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The American Society of Mechanical Engineers
United Engineering Center
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New York, N.Y. 10017

April 24, 1981

Mr. William Gute
Petroleum Engineer
Pipeline Safety Enforcement Division
Office of Operations & Enforcement
Materials Transportation Bureau
Dept. of Transportation
Research and Special Program Admin.

SUBJECT: Inquiry 1453

Dear Mr. Gute:

Reference is made to your inquiry letter of February 5, 1980.

Our understanding of the question in your inquiry and our reply are as follows:

1. QUESTION:

What are the definitions of "designer", "special or unusual problem", and "rigorous analysis" as mentioned in Paragraph 400 (e) of ANSI/ASME B31.4.

REPLY:

Designer. The responsible person who, by the use of his knowledge, training, expertise, and experience, applies accepted engineering practice and criteria to arrive at the specific physical combination of pipe, fittings, structures, and materials meeting the requirements of this Code.

Special or Unusual Problem. A problem relating to the general subject of this Code, but not specifically covered by procedures or limitations detailed therein.

Rigorous Analysis. A comprehensive and detailed investigation and/or assessment of a subject where specific rules are not given in the Code, or as a substitute for the simplified engineering approach usually presented in the Code. When used, the designer is responsible for demonstrating the validity of his approach.

2. QUESTION:

Is it the intent of Section 400 (e) of the B31.4 Code to allow pipeline operators to exceed flange or valve designer/ manufacturer's maximum working pressure based on the operators own testing or calculations?

REPLY:

ANSI/ASME B31.4 clearly states that when a designer/operator exceeds or deviates from the requirements of the Code, based on a rigorous analysis, he alone is responsible for demonstrating the validity of his approach.

I trust the above comments have adequately answered your questions, and I shall consider the matter closed unless I hear from you to the contrary.

Sincerely,
Jerry D'Acanzo
Secretary, B31