
ROUTING AND TRANSMITTAL SLIP

DATE:

5-17

TO:

1. Cesar DeLeon

REMARKS:

5/21/93

Ivan Huntoon -

The regulations require rupture discs, pressure relief, or pressure limiting device. The requirements for these devices in § 192.199 clearly indicate that a computer would not meet these requirements, and therefore could not be used in lieu of rupture disc pressure relief, etc.

FROM:

Ivan Huntoon

MEMORANDUM

May 10, 1993

Reply to Attn. of:

Subject: ACTION: Use of Computers for Overpressure Protection Devices.

From: Ivan A. Huntoon, Director, Central Region, DPS-26

To: Richard L. Beam, Deputy Associate Administrator for Pipeline Safety, DPS-2

Regional Directors
Compliance Officer
Director, Compliance
Director, Regulatory Programs

Attached is a request from MNOPS concerning the use of computers as a first line of defense against overpressure. The questions posed appear to be issues we might want to review at the June meeting. I would like to have your opinions.

The letter did not mention that the original question to MNOPS was an application related to compressor stations.

My initial reaction is that we need to stay with the relief devices and pressure switches for our "primary" protection. The computer could be the "first line of defense," but whether and how we would cover computerized overpressure protection is another issue.

OFFICE OF PIPELINE SAFETY

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STATE OF MINNESOTA DEPARTMENT OF SAFETY

April 20, 1993

Mr. Ivan Huntoon, Central Region Director
Federal Office of Pipeline Safety
911 Walnut Street, Room 1811
Kansas City, MO 64106

Dear Mr. Huntoon:

This letter is to follow up on recent questions that have been raised with regard to computer controlled overpressure protection devices.

We're interested in knowing what the present position of FOPS is regarding the use of computer controls for overpressure protection. It seems that a number of transmission companies presently use computer controls in their operations, and these controls would be the first line of defense against an overpressure condition. The questions that have been raised are:

1. Can computer controlled overpressure protection devices be used as pressure limiting devices in accordance with §192.199?
2. If they can, would any supplemental overpressure protection devices such as pressure switches, or mechanical relief devices, have to be installed?
3. If operators are allowed to designate computer controlled overpressure protection devices as pressure limiting devices in accordance with §192.199, what inspection, testing and maintenance activities would be required under §192.739 and .743?
4. If computer controls are not acceptable overpressure protection devices according to §192.199, what inspection, testing and maintenance activities would they be subject to, if they were installed at compressor stations?

MNOPS believes there are several advantages to the use of computer controls for overpressure protection, versus pressure switches, or mechanical relief devices. The cost advantages coupled with the benefits of more accurate control, reliability and keeping the product in the pipeline are significant improvements over more traditional methods. It is

our understanding that fail-safe measures are typically designed into the control system so that loss of power to the computer, or some other disruption to the control system would institute a shutdown.

We understand that issues such as these are a little more complex, and it may take longer to get some answers. We appreciate your efforts in helping to clarify the situation. Please call if you have any questions, or need any specifics with regard to system configurations.

Thanks again for your help.

Sincerely,

_____ Walt Kelly, Director
Minnesota Office of Pipeline
Safety