

April 2005

NYSEARCH's Oracle Project Seeks Exciting New Technology Opportunities

NYSEARCH, the research, development, and demonstration organization within the Northeast Gas Association, has initiated the ORACLE effort, designed to generate for NYSEARCH a continual flow of new technology concepts that, if successfully developed for gas applications, would provide the natural gas industry with "quantum leap advances" in gas operations, safety and/or customer service.

The identification of new "quantum leap," state-of-the-art technologies could provide improved operations, maintenance, and construction processes and procedures for the natural gas industry that would have a profound impact on the industry. While the evolutionary technologies being developed by NYSEARCH, and other industry research consortia, continue to provide significant results, the identification and development of new technologies, radically different from the ones used currently by utilities, could result in quantum leaps in increases in operational efficiencies.

To address this challenging task, NYSEARCH last year initiated its project called "ORACLE," specifically designed to identify advanced, state-of-the-art technologies.

Through the dedicated efforts of an individual designated within the organization, new and emerging technologies will be identified in the areas of *advanced sensors, sensory devices, and detection technologies* and a framework for adopting them into the gas industry will be developed. This framework should include the research and development needs to transfer the technology, the identification of potential R&D organizations to conduct the necessary R&D work, the issuance of an RFP (Request For Proposal), and the selection of the most appropriate contractor.

Technologies such as fiberoptics, microelectromechanical systems, micro-sensors, and non-intrusive detection from the military, biomedical, aerospace, and telecommunications industries have been tracked and evaluated for application in the gas industry. These efforts have already resulted in the identification of a few technologies that are now being considered by NYSEARCH for funding, development, and adaptation to the natural gas industry. Among them is a fiberoptic line with a special coating that allows the point or distributed detection of methane and other chemicals of interest to the gas industry; a suite of sensory devices able to be deployed into gas mains through service lines, thus allowing the inspection of these mains; and a camera based on optical spectroscopy that allows the detection of corrosion of plain and coated gas pipelines.

The effort will continue and intensify during this year - 2005.

Look for further information in future issues. In the meantime, feel free to contact Daphne D'Zurko, Vice President for Research and Development, Northeast Gas Association, 1515 Broadway, 43rd floor, New York, NY 10036, tel. 212-354-4790, ext. 214, ddzurko@northeastgas.org.