January 1, 1977, in order to complete the installation of cathodic protection equipment.

Investigation by the Commission Staff shows that the City has an all welded steel, coal tar coated system consisting of 79 miles of mains, four miles of which were constructed after August 1, 1971, and have been in place more than one year. Due to the initial expense of conducting and electrical survey of the entire system to determine areas of active corrosion, the City chose to cathodically protect all of its steel system. In August of 1972 it contracted with H.C. VanNovhuys, Consulting Engineers, to survey its gas facilities and design cathodic protection for the system. Upon completion of the survey it was determined that the system would be electrically isolated into five sections or zones and that rectifiers would be installed in each of the zones for cathodic protection.

As of May 26, 1976, three of the zones, consisting of 64 miles of mains and comprising 81% of the entire system, were under cathodic protection. Included in these three zones are two, of the four miles of new mains. Ground beds ad rectifiers will be installed in the fourth and fifth zones by January 1 1977. The remaining two miles of new mains are located in these two zones and are electrically connected to existing mains for cathodic protection.

According to reports on file with the Commission, Monroe's pipeline system has a history of safe operation. Corrosion leaks increased from 45 in 1971 to 98 in 1974, the year when most of the cathodic protection was applied. In 1975 the number of corrosion leaks decreased to nine.

Based on the foregoing, the petition filed by the City, and the entire record in this matter, the Commission makes the following

# **FINDINGS OF FACT**

1. That the City of Monroe, North Carolina, operates a municipal natural gas distribution system subject to the gas pipeline safety jurisdiction of this Commission.

2. That the City has an all welded steel, coal tar coated gas pipeline system consisting of 79 miles of mains, four miles of which were installed after July 31, 1971.

3. That the City's entire pipeline system has been isolated electrically into five zones for cathodic protection.

4. That as of May 26, 1976, three electrically isolated zones, consisting of 64 miles of mains and comprising 81% of the entire system, were under cathodic protection.

5. That cathodic protection has been designed and materials ordered for the protection of the remaining 15 miles of mains, and installation will be completed by January 1, 1977.

6. That of the four miles of mains installed since August 1, 1971, two miles are presently under cathodic protection and the remaining two will be under cathodic protection by January 1, 1977, but more than one year from the date of installation.

7. That the City of Monroe has operated a safe pipeline system in the past with a decrease in corrosion leaks from 98 in 1974 to nine in 1975.

Based on the foregoing Finlings of Fact, the Commission reaches the following

# CONCLUSIONS

1. That a five-month extension of the effective date of compliance with the requirements of 49 CFR Subpart I, specifically Sections 192.455(a) and 192.457(b), is necessary in order to allow the City of Monroe to receive and install materials ordered for cathodic protection of the remaining unprotected portion of its gas pipeline system.

2. That the granting of the requested waiver of compliance is not inconsistent with gas pipeline safety.

IT IS, THEREFORE, ORDERED as follows:

1. That the City of Monroe be, and hereby is, granted a waiver of the effective date of compliance with the requirements of the minimum Federal safety standards for pipeline facilities and the transportation of gas, 49 CFR 192.455(a) and 192.457(b), from August 1, 1976, to January 1, 1977.

2. That the City of Monroe shall file with this Commission no later than. January 15, 1977, an affidavit stating that its entire gas pipeline system is under cathodic protection in compliance with this order.

3. That this Order shall become effective 60 days from the date of issuance and, further, that a copy thereof shall be forwarded to the Secretary of the Department of Transportation to constitute written notice of the waiver to be granted herein.

ISSUED BY ORDER OF THE COMMISSION.

This the22nd day of June, 1976

NORTH CAROLINA UTILITIES COM SSION

Katherine M. Peele, Chief Clerk

## Staff Analysis of the City of Monroe Corrosion Program for Support of Waiver Request,

On May 20, 1976, the Commission received a request from the City of Monroe for a waiver of Subpart I (49 CFR Part 192), until January 1, 1977, to complete the installation of cathodic protection equipment.

The gas facilities in Monroe were designed and installed under the supervision of Barnard & Burke, Inc., of Baton Rouge, Louisiana in 1960. Since the beginning of this facility, Monroe has only installed steel, coated and wrapped (CM mains and services with the plan to cathodically protect (CP) the entire system. By letter from Mr. J. E. Flinkel, City Manager of Monroe, dated August 29, 1972, the Commission was informed that the City had hired H. C. Van NovhUys Corrosion Engineers, to conduct a cathodic protection survey and design a system for placing the system under full protection. The facility was isolated electrically into five zones for CP. As of May 26, 1976, three (3) of the zones consisting of 64 miles of mains and services or 81% of the entire system is under protection. The remaining two zones consisting of 15 miles of mains will be protected by January 1, 1977. Ground beds and rectifiers have been designed and materials ordered for the installation of the CP system for the remaining two (2) sections. One of these sections is a large portion of the system while the other is a small new subdivision. (See attached map).

The attached chart shows a breakdown of the pas system by size and year installed beginning in 1971. As is shown, corrosion leaks increased from 45 in 1971 to 98 in 1974, the year most of the CP was applied. The following year, 1975, the corrosion leaks decreased to P. Prior to August 1, 1971, Monroe had installed 75 miles of mains and 1340 services. As of March 4, 1976, 62 miles of these mains with their associated services had been placed under protection. After July 11, 1971, the city installed 4 miles of mains and 238 services. As of March 4, 1976, 2 miles of the 4 with associated services had been placed under protection. The remaining 13 miles of mains installed prior to August 1, 1971 and the 2 miles installed after July 11, 1971 are located in the forth and fifth CP zones for which the materials have been ordered to apply cathodic protection.

Based on the information above and operation records as well as inspections of the Monroe Gas System, the staff feels that an extension of time until January 1, 1977 for full compliance of Subpart I, 49 CFR Part 192, will not be detrimental to public safety and is needed in order to allow lead time for receiving the materials and installing the CP system in the 2 remaining zones.

# Monroe Gas System (Miles of Mains)

Size	Ending	Ending	Ending	Ending	Ending	Ending
	1971	1972	1973	1974	1975	3/4/76
Thin 2"	57	58	59	59	59	59
2" thru 4"	13	14	14	14	14	14
Over 4"	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
Total	76	78	79	79	79	79
New Pipe Inst.	1	2	1	0	0	0
Under C.P.	0	0	0	63	63	64
Corrosion Leaks	45	51	70	98	9	

# City of Monroe, North Carolina

May 26, 1976

Mr. R. J. Nery, Chief Gas Section N. C. Utilities Commission Raleigh, N.C. 27602

## Dear Sir:

The City of Monroe Natural Gas Department is in the process of installing two ground beds and rectifiers which will bring our total gas system under cathodic protection.

We presently have 80% of the system under protection and these two installations are for the protection of the remaining 20%.

Because the rectifiers have to be custom built to match the areas to be protected we will be delayed past the August 1 deadline in achieving 100% protection.

I hereby respectfully request that the City of Monroe be granted a waiver of subpart I of the Natural Gas Pipeline Safety Act until January 1, 1977, to complete the installation of cathodic protection equipment.

Very truly yours, Wade H. Brome Asst. City Manager