U.S. Department of Transportation Research and Special Programs Administration 400 Seventh Street, S.W. Washington, D.C. 20590

APR 20 1999

Mr. Joseph T. Clennon, Esq. Office of General Counsel The Illinois Commerce Commission 527 East Capital Avenue Springfield, Illinois 62794-9280

Dear Mr. Clennon:

We have considered your letter of December 16, 1998, granting Northern Illinois Gas Company, d/b/a Nicor Gas Company (Ncor Gas), a waiver of compliance with 49 CFR 192.121(a) and 192.123 to permit the use of certain plastic pipe made from polyamide resin, known as Nylon 11, PA 11, or Rilsan. (hereinafter referred to as PA11).

Your letter indicates that the proposed plastic pipe installation will be designed to operate at pressures not exceeding 160 psig at 73° F. Nicor Gas intends to install and operate about 6,000 feet of this type of plastic pipe in Class 1 or 2 locations for a trial period of four years for the purposes of studying the performance of pipe with respect to environmental impact, damage tolerance, and long-term strength retention. Based on your letter and the technical information provided by Nicor Gas, the following is our understanding of the critical issues:

- 1. The resin type used in making the pipe selected for installation will have an approved designation from the Plastics Pipe Institute. The appropriate Hydrostatic Design Basis will be determined for designing the pipe and appurtenances. Nicor Gas will have procedures for the traceability of resins, pipe, and other equipment used to the respective manufacturer and manufacturer's specifications and designations.
- 2. Nicor Gas will install defect free 2-inch PA 11 pipe in accordance with written procedure submitted to the Illinois Commerce Commission (Commission).
- 3. Nicor Gas will provide additional line markings and any other means as deemed necessary to prevent third party damage to minimize risks to the public. Nicor Gas will adhere to the location and routing of the pipe as approved by the Commission.
- 4. The maximum operating pressure for the pipe may not exceed 160 psig, at 73°F, based on the established HDB and 0.32 design factor as specified in § 192.121.
- 5. All service lines fed from the PA11 pipe will be of the same material and attachments, and joining procedures will be established and verified. Service regulators, relief valves, and other equipment will be installed in compliance with CFR Part 192 requirements to the satisfaction of the Commission.
- 6. At no time will hot tapping be permitted to add feeder lines or equipment to the pipeline.
- 7. The installation is for a trial period of four years from the date service begins. The installation and operation is only for the purposes of evaluating the PA11 pipe performance under a variety of installation procedures and service conditions. The Commission will supervise periodic activities, such as excavating for removal of sample: pipe sections, testing, and evaluation.
- 8. Nicor Gas will be required to submit periodic written reports on their findings from periodic inspection and evaluation.

Based on the above representations and our evaluation of the safety of the proposed pipeline, we have determined that the proposed trial installation and operation of polyamide pipe would not be unduly hazardous to the public.

Sincerely, Richard B. Felder Associate Administrator for Pipeline Safety