

structural and thermodynamic properties of glass (including the metastable and energetics of stable and metastable phases), systematic irradiation studies that will simulate long-term self-irradiation doses and spectra (including archived glasses containing Pu or Cm, and over the widest range of dose, dose rate and temperature) and predictive theory and modeling based on computer simulations (including ab initio, Monte Carlo, and other methods).

Some examples of specific science research challenges include but are not limited to: fundamental chemical studies needed to determine species concentrations above molten glass solutions containing heavy metals, cesium, strontium, lanthanides, actinides, with and without a cold cap composed of unmelted material; materials science studies of molten materials that simulate conditions anticipated during vitrification and storage in vitrified form of HLW needed to develop improved processes and formulations; fundamental physical chemistry studies of sodium nitrate/nitrite mixtures needed for HLW stabilization.

References for Background Information

Note: World Wide Web locations of these documents are provided where possible. For those without access to the World Wide Web, hard copies of these references may be obtained by writing Mark A. Gilbertson at the address listed in the **FOR FURTHER INFORMATION CONTACT** section.

DOE. 1997. Accelerating Cleanup: Focus on 2006. Discussion Draft. <http://www.em.doe.gov/acc2006>

DOE. 1997. Radioactive Tank Waste Remediation Focus Area Technology Summary (Rainbow Book). <http://www.em-52.em.doe.gov/ifd/rbbooks/tanks/tansrb.htm>

DOE. 1997. Research Needs Collected for the EM Science Program—June 1997. <http://www.doe.gov/em52/needs.html>

DOE. 1997. U.S. Department of Energy Strategic Plan. <http://www.doe.gov/policy/doeplan.htm>

DOE. 1996. Estimating the Cold War Mortgage: The 1996 Baseline Environmental Management Report. March 1996. U.S. Department of Energy Office of Environmental Management, Washington, D.C. <http://www.em.doe.gov/bemr96/index.html>

DOE. 1996. Office of Environmental Restoration EM-40. <http://www.em.doe.gov/er/index.html>

DOE. 1996. Office of Nuclear Material and Facility Stabilization EM-60. <http://www.em.doe.gov/menu/?nucmat.html>

DOE. 1996. Office of Science and Risk Policy EM-52 and Environmental

Management Science Program. <http://www.em.doe.gov/science/>

DOE. 1996. Office of Science and Technology EM-50. <http://em-50.em.doe.gov/>

DOE. 1996. Office of Waste Management EM-30. <http://www.em.doe.gov/menu/?wstgmt.html>

DOE. 1996. Spent Nuclear Fuel. DOE-Owned SNF Technology Integration Plan. U.S. Department of Energy, Washington, DC. DOE/SNF-PP-002, May 1996. http://tikal.inel.gov/tip_int.htm

DOE. 1996. Taking Stock: A Look at the Opportunities and Challenges Posed by Inventories from the Cold War Era. The U.S. Department of Energy, Office of Environmental Management, Washington, DC. <http://www.em.doe.gov/takstock/index.html>

DOE. 1995. Closing the Circle on the Splitting of the Atom: The Environmental Legacy of Nuclear Weapons Production in the United States and What the Department of Energy is Doing About It. The U.S. Department of Energy, Office of Environmental Management, Office of Strategic Planning and Analysis, Washington, D.C. <http://www.em.doe.gov/circle/index.html>

"Radiation Effects in Glasses Used for Immobilization of High-Level Waste and Plutonium Disposition", W. J. Weber, R. C. Ewing, C. A. Angell, G. W. Arnold, A. N. Cormack, J. M. Delaye, D. L. Griscom, L. W. Hobbs, A. Navrotsky, D. L. Price, A. M. Stoneham, and M. C. Weinberg, *J. Mater. Res.*, Vol. 12, No. 8, August 1997, pp. 1946-1978.

National Research Council. 1997. Building an Environmental Management Science Program: Final Assessment. National Academy Press, Washington, DC. <http://www.nap.edu/readingroom/books/envmanage/>

National Research Council. 1995. Improving the Environment: An Evaluation of DOE's Environmental Management Program. National Academy Press, Washington, D.C. <http://www.nap.edu/readingroom/books/doemp/>

Secretary of Energy Advisory Board. Alternative Futures for the Department of Energy National Laboratories. February 1995. Task Force on Alternative Futures for the Department of Energy National Laboratories, Washington, D.C. <http://www.doe.gov/html/doe/whatsnew/galvin/tf-rpt.html>

U.S. Congress, Office of Technology Assessment. Complex Cleanup: The Environmental Legacy of Nuclear Weapons Production, February 1991. U.S. Government Printing Office, Washington, D.C. NTIS Order number: PB91143743. To order, call the NTIS

sales desk at (703) 487-4650. http://www.wvs.princeton.edu:80-ota/disk1/1991/9113_n.html

National Science and Technology Council. 1996. Assessing Fundamental Science, Council on Fundamental Science. <http://www.nsf.gov/sbe/srs/ostp/assess/>

The Catalog of Federal Domestic Assistance Number for this program is 81.049, and the solicitation control number is ERFAP 10 CFR Part 605.

Issued in Washington, DC, December 24, 1997.

Ralph H. DeLorenzo,

Acting Associate Director for Resource Management, Office of Energy Research. [FR Doc. 98-114 Filed 1-2-98; 8:45 am]

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DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. RP97-63-007]

Colorado Interstate Gas Company; Notice of Tariff Compliance Filing

December 29, 1997.

Take notice that on December 22, 1997, Colorado Interstate Gas Company (CIG), tendered for filing to become part of its FERC Gas Tariff, First Revised Volume No. 1, Substitute Third Revised Sheet No. 230A to be effective November 1, 1997.

CIG states that the purpose of this compliance filing is to comply with the order issued October 31, 1997 in Docket No. RP97-63-006, to reflect the language in GISB Standard 1.3.30 regarding zones.

Any person desiring to protest this filing should file protest with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426, in accordance with Section 385.211 of the Commission's Regulations. All such protests must be filed as provided in Section 154.210 of the Commission's Regulations. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Copies of this filing are on file with the Commission and are available for public inspection in the Public Reference Room.

Lois D. Cashell,

Secretary.

[FR Doc. 98-57 Filed 1-2-98; 8:45 am]

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