



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

PDR.

November 9, 1999

The Honorable Stephen Horn, Chairman  
Subcommittee on Government Management,  
Information, and Technology  
Committee on Government Reform  
United States House of Representatives  
Washington, D.C. 20515-6143

Dear Mr. Chairman:

In response to your request of May 20, 1997, I am enclosing the U.S. Nuclear Regulatory Commission's (NRC) November 1999 quarterly report on the Year 2000 (Y2K) problem as submitted to the Office of Management and Budget. As previously stated in our February 1999 Y2K quarterly status report, the NRC completed its Y2K Program on February 5, 1999. This status is restated in relevant sections of the enclosed report.

If a more in-depth review of NRC's Y2K Program is required, the NRC's Chief Information Officer and the NRC Y2K Program Manager will be pleased to meet with members of your staff.

Sincerely,

Richard A. Meserve

Enclosure: As stated

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November 9, 1999

The Honorable Richard F. Bennett  
Chairman, Special Committee  
on the Year 2000 Technology Problem  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

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November 9, 1999

The Honorable Jacob J. Lew  
Director  
Office of Management and Budget  
Washington, D.C. 20503

Dear Mr. Lew:

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November 9, 1999

The Honorable Christopher J. Dodd  
Special Committee on the Year 2000  
Technology Problem  
United States Senate  
Washington, D.C. 20510

Dear Senator Dodd:

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Richard A. Meserve

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
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November 9, 1999

The Honorable Jim Turner  
Subcommittee on Government Management,  
Information, and Technology  
Committee on Government Reform  
United States House of Representatives  
Washington, D.C. 20515-6143

Dear Congressman Turner:

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Similar letters addressed to:

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**Status of the U.S. Nuclear Regulatory Commission's (NRC's) Year 2000 Efforts**  
**Quarterly Report for November 1999**

**I. Mission-Critical Systems**

Total Number of Mission-Critical Systems	Number Compliant	Number To Be Replaced	Number To Be Repaired	Number To Be Retired
7	7	0	0	0

**II. Other Progress**

**A. Non-Mission-Critical Systems**

Our total number of non-mission-critical systems is 103. All NRC non-mission-critical systems were renovated, validated, and implemented in our production environment as of February 5, 1999.

**B. Data Exchanges**

After assessing all areas of the agency that have the potential of exchanging data with other Federal, State, and local governments, and with international and commercial entities, we identified three systems with which we exchange data. Two of these systems exchange data with one source, and the other system exchanges data with six sources.

Discussions with NRC data exchange partners reveal that two exchanges are already Year 2000 (Y2K) compliant and five exchanges do not require NRC to make any changes. The final data exchange is contained in one of NRC's mission-critical systems. This system has been renovated, validated, and implemented. All of our work in this area has been completed.

**C. Telecommunications Systems**

NRC sent letters to all of its vendors of telecommunications equipment seeking information on their progress in addressing the Y2K problem as it relates to their products. All of the vendors have responded, been contacted by telephone, or had their Internet site accessed to determine the status of their progress.

We have performed the work necessary to ensure that 100 percent of our telecommunications infrastructure is compliant with or is not affected by Y2K issues.

We have also contacted our telecommunications service providers to ascertain that they have plans to achieve Y2K compliance. All of our service providers have responded that they are Y2K compliant.

Enclosure

**D. Buildings and Related Systems**

We assessed all agency building systems and determined that four building system categories could be affected by Y2K issues: environmental, fire protection, security access control and alarms, and elevator.

We contacted the vendors for these systems and they sent us written responses. As of February 5, 1999, we have determined that continued safe operation of systems in these four categories will not be affected by the Y2K date rollover.

**E. Embedded Chip Systems**

We have identified and analyzed all known embedded chip systems at the NRC and have replaced all noncompliant embedded chip hardware as necessary to address the Y2K problem.

**F. Any Additional Information**

No other information is offered.

**III. Federally Supported, State-Run Programs**

In February 1998, NRC sent information to the Agreement States (AS) to increase their awareness of the Y2K problem. Information was sent on the nature and scope of potential problems for materials licensees and the actions NRC was taking to encourage NRC materials licensees to examine their computer systems and software. NRC recommended that the AS encourage their licensees to conduct similar examinations. NRC also asked the AS to share information with NRC on any Y2K problems identified by AS licensees that could affect NRC, other AS, or their licensees.

To help facilitate AS efforts to address potential Y2K problems, NRC established a link to NRC Y2K information at the Office of State Programs Web site. NRC also informed the AS about the availability of the NRC's list server that sends the latest Y2K information by e-mail to each subscriber.

During the past 21 months, the Chair of the Management Review Board has also questioned AS managers about their State's Y2K activities. The AS managers have indicated that Y2K issues in their programs are being addressed as a part of statewide efforts. At this time, NRC is not aware of any Y2K issues affecting materials licensees identified by AS.



**IV. High-Impact Programs**

NRC has no programs in this category.

**V. Change Management and Verification Efforts**

Although NRC has always practiced change management on an informal basis, we formalized our change management process in 1996 with the issuance of NRC's Systems Development and Life Cycle Management Methodology (SDLCM). Recognizing that any proposed change, if not properly managed, has the potential to cause system failures, NRC's SDLCM provides for a 10-step change control process that, among other tasks, provides for change research, problem analysis, and impact analysis. Complete documentation resulting from this change control process is reviewed and approved by a configuration control board before any work is begun. We believe that this formal process will prevent any adverse effect on previously implemented Y2K repairs.

Systems repaired by Y2K program contractors were independently verified and validated by a three-level approach. The first level, unit testing, was performed by contract personnel who actually repaired the system code. The second and third levels were performed by personnel who were not involved with system repairs. The second level of testing was performed by contractor personnel assigned to a permanent quality assurance group, using an established test plan. Third-level testing was performed by the NRC personnel who use the system, also using an established test plan. We consider the systems validated only after we receive written approval from all three testing levels. We retain all annotated test plans in our Y2K files, along with all written approvals.

Systems repaired by NRC program offices (and their contractors) underwent a comparable validation process. We reported these systems as validated only when the Senior Executive Service director of the responsible office certified validation in writing.

All repaired and replaced systems have been successfully operating in our production environment since February 5, 1999.

**VI. Regulatory Review**

NRC's Committee to Review Generic Requirements (CRGR) reviews proposed regulatory requirements. The CRGR has been instructed to consider the impact of proposed requirements on Y2K efforts of licensees.

**VII. Business Continuity and Contingency Plans**

Computer systems supporting NRC's regional offices are centrally supported at NRC's headquarters and are covered in NRC's Business Continuity and Contingency Plan (BCCP) first submitted to the Office of Management and Budget (OMB) on June 18, 1999. OMB requested an updated BCCP on

October 13, 1999, and we submitted one to OMB on October 18, 1999. NRC most recently tested the emergency response aspects of this plan on October 15, 1999, when we conducted a full-scale Y2K exercise; 11 nuclear reactor licensees and 3 fuel cycle facilities participated in this exercise.

Presidential Decision Directive 67 (PDD 67), issued October 21, 1998, relates to enduring constitutional government, a Continuity of Operations Planning (COOP), and continuity of government (COG) operations. In response to this directive, the NRC formed a task force of representatives from throughout the agency who are familiar with agency contingency plans. The task force developed the COOP as a unifying concept that does not replace existing plans but, instead, superimposes COOP functions if and when a problem threatens serious disruption to NRC operations.

The NRC COOP identifies agency emergency response as the primary function necessary to ensure adequate protection of public health and safety, the common defense and security, and the environment in the use of nuclear materials in the United States. The plan further identifies those requirements necessary to support the primary function, such as emergency communications, establishing a chain of command, and delegation of authority. NRC has coordinated and continues to coordinate the various contingency plans, such as NRC's Contingency Plan for the Year 2000 Issue in the Nuclear Industry, at working-group levels. For example, Y2K planning concerns a specific threat at a predictable time, so details of the Y2K plan and the COOP differ, but the agency's responses will be consistent.

NRC's COOP was approved by the Commission and implemented on October 21, 1999.

#### **VIII. Other Management Information**

##### **A. Costs (in millions)**

<b>Fiscal Year</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>Total</b>
Current Cost	0.0*	2.4	4.0	1.9	0.1	8.4

\* - Item is \$45,000.

##### **B. Costs Not Covered in Base or Emergency Funds.**

All costs were covered in original agency base estimates.

##### **C. Explain Dramatic Changes in Cost.**

No changes have occurred since the last report.

**D. Key Personnel**

No concerns exist about the availability of key personnel.

**E. Other Problems**

No problems affecting progress exist.

If you have any questions about this report, please contact Arnold E. (Moe) Levin at 301-415-7458, or by e-mail at [AEL1@NRC.gov](mailto:AEL1@NRC.gov).