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"PRACTICAL APPROACH TO THE CONTROL OF COMPRESSOR PIPING SYSTEM VIBRATIONS"

M. A. Porter Bolt Beranek and Newman Inc. San Francisco, California

ABSTRACT

Gas compression is a means of storing energy. Depending on the type of gas and pressures involved, the sudden release of this energy due to a piping failure can produce results ranging from undesirable to catastrophic. An often observed and discussed influence on such failures is the mechanical vibration of various compressor piping components caused by either mechanical or gas derived excitation. This paper discusses various methods of diagnosing and reducing such piping system vibrations. Limitations from both a technological and economic standpoint for these techniques are evaluated and finally, is discussed. The new method incorporates state-of-theart equipment and instrumentation currently available. Information concerning the proceedures and applicability of this method are discussed.

See Page 435