

Decision No. 76086

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of)
SAN DIEGO GAS & ELECTRIC COMPANY, a)
corporation, for a Certificate of)
Public Convenience and Necessity to)
construct and operate natural gas)
liquefaction, storage, and regasi-)
fication facilities as an addition)
to its existing liquefied natural)
gas facilities.)

Application No. 51130
(Filed June 2, 1969)

O P I N I O N

Applicant's Request

By this application, San Diego Gas & Electric Company (Applicant) requests a certificate of public convenience and necessity to construct and operate natural gas liquefaction, storage and regasification facilities as an addition to its existing liquefied natural gas facilities located at Chula Vista, California. The proposed commencement of commercial operations of the additional liquefied natural gas facilities is about June of 1970.

Purpose of the Facilities

The proposed additional facilities constitute the second step in meeting system peak requirements over the ten-year period from 1965 to 1974. This addition will increase Applicant's ability to liquefy and store natural gas during the warmer periods of the year for use in meeting system requirements during the colder periods. The peak shaving thereby attained will allow a lower contract demand in Applicant's gas purchase contract. The added facilities will also improve Applicant's means of maintaining service to its customers in the event one of the existing gas transmission pipelines suffers accidental interruption, and will provide means to serve customers remote from the central plant.

Description of the Facilities

The liquefied natural gas plant to be constructed will have a gross liquefaction capacity of 7.0 MMcfd, will store 1,200 MMcf (348,000 Bbls of liquefied natural gas) of natural gas, and will be capable of regasifying the stored liquid product at a rate of 120 MMcfd. The regasified gas will at all times be interchangeable with the natural gas delivered to Applicant's system. The facilities will be located in Chula Vista, California, immediately adjacent to its existing liquefied natural gas facilities which were certificated by Decision No. 68315 in Application No. 46879. A map showing the location of this plant is attached to the application as Exhibit "C".

The natural gas is first sent through a purification cycle to remove certain undesirable components such as carbon dioxide and sulphides prior to entering the liquefaction cycle. A closed loop nitrogen cycle provides the refrigeration required to liquefy the natural gas feed. The liquefied natural gas will then be stored in a double walled, perlite insulated, above ground cryogenic tank. The regasification is accomplished by pumping the liquid into the vaporizers which convert the liquid back to the gaseous state. Odorant is added to the vaporized gas before entering the distribution system. A process flow diagram is attached to the application as Exhibit "E".

Design and Safety

The proposed facilities will be constructed and operated in compliance with the standard of National Fire Protection Association No. 59A and applicable provisions of General Order No. 94-A.

The liquid natural gas storage tank will be constructed in conformance with the rules of API 620, Appendix Q. The Division of Industrial Safety of the State of California has determined that

the design and engineering of the storage tank complies with its requirements. The Chicago Bridge & Iron Company, which constructed Applicant's initial storage vessel, will be the principal contractor responsible for the design, engineering, and construction of the cryogenic vessel.

The storage tank will be located within a diked area surrounding the proposed and existing tanks sized to contain at least 100% of the capacity of the larger tank as required by NFPA No. 59A, Section 3151. The total dike capacity will be 570,000 Bbls which is larger than the existing and proposed storage tanks total capacity of 523,000 Bbls. The liquefaction and regasification facilities will be located outside the storage tank area. A plot plan of the proposed facilities is attached to the application as Exhibit "D". The AIRCO/BOC Cryogenic Plants Corporation will be the principal contractor responsible for the design, engineering and execution of the process plant.

The proposed facilities will be constructed in an industrial area remote from other structures, and the storage tank will be located a distance of at least 500 feet from the nearest adjacent property line where structures can be erected. A fixed automatic fire control system will be installed at strategic locations consisting of a complete dry chemical protection system. The design of the plant is such that it can automatically be de-energized and the fixed fire protection system energized. In addition, two portable fire protection systems will be stationed at the plant site. Applicant has obtained a building permit and approval of its fire protection plan from the City of Chula Vista.

Cost and Economic Feasibility

The estimated construction cost of the proposed facilities is \$7,395,200 as detailed in Exhibit "H". The first full year operating cost including fixed charges is estimated to be \$1,263,200 as shown in Exhibit "I". Both exhibits are attached to the application.

In support of the economic feasibility of the project, Applicant developed Exhibits "F" and "G" which compare the annual cost of meeting system peaking requirements by installing the additional facilities or by increasing the gas contract demand. Exhibit "G" shows that a saving of \$377,000 annually if the proposed facilities were to be installed.

Findings

The proposed facilities will improve Applicant's peak shaving capability, provide safeguard against interruption and provide service to customers beyond the gas mains. The Commission finds that the Applicant's proposal is in the public interest, that a public hearing is not necessary, and that public convenience and necessity require that Applicant's application, to construct and operate natural gas liquefaction, storage and regasification facilities, be granted.

The certificate hereinafter granted shall be subject to the following provision of law:

That the Commission shall have no power to authorize the capitalization of this certificate of public convenience and necessity or the right to own, operate, or enjoy such certificate of public convenience and necessity in excess of the amount (exclusive of any tax or annual charge) actually paid to the State as a consideration for the issuance of such certificate of public convenience and necessity or right.

The action taken herein is for the issuance of a certificate of public convenience and necessity only and is not to be considered as indicative of amounts to be included in proceedings for the purpose of determining just and reasonable rates.

O R D E R

IT IS ORDERED that:

1. A certificate of public convenience and necessity is granted to San Diego Gas & Electric Company to construct and operate natural gas liquefaction, storage, and regasification facilities in Chula Vista as described in the application.
2. Within ninety days after the facilities are in commercial operation, Applicant shall file statements, acceptable to the Commission, as follows:
 - a. Statement of those portions of General Order No. 94-A deemed applicable to the facilities.
 - b. Statement of practices and procedures which govern operation of the facilities.
3. Within one year following the date of completion, Applicant shall file with this Commission a detailed statement of the capital cost of the facility certificated herein.
4. The authorization herein granted will expire if not exercised within two years from the effective date hereof.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 26th day of AUGUST, 1969.

William Sproule Jr.
President

Arthur J. ...

Robert P. ...

Thomas ...
Commissioners