#### OIL & GAS DOCKET NO. 01-0249841

THE APPLICATION OF REGENCY FS LP TO CONSTRUCT AND OPERATE A HYDROGEN SULPHIDE GAS PIPELINE, THE BIGFOOT EXTENSION, FRIO COUNTY, TEXAS

APPLICATION REVIEWED BY: Thomas H. Richter, P.E.

**DATE REVIEWED:** May 30, 2007

**DATE EXAMINER RECEIVED FILE:** May 29, 2007 **DATE APPLICATION FILED:** December 4, 2006

# EXAMINER'S REPORT AND RECOMMENDATION STATEMENT OF THE CASE

This is the unprotested application of Regency FS LP ("Regency") for Commission authority pursuant to Statewide Rules 106, 70 and 36 for approval to construct and operate a hydrogen sulphide (H<sub>2</sub>S) gas pipeline in Frio County.

The Commission's Field Operations Section recommends approval. The Commission's Pipeline Safety and Gas Services Sections have reviewed the application. The examiner recommends approval of the application.

### **DISCUSSION OF THE EVIDENCE**

The proposed Regency FS LP, Bigfoot Extension gas pipeline (which will be located in Frio County only) will connect two existing pipelines, the Regency Frio Newline LP's 8" pipeline in the Pearsall System (T4 #07068) and the 14" West Big Foot Lateral (T-4 #06197). The lines connect to the Regency Tilden Gas Plant (ID No. 01-0253) in McMullen County. The pipeline will be operated under the Tilden System and the Tilden System  $H_2$ S Contingency plan. The pipeline will be  $\pm 3.3$  miles in length composed of 8" steel pipe. The maximum operating pressure of the line is 1100 psig. Initially, the line will carry 2 - 3 MMCF of gas per day but this volume will change with time. The normal operating pressure of the line will be 450 to 550 psig. All pressures and valves are monitored by the Gas Plant control facility. The automatic shut-in valves are set to shut-in at 400 psig. All valves on the system are set to "fail-safe" closed. The valves can be closed remotely by the gas plant control room or manually at the valve by gas plant personnel.

The  $\rm H_2S$  concentration is 5,671 parts per million (ppm). The maximum escape rate at any given time is 476 MCF which is that volume of gas contained in the pipeline between the block valves located at connections with the other two lines. This volume is referred to as "line-pack". The 100 ppm radius of exposure (ROE) is 250 feet and the 500 ppm ROE is 87 feet. There are no residences within the 100 ppm ROE. FM 2779 parallels the line for approximately one mile and is included within the 500 ppm ROE.

All materials will satisfy the requirements described in the latest editions of NACE Standard MR-01-75. The handling and installation of materials and equipment used in hydrogen sulphide service are to be performed in such a manner so as not to induce susceptibility to Sulphide Stress Cracking. The proposed line will comply with Statewide Rule 36(c)(8). The line will be clearly marked at road crossings and along the line.

Regency FS LP published notice of the application in a newspaper of general circulation in Frio County. The notice was published in *The Frio-Nueces Current* on December 14, 2006. The application was filed with the Frio County Clerk on December 12, 2006.

#### **FINDINGS OF FACT**

- 1. On December 4, 2006, Regency FS LP filed an application for a permit to construct hydrogen sulphide gas gathering pipeline in Frio County.
- 2. Regency FS LP published notice of the application in a newspaper of general circulation in Frio County. The notice was published in *The Frio-Nueces Current* on December 14, 2006. The application was filed with the Frio County Clerk on December 12, 2006.
- 3. The proposed Regency FS LP, Bigfoot Extension gas pipeline (which will be located in Frio County only) will connect two existing pipelines, the Regency Frio Newline LP's 8" pipeline in the Pearsall System (T4 #07068) and the 14" West Big Foot Lateral (T-4 #06197). The lines connect to the Regency Tilden Gas Plant (ID No. 01-0253) in McMullen County.
- 4. The proposed line will be  $\pm 3.3$  miles in length composed of 8" steel pipe.
  - a. The maximum operating pressure of the line is 1100 psig (normal operating pressure will be 450 550 psig).
  - b. The maximum escape volume of the line is 486 MCF which is the maximum volume contained in the pipeline at any given time ("line-pack") between the two block valves that is available for escape .
  - c. The maximum H<sub>2</sub>S concentration is 5,671 parts per million (ppm).
  - d. The 100 ppm radius of exposure (ROE) is 250 feet and the 500 ppm ROE is 87 feet.
  - e. There are no public areas within the 100 ppm ROE.
  - f. A public road, FM 2779, parallels the line for approximately one mile and is included within the 500 ppm ROE.
- 5. Pipeline materials and construction meet the NACE standards as required by Statewide Rule 36 for hydrogen sulphide service.

- 6. The pipeline will be operated under the Tilden System and the Tilden System  $H_2S$  Contingency plan.
- 7. The pipeline will be constructed subject to Commission inspections for compliance with the appropriate Commission Rules pursuant to Statewide Rule 36(c)(6)(8) and (13).
- 8. The Commission's Field Operations Section recommends approval. The Commission's Pipeline Safety Division and Gas Services Division have reviewed the application.

## **CONCLUSIONS OF LAW**

- 1. Proper notice was timely given to all parties entitled to notice pursuant to applicable statutes and rules.
- 2. All things have occurred and have been accomplished to give the Commission jurisdiction in this case.
- 3. The application complies with Statewide Rules 36, 70 and 106.
- 4. Approving the application for a permit to construct and operate the proposed gas pipeline is consistent with the rules and safety standards adopted by the Commission.

## **EXAMINER'S RECOMMENDATION**

The examiner recommends that the application of Regency FS LP for Commission authority pursuant to Statewide Rules 106, 70 and 36 for approval to construct and operate the proposed hydrogen sulphide gas pipeline in Frio County be approved.

Respectfully submitted,

Thomas H. Richter, P.E. Technical Examiner Office of General Counsel