

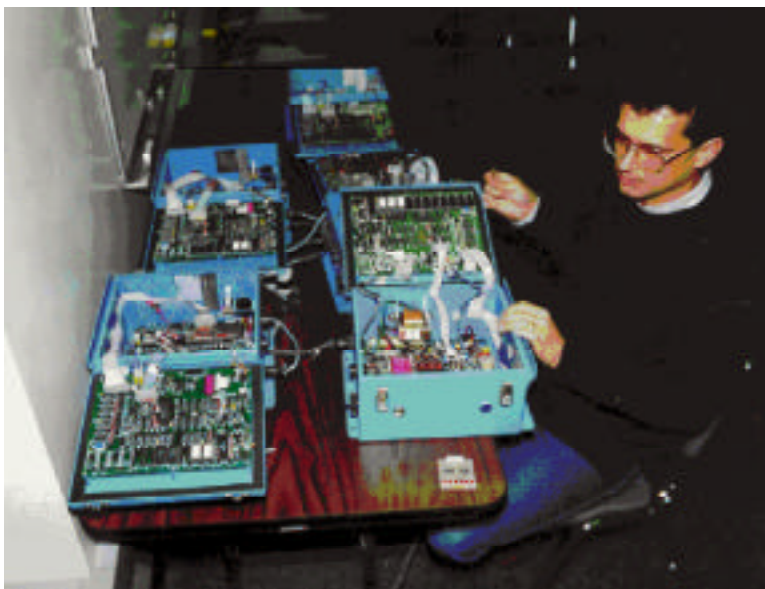


Year 2000 Issues

U.S. Experts Helping Soviet – Designed Power Plant Personnel Deal With Y2K

The potential effects of the Year 2000 (Y2K) computer issue present as much of a challenge abroad as they do in the United States. Of particular concern to U.S. officials is the Y2K preparedness of nuclear power plants in the former Soviet Union countries.

Beginning last year, the United States undertook a Y2K education program in countries with Soviet-designed nuclear power plants, providing the information necessary to address the problem. Most of the countries have adopted guidelines established by the International Atomic Energy Agency (IAEA) for conducting Y2K assessments.



U.S. experts are training staff at Soviet-designed nuclear power plants to test embedded systems for Y2K compliance.

Information collected by the U.S. Y2K team in Moscow indicates Russia has established a well-organized Y2K program. Rosenergoatom soon will complete Y2K assessments at all nuclear power plants. Ukraine has completed limited assessments.

Current information indicates that no problems exist within the primary safety systems at the nuclear power plants. These systems monitor operation of the plant and automatically shut it down if serious problems arise. Preliminary assessments indicate safety systems will continue to function properly, regardless of any minor Y2K problem.

Several issues are pending:

- Some Y2K problems exist in secondary safety systems. The most important are plant process computers. Failure of a plant process computer is not an immediate safety concern but does require that the plant be shut down within 4 to 8 hours if the computer is not restored. With nuclear energy providing about 20 percent of the electricity in Russia and 50 percent in Ukraine, the concern is that the shutdown of several nuclear plants could disrupt power supplies in the middle of winter.
- Y2K problems originating in the electrical transmission and distribution system could cause a loss of offsite power to the plant, resulting in an unplanned reactor shutdown. Russian and Ukrainian transmission and distribution experts are confident they can operate their systems manually to avoid any unplanned disruption of electricity supplies.

U.S. Department of Energy
Office of International Nuclear
Safety and Cooperation
1000 Independence Avenue S.W.
Washington, DC 20585
(202) 586-6641
<http://insp.pnl.gov:2080>

- Additional evaluation and planning is needed at Soviet-designed nuclear power plants to ensure plant personnel understand possible Y2K problems and how to respond to them appropriately. Contingency plans must be developed to address the worst case Y2K scenarios.

The U.S. Department of Energy (DOE) will support host country Y2K assessments, help correct known deficiencies, and assist in the completion of contingency planning in Russia, Armenia, Kazakhstan, and Ukraine. It is clear that all the countries with Soviet-designed nuclear power plants understand the Y2K issue and the potential problems. To varying degrees, all have programs to address the issues and are pursuing solutions.