



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

NRC-PDR

HOLD

JUL 30 1979

MEMORANDUM FOR: B. Grimes, Acting Assistant Director for Systems
Engineering, Division of Operating Reactors

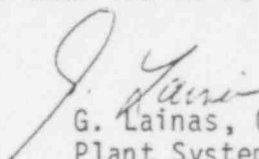
FROM: G. Lainas, Chief, Plant Systems Branch, Division
of Operating Reactors

SUBJECT: CONTAINMENT ISOLATION VALVE OPERABILITY

Enclosed is the additional information on containment isolation valve operability which you requested.

PSB has calculated the total differential pressure across a BWR containment isolation valve for systems with an initial upstream pressure of 60 psia. Comparisons were made with systems composed of three different fluids: air, natural gas and a post-LOCA mixture. Figure 1 summarizes the results of these calculations. As can be seen from this figure, the differences in the valve response are insignificant.

The total differential pressure across the 2" valve in the bypass line was compared with the total differential pressure across the 18" containment isolation valve in a BWR. The results are summarized in Figure 2. The 18" containment isolation valve is subjected to a slightly higher (~4 psid) differential pressure than the valve in the 2" bypass line.


G. Lainas, Chief
Plant Systems Branch
Division of Operating Reactors

Contact:
J. Kerrigan, X27110

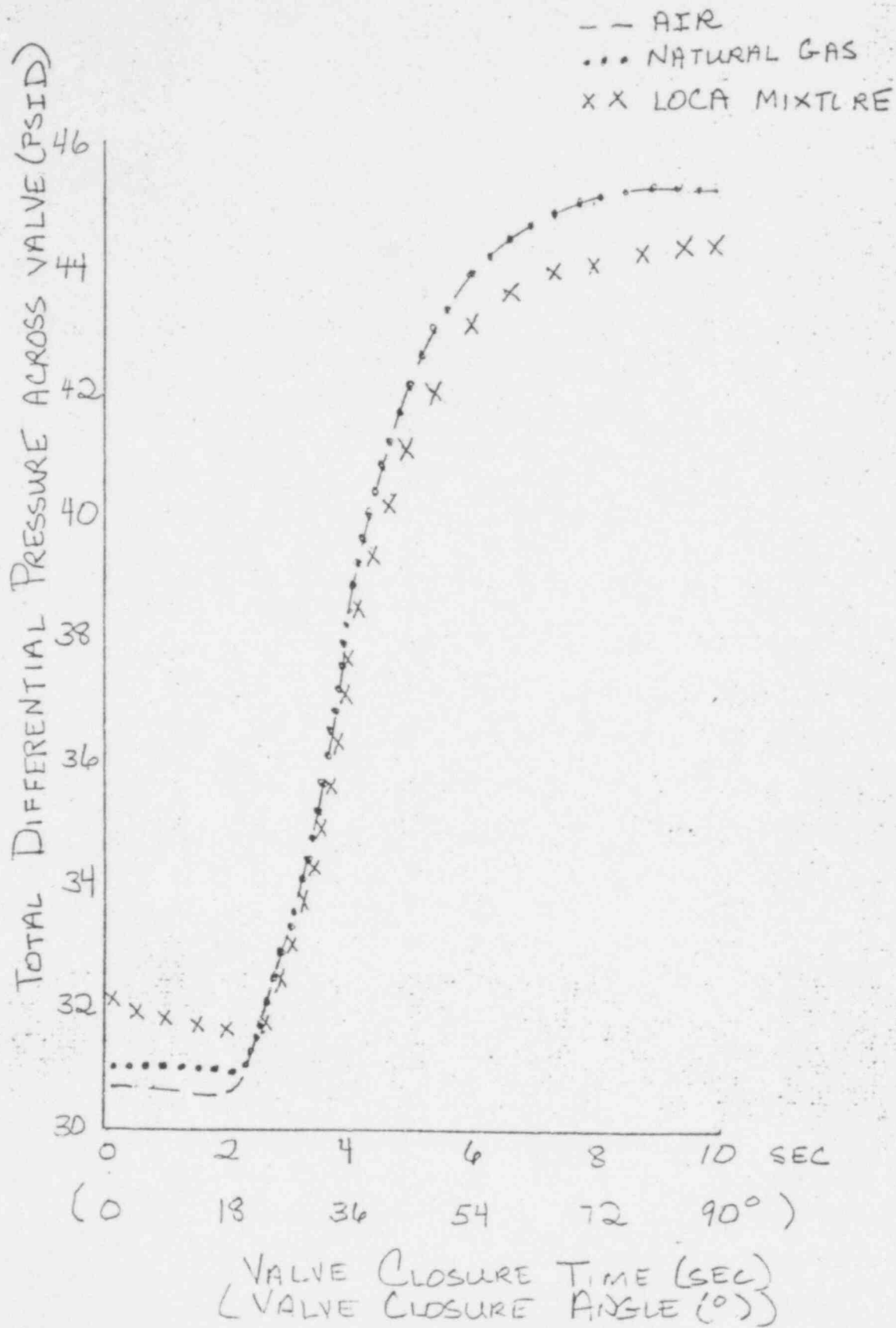
Enclosure:
As stated

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VALVE CLOSURE TIME (SEC)
 (VALVE CLOSURE ANGLE (°))

FIGURE **POOR ORIGINAL**

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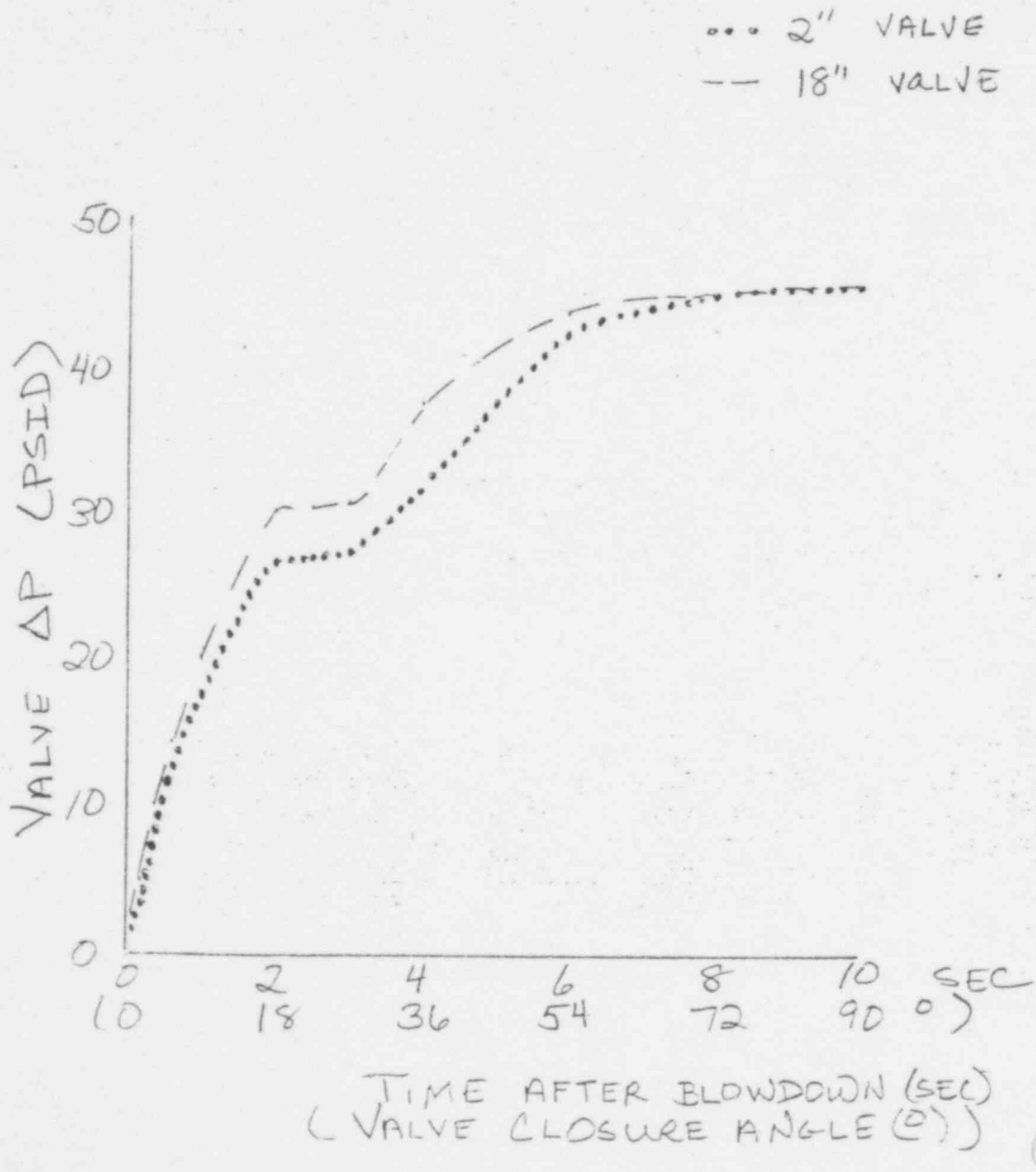


FIGURE 2

POOR ORIGINAL