



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

April 25, 1997

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

Dear Mr. Chairman:

In response to your request of March 26, 1997, I am providing the enclosed information regarding the ability of automated systems to properly process date fields in the Year 2000. This information supplements that previously provided to the Subcommittee on Government Management, Information and Technology on June 17, 1996, and February 10, 1997.

The Commission appreciates the guidance and coordination provided by both the Subcommittee on Technology and the Subcommittee on Government Management, Information and Technology. NRC will continue to work through the Office of Management and Budget (OMB) and the Chief Information Officers Council in resolving the Year 2000 issue.

Arnold E. Levin, Acting Director, Office of Information Resources Management, has overall responsibility for NRC's Year 2000 program. Mr. Levin can be reached by telephone (301-415-7458) or electronic mail (aell@nrc.gov), should you have any questions regarding our submission.

Sincerely,

Shirley Ann Jackson

Enclosure:
Response to Committee Questions

cc: John A. Koskinen, OMB

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PDR COMMS NRCC
CORRESPONDENCE PDR



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

April 25, 1997

The Honorable Carolyn Maloney
Ranking Member, Subcommittee on Government
Management, Information and Technology
Committee on Government Reform and Oversight
United States House of Representatives
Washington, D.C. 20515-6143

Dear Congresswoman Maloney:

In response to your request of March 26, 1997, I am providing the enclosed information regarding the ability of automated systems to properly process date fields in the Year 2000. This information supplements that previously provided to the Subcommittee on Government Management, Information and Technology on June 17, 1996, and February 10, 1997.

The Commission appreciates the guidance and coordination provided by both the Subcommittee on Technology and the Subcommittee on Government Management, Information and Technology. NRC will continue to work through the Office of Management and Budget (OMB) and the Chief Information Officers Council in resolving the Year 2000 issue.

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Shirley Ann Jackson

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
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April 25, 1997

The Honorable Constance Morella
Chairman, Subcommittee on Technology
Committee on Science
United States House of Representatives
Washington, D.C. 20515-6143

Dear Madam Chair:

In response to your request of March 26, 1997, I am providing the enclosed information regarding the ability of automated systems to properly process date fields in the Year 2000. This information supplements that previously provided to the Subcommittee on Government Management, Information and Technology on June 17, 1996, and February 10, 1997.

The Commission appreciates the guidance and coordination provided by both the Subcommittee on Technology and the Subcommittee on Government Management, Information and Technology. NRC will continue to work through the Office of Management and Budget (OMB) and the Chief Information Officers Council in resolving the Year 2000 issue.

Arnold E. Levin, Acting Director, Office of Information Resources Management, has overall responsibility for NRC's Year 2000 program. Mr. Levin can be reached by telephone (301-415-7458) or electronic mail (aell@nrc.gov), should you have any questions regarding our submission.

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Shirley Ann Jackson

Enclosure:
Response to Committee Questions

cc: John A. Koskinen, OMB



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

April 25, 1997

The Honorable Bart Gordon
Ranking Member, Subcommittee on Technology
Committee on Science
United States House of Representatives
Washington, D.C. 20515-6143

Dear Congressman Gordon:

In response to your request of March 26, 1997, I am providing the enclosed information regarding the ability of automated systems to properly process date fields in the Year 2000. This information supplements that previously provided to the Subcommittee on Government Management, Information and Technology on June 17, 1996, and February 10, 1997.

The Commission appreciates the guidance and coordination provided by both the Subcommittee on Technology and the Subcommittee on Government Management, Information and Technology. NRC will continue to work through the Office of Management and Budget (OMB) and the Chief Information Officers Council in resolving the Year 2000 issue.

Arnold E. Levin, Acting Director, Office of Information Resources Management, has overall responsibility for NRC's Year 2000 program. Mr. Levin can be reached by telephone (301-415-7458) or electronic mail (aell@nrc.gov), should you have any questions regarding our submission.

Sincerely,

Shirley Ann Jackson

Enclosure:
Response to Committee Questions

cc: John A. Koskinen, OMB

U. S. Nuclear Regulatory Commission
Response to Questions
from
Subcommittee on Technology
Committee on Science
and
Subcommittee on Government Management, Information and Technology
Committee on Government Reform and Oversight
Regarding the Year 2000 Technology Problem

QUESTION 1. Does your agency have a plan for assessing the Year 2000 vulnerability of microchips in electronic devices subject to regulation by your agency, in use by your agency, or that might be purchased by your agency?

ANSWER.

The Nuclear Regulatory Commission's recently completed inventory of automated systems, which is being assessed for Year 2000 vulnerabilities, includes telephone, elevator control, building access, fire alarm, and other electronic devices containing embedded microchips. We have also encouraged our licensees to consider Year 2000 problems in all devices, including security control and radiation monitoring equipment. To facilitate the exchange of information among licensees, NRC, and the public, information related to the Year 2000 problem is posted on NRC's World Wide Web server. In addition to the information presented on NRC's homepage, an Internet list server has been established to encourage discussion of Year 2000 issues.

To assure Year 2000 compliance of products and devices purchased by the NRC, we are adopting the September 11, 1996, recommended Year 2000 contract language developed for the Chief Information Officer Council Subcommittee on the Year 2000. The recommended language has also been adopted in the January 2, 1997, interim Federal Acquisition Regulation on Year 2000.

QUESTION 2.

If a plan exists, provide a copy to the subcommittees. If no plan exists, is such an assessment under way, and when do you expect it to be completed?

ANSWER.

A copy of the Nuclear Regulatory Commission's Year 2000 Action Plan is provided as Exhibit 1. The NRC Action Plan generally follows Office of Management and Budget (OMB) milestones for completion of various Year 2000 activities. For commercial products, which include microchips in electronic devices, the agency will question and monitor vendor progress rather than correct and test software, as described by OMB.

QUESTION 3.

Have officials of your agency communicated with private industry about the potential consequences of the Year 2000 technology problem associated with electronic devices containing embedded microchips? If not, why not?

ANSWER.

On December 24, 1996, the NRC issued Information Notice 96-70 to all licensees, Agreement States, and a number of industry organizations regarding the Year 2000 problem and its effect on systems and devices. A copy of that Information Notice is provided as Exhibit 2.

QUESTION 4.

Who within your agency has designated responsibility for addressing the risks associated with possible malfunctions of electronic devices containing embedded microchips?

ANSWER.

Arnold E. Levin, Acting Director, Office of Information Resources Management, has overall responsibility for NRC's Year 2000 program. Mr. Levin assumed these duties from Mr. Gerald F. Cranford, previously identified as the agency lead for the Year 2000 activities. Mr. Cranford recently retired from Federal service. The enclosed Year 2000 Action Plan will be modified to reflect this change in responsibility in the next scheduled update of the Action Plan.

YEAR 2000 ACTION PLAN

U.S. Nuclear Regulatory Commission

Revision 1

December 20, 1996

This document supersedes NRC Year 2000 Action Plan provided as Exhibit 1 of letter from NRC Chairman Shirley Jackson to the Honorable Stephen Horn dated June 17, 1996.

44-0218-0065-17pp.

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NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
PROJECT MANAGEMENT			
NRC Year 2000 Project Manager	Gerald Cranford	Appointed	See letter from NRC Chairman Shirley Jackson to the Honorable Stephen Horn dated June 17, 1996
Day-to-Day Responsibility	John Voglewede	Appointed	
Office and Region Points-of-Contact for Year 2000	See Attachment 1	Appointed	See memorandum from James M. Taylor (EDO) to Office Directors and Regional Administrators dated October 23, 1996
Meeting of Office/Region Contacts	IRM/DO	Quarterly	Beginning JAN 1997
Project Management Support			
Issue Project Element Plan (PEP) for project management support services	IRM/PPAB	DEC 1996	Project Management Support for NRC Year 2000 Program anticipated under a GSA Federal Systems Integration and Management Center (FEDSIM) agreement, <i>Comprehensive IRM Planning and Management Support Services</i> Project Element Plan provided to GSA on December 17, 1996
Begin project management support services for NRC Year 2000 Program	FEDSIM	JAN 1997	
Revise NRC Year 2000 Action Plan	FEDSIM	MAY 1997	
Comprehensive Information Systems Support Consolidation (CISSCO) Program	IRM/CISSCO	Initiated	Briefing on Year 2000 Solution dated October 9, 1996 (CSC Proprietary)
Provide Federal Year 2000 Contract Language for CISSCO activities, as appropriate	IRM/PPAB	JAN 1997	Standard Year 2000 Contract Language provided by GSA

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
General Systems Development			
Incorporate Year 2000 considerations in NRC Management Directive Handbook 2.4, <i>Acquisition of Information Technology Resources</i>	IRM/PPAB	Completed	Part 4.6, <i>Year 2000 Considerations</i> , now incorporated into <u>draft</u> MD Handbook 2.4, dated September 30, 1996
Incorporate Year 2000 considerations in NRC Management Directive Handbook 2.5, <i>Application Systems Life Cycle Management</i>	IRM/CISSCO	JAN 1997	Under Consideration
PROBLEM AWARENESS			
4) <i>Issue Network Bulletin with interim Guidance regarding what to look for in reviewing National Lab, private contractor, locally developed products for the potential impact of the century change and what IRM is doing for other applications and systems. [italicized milestones are from previous NRC Year 2000 Action Plan]</i>	IRM/TIB	JUN 1996 Completed	Network Bulletin issued August 27, 1996 For guidance, see Project Management and Inventory Assessment activities
Issue NRC All Employees Bulletin	ADM	Completed	NRC WEEKLY ANNOUNCEMENTS dated September 3, 1996
Briefing for Deputy Executive Director for Operations/Designated Senior Official	IRM/DO	Completed	DEDS/DSO Briefing on November 19, 1996
Update DEDS/DSO	IRM/DO	As Required	Briefing held December 20, 1996

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
5) Issue Memorandum to all Office Directors and Regional Administrations along with copy of the Bulletin (4 above) to raise awareness in offices other than IRM. Solicit identification of system/programs and feedback to IRM on progress of evaluation (software base of system, where running, host machine, point of contact, and status of review)	EDO	JUN 1996 Completed	See Executive Director for Operations memorandum for Office Directors and Regional Administrators on <i>The Year 2000 Problem</i> dated October 23, 1996 For system/program identification, see Agency Software Inventory activity
Establish Year 2000 World Wide Web Site	IRM/DO	Completed	www.nrc.gov/NRC/NEWS/year2000 posted October 31, 1996 (includes Year 2000 Contract Language from GSA)
Update External WWWeb Site	IRM/TA	Monthly	
Update Internal WWWeb Site	FEDSIM	Monthly	Beginning Second Quarter FY 1997
Establish Year 2000 Internet List Server	IRM/DO	Completed	listproc@nrc.gov (listname = year-2000) activated October 23, 1996
List Server maintenance	IRM/DO	Continuing	
Briefing for Information Technology Council	IRM/DO	Completed	IT Council briefing on November 19, 1996
Update IT Council	IRM/DO	Annually	
Briefing for Office/Region Contacts	IRM/DO	JAN 1997	Draft IT Council briefing (above) distributed to all Office/Region Y2K Contacts
Update Office/Region Contacts	IRM/DO	Quarterly	
Request NRC Notice to Nuclear Industry	DEDS/DSO	Completed	Hugh Thompson (DEDS) memo to Frank Miraglia (NRR) and Carl Paperiello (NMSS) on "Impact of Year 2000 on Computer Software" dated October 24, 1996 See Regulatory Impact
Notice to Reactor Licensees	NRR	JAN 1997	
Notice to Materials Licensees	NMSS	JAN 1997	

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
AGENCY RESOURCES AND REQUIREMENTS			
<p>Agency Year 2000 Resource Estimates</p> <p>Offices/Regions to provide budget estimates to NRC Controller</p>	<p>OC</p> <p>ADM</p> <p>AEOD</p> <p>IRM</p> <p>NMSS</p> <p>NRR</p> <p>OC</p> <p>OP</p> <p>RES</p> <p>RGN-I</p> <p>RGN-II</p> <p>RGN-III</p> <p>RGN-IV</p>	<p>FEB 1997</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p> <p>DEC 1996</p>	<p>Ronald Scroggins (OC) memorandum to NRC Office Directors and Regional Administrators on "Instructions for Preparing the Nuclear Regulatory Commission's FY 1998 Budget Request to Congress" dated November 15, 1996.</p> <p>See Federal Resources and Requirements</p>
<p>2) Issue instructions to all SDIB staff to initiate a review of dates (fields, screens, edits, initialization routines, etc.) as part of TACs for modification or enhancement of systems. Identify whether changes are needed (extent of change). If quick and easy - fix; If not record actions necessary</p> <p>Documentation: Report in highlights, Quarterly review of outstanding systems and correction actions, Report Progress in Director's (IRM) Monthly</p>	<p>IRM/SDIB</p>	<p>APR 1996</p> <p>-APR1998</p>	<p>Guidance to IRM Systems Development and Integration Branch (SDIB) staff issued:</p> <p>Karen VanDuser note to SDIB staff on System Readiness for Year 2000 dated April 17, 1996</p> <p>Karen VanDuser note to SDIB staff dated September 16, 1996</p>
<p>Review Year 2000 Compliance Programs in Branch Components of IRM Program Plan</p>	<p>IRM/DO</p>	<p>Annual</p> <p>(October)</p>	<p>Recommendation made that Year 2000 Plan be incorporated as IRM/DO activity rather than IRM Branch activity - See Progress Review below</p>

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
IRM Year 2000 Program Input			
Provide OMB A-11 Cost Estimates	IRM/DO	DEC 1996	<i>This element will sum to the IRM portion of Agency Year 2000 Resource Estimates given above</i>
End User Support Services	IRM/EUSB	DEC 1996	
System Development and Integration	IRM/SDIB	DEC 1996	
Technology Infrastructure Branch	IRM/TIB	DEC 1996	
Provide Software Inventory/Contact			
End User Support Services	IRM/EUSB	DEC 1996	<i>See Complete Office/Region Software Inventory below</i>
System Development and Integration	IRM/SDIB	DEC 1996	
Technology Infrastructure Branch	IRM/TIB	DEC 1996	
IRM Progress Review			
Progress Review of Year 2000 Costs and Status of Inventory Review			<i>Note Agency Year 2000 Resource Expenditures Expected to be Dominated by IRM</i>
IRM/Director's Office	IRM/DO	Quarterly	Beginning JAN 1997
End User Support Services	IRM/EUSB	Quarterly	Beginning JAN 1997
System Development and Integration	IRM/SDIB	Quarterly	Beginning JAN 1997
Technology Infrastructure Branch	IRM/TIB	Quarterly	Beginning JAN 1997

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
FEDERAL RESOURCES AND REQUIREMENTS			
"Report total estimated obligations (FY1997 - FY1999) for preparing systems to operate smoothly through the millennium change"			Office of Management and Budget Circular A-11 (1996), Section 43.2(c)
Review Office/Region Estimates	IRM	DEC 1996	(See Controller's instructions)
Submit Budget Estimates to OMB	OC	FEB 1997	NRC Budget Submittal in NUREG-1100, Volume 13 (Green Book)
Provide Office of Management and Budget with revised Year 2000 Action Plan	IRM/DO	JAN 1997	T.J. Glauthier (OMB) letter to Chairman Shirley Jackson dated November 27, 1996
Department of Commerce/NIST revised Federal Information Processing Standard (FIPS PUB 4-1, Representation for Calendar Date and Ordinal Date for Information Exchange)	IRM/PPAB	FEB 1997	Implicit reference to FIPS PUB 4-1 may not be required in agency FIP procurement guidelines
Chief Information Officers' Council Year 2000 Steering Committee Requirements	IRM/DO	Unknown	No requirements have arisen from the CIO Council other than first item in Regulatory Impact below
AGENCY SOFTWARE INVENTORY			
8) Compile information from Directors and Regional Administrators with that of IRM. Evaluate progress and perform analysis of next steps. Documentation: Every six months issue additional guidance on techniques for identification, Report to EDO on progress of effort and outstanding items	NONE	Not Applicable	Superseded by next item

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
Complete Office/Region Software Inventory			
ACRS/ACNW	ACRS/ACNW	DEC 1996	James M. Taylor (EDO) to Office Directors and Regional Administrators on <i>The Year 2000 Problem</i> dated October 23, 1996.
ADM	ADM	DEC 1996	
AEOD/HQ	AEOD/HQ	DEC 1996	
AEOD/TTC	AEOD/TTC	DEC 1996	
ASLBP	ASLBP	DEC 1996	
EDO	EDO	DEC 1996	
IRM/MICRO	IRM/MICRO	DEC 1996	
IRM/APPS	IRM/APPS	DEC 1996	
IRM/SYS	IRM/SYS	DEC 1996	
NMSS	NMSS	DEC 1996	
NRR	NRR	DEC 1996	
OC	OC	DEC 1996	
OCA	OCA	DEC 1996	
OCAA	OCAA	DEC 1996	
OE	OE	DEC 1996	
OGC	OGC	DEC 1996	
OI	OI	DEC 1996	
OIG	OIG	DEC 1996	
OIP	OIP	DEC 1996	
OP	OP	DEC 1996	
OPA	OPA	DEC 1996	
OSP	OSP	DEC 1996	
RES	RES	DEC 1996	
RGN-I	RGN-I	DEC 1996	
RGN-II	RGN-II	DEC 1996	
RGN-III	RGN-III	DEC 1996	
RGN-IV	RGN-IV	DEC 1996	
SBCR	SBCR	DEC 1996	
SECY	SECY	DEC 1996	

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
INVENTORY ASSESSMENT			
1) Spot check of several critical systems to ascertain possible impact and scope	IRM/SDIB	MAR-1996 Completed	Results: Some Systems Not Year 2000 Compliant (e.g., Automated Personnel System, Enforcement Action Tracking System) with Out-Year Scheduling
<p>3) Evaluate various COTS packages and versions of these packages to ascertain how they record and process dates. Document the findings and determine stable versions to deploy. Begin with standard packages (i.e. DOS, dBASE, Lotus, etc.) but address even one of a kinds.</p> <p>Documentation: Report Progress in Director's (IRM) Monthly Report, Develop information from findings to be used in Bulletins and other guidance documents</p>	<p>FEDSIM</p> <p>IRMEUSB</p>	APR 1996 -JAN 1998	Year 2000 Compliance expected to be based on Federal Review (Government Technology Executive Council (SSA), Defense Information Systems Agency (DISA) Product Compliance Catalog
<p>6) Evaluate Operating Systems and utility software on NRC owned minicomputers to insure that internal calendars can appropriately handle the century change.</p> <p>Develop guidance to make this type of evaluation a check point in applying software upgrades.</p> <p>Documentation: Report findings and progress in Director's (IRM) Monthly Report</p>	<p>FEDSIM</p> <p>IRM/TIB</p>	MAY 1996 -SEP1996	<p>Year 2000 Compliance expected to be based on Federal Review (Government Technology Executive Council (SSA), Defense Information Systems Agency (DISA) Product Compliance Catalog</p> <p>At Issue is the Interaction of Firmware, Operating System Software, Application System Software, and Applications</p>

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
<p>7) Evaluate Unix-based Operating Systems to insure that internal calendars can appropriately handle the century change. Develop Guidance to make this a check point in applying software upgrades.</p> <p>Documentation: Report findings and progress in Director's (IRM) Monthly Report</p>	<p>FEDSIM IRM/TIB</p>	<p>MAY 1996 SEP1996</p>	<p>Year 2000 Compliance expected to be based on Federal Review (Government Technology Executive Council (SSA), Defense Information Systems Agency (DISA) Product Compliance Catalog</p> <p>At Issue is the Interaction of Firmware, Operating System Software, Application System Software, and Applications</p>
<p>9) Assist other offices by writing letters to leased data centers or development centers (Parklawn, NIH, DOE National Labs, CNWRA, etc.) providing guidance on Operating System and internal calendar checks to be performed and requesting assurance that they are ready to handle the year 2000.</p>	<p>FEDSIM IRM/TIB</p>	<p>SEP1996 Ongoing</p>	<p>To be negotiated with host agency (e.g., Department of Health and Human Services)</p>
<p>10) Check with telecommunication service vendors regarding their ability to properly address year 2000. Make this a recheck point in any new orders or upgrades of service</p> <p>Documentation: Report findings in Director's (IRM) Monthly Report</p>	<p>FEDSIM IRM/TIB</p>	<p>SEP1996 Ongoing</p>	<p>To be negotiated with host agency (e.g., General Services Administration FTS2000)</p>

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
Confirm Software Inventory			See Confirmatory Sources in NRC SOFTWARE LISTS Attachment
Verify Inventory Using Secondary Sources	FEDSIM	FY 1997	
Cross Check Inventory for Duplication	FEDSIM	FY 1997	NRC Software Inventory to be Consolidated in a Single Database
Confirm Inventory by Sampling	FEDSIM	FY 1997	
NRC-Regulated Software			
- Reactor Systems	NRR	TBD	See REGULATORY IMPACT
- Medical Applications	NMSS	TBD	
- Nuclear Materials	NMSS	TBD	
STRATEGY FOR CORRECTION			
Evaluate various alternatives (determine which applications should be redeveloped, replaced, or modified)	FEDSIM	FY 1997	Comprehensive IRM Planning and Management Support Services
Develop a risk assessment that identifies systems and applications that must be modified and perform impact analysis	FEDSIM	FY 1997	Comprehensive IRM Planning and Management Support Services
Identify the segments of computer systems that must be modified	FEDSIM	FY 1997	Comprehensive IRM Planning and Management Support Services
Estimate cost of modifications	FEDSIM	FY 1997	Comprehensive IRM Planning and Management Support Services
Planning and Scheduling	FEDSIM	FY 1997	Comprehensive IRM Planning and Management Support Services

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
<p>Financial Systems Inventory OMB Circular A-11 (1996), Section 40</p> <p> Allotment/Financial Plan System Treasury Cash Link (CASH-LINK) Controller Cost Center Resource Data Capitalized Property PC System Justice Debt Management System Treasury Electronic Cert Sys (ECS) Federal Financial System (FFS) Gov Online Acct Lnk Sys (GOALS/DATA) Gov Online Acct Lnk Sys (GOALS/OPAC) License Fee Bill Generator System OMB Budget Data Collection (MAX) Payroll System Property Management System Payroll/Personnel System Travel Management System USDA Thrift Savings Plan System </p>	<p> OC(DBA) TREASURY OC(DBA) OC(DAF) JUSTICE TREASURY OC/TREASURY TREASURY TREASURY OC(DAF) OMB OC(DAF) ADM OC/OP/IRM OC(DAF) USDA </p>	<p>Required to report annually</p> <p>(1997)</p>	<p>Ronald Scroggins to Jack Radzikowski (OMB) dated October 10, 1996 [updated]</p> <p> No Undetermined No Yes NO Undetermined No No No Yes Undetermined Undetermined No Undetermined (New System) No Undetermined </p>
SOFTWARE CONVERSION			
Software Conversion Activities	CISSCO	FY 1998	See Year 2000 Program Plan
Review Agency Conversion Methods	FEDSIM	FY 1998	See Year 2000 Program Plan
Agency Examples and Best Practices	CISSCO	FY 1998	Nothing Done Yet

NRC ACTION PLAN FOR YEAR 2000

ACTION	RESPONSIBILITY	DUE DATE	STATUS
TESTING AND VERIFICATION			
Ensure new systems are Year 2000 compliant	IRM	FY 1999	Conduct post implementation reviews to ensure the integrity and functionality of modified systems
11) Follow up as necessary	IRM/DO	Activity to be revised under Project Management	The Federal Financial Institutions Examination Council recommends that reprogramming efforts be completed by December 31, 1996 (one year for testing)
CONTINGENCY PLANNING			
Incorporate Year 2000 scenario in NRC Headquarters Data Center Contingency Plan (DG, DEC, IBM, and NRC LAN/WAN)	IRM/FCAS	JUN 1997	Draft Contingency Plan for NRC HQ Data Center (June 1996) prepared under interagency agreement with GSA (TROY Systems)
REGULATORY IMPACT			
GSA Request for Assessment of Year 2000 Computer Problem on Regulated Industry	EDO/DSO	12/19/1996 CIO Meeting	Sally Katzen (GSA) memorandum dated December 6, 1996 for Regulatory Working Group/Chief Information Officers' Council
NRC Information Notice	NRR NMSS	JAN 1997 JAN 1997	Hugh Thompson (DEDS) memo to Frank Viraglia (NRR) and Carl Paperiello (NMSS) on "Impact of Year 2000 on Computer Software" dated October 24, 1996
NRC Standard Review Plan	NRR	JAN 1997	Chapter 7 Update

NRC ACTION PLAN FOR YEAR 2000

REFERENCES

- George Munoz to Chief Financial Officers Council dated April 8, 1996.
- Gerald Cranford (NRC/IRM) letter to Steven App (Treasury) on Chief Financial Officers' Council dated April 9, 1996.
- John A. Koskinen (OMB) to NRC dated April 11, 1996.
- Karen VanDuser (NRC/IRM/SDIB) note to SDIB staff on *System Readiness for Year 2000* dated April 17, 1996.
- Congressman Stephen Horn to NRC dated April 29, 1996.
- James M. Taylor (NRC/EDO) letter to John Koskinen (OMB) on Computer Difficulties at the Turn of the Century dated May 10, 1996.
- "Solving the Year 2000 Software Problem: Creating Blueprints for Success," Hearing before the Subcommittee on Technology (Chairwoman: Rep. Constance Morella) of the Committee on Science, U.S. House of Representatives, May 14, 1996.
- NRC Chairman Shirley Jackson to Congressman Stephen Horn dated June 17, 1996.
- *Year 200 Computer Problem Gets Attention of NRC Managers*, INSIDE N.R.C. (McGraw-Hill Company), August 5, 1996, Page 17.
- NRC Network Announcement dated August 27, 1996.
- NRC WEEKLY ANNOUNCEMENTS dated September 3, 1996.
- Hugh Thompson to Ed Springer (GSA) dated September 7, 1996.
- Karen VanDuser note to SDIB staff dated September 16, 1996.
- Ronald Scroggins (NRC/OC) letter to Jack Radzikowski (OMB) dated October 10, 1996.
- EDO Memorandum for Office Directors and Regional Administrators on "The Year 2000 Problem" dated October 23, 1996.
- Hugh Thompson Memorandum to Frank Miraglia and Carl Paperiello on "Impact of Year 2000 on Computer Software" dated October 24, 1996.
- Ronald Scroggins (OC) memorandum to NRC Office Directors and Regional Administrators on "Instructions for Preparing the Nuclear Regulatory Commission's (NRC) FY 1998 Budget Request to Congress" dated November 15, 1996.

NRC ACTION PLAN FOR YEAR 2000

NRC OFFICE/REGION CONTACTS FOR YEAR 2000 ISSUE

ACRS/ACNW	Ethel Barnard
ADM	Larry Cooper
AEOD/HQ	John Jolicoeur
AEOD/TTC	Jim Griffin
ASLBP	Jack Whetstine
EDO	Valeria Wilson
IRM/MICRO	Dawn Oliver
IRM/APPS	Karen VanDuser
IRM/SYS	Rashida Alam
NMSS	Sally Cornell
NRR	Michael Kaltman
OC	Lars Solander
OCA	Linda Portner
OCAA	Mickey Tenaglia
OE	Dawn Landron
OGC	Pat Craver
OI	William Hutchison
OIG	Deborah Huber
OIP	Clarence Breskovic
OP	Jim McDermott
OPA	Beth Hayden
OSP	James Myers
RES	Gerry Tomlin
RGN-I	Marilyn Moore
RGN-II	Judy Coleman
RGN-III	Martin Kerlin
RGN-IV	Michael Phillips
SBCR	Ira Radden
SECY	Andy Bates

NRC ACTION PLAN FOR YEAR 2000

NRC SOFTWARE LISTS

PRIMARY SOURCES

- Enterprise Model List (Gerald Cranford to Office Directors and Regional Administrators on "Planning for Application Systems" dated September 24, 1996).
- NRC Office/Region Software Inventory (See Agency Software Inventory topic in NRC Action Plan for Year 2000)
- List of commercial-off-the-shelf minicomputer and mainframe computer software supported under contract by IRM (e.g., DB2, Oracle, Novell Netware).
- List of commercial-off-the-shelf software purchased by the IRM/End User Support Services Branch.
- *Computer Codes and Mathematical Models* (NUREG/BR-0083, Volumes 1-10), listing of NRC scientific and technical codes cited in NUREG and NUREG/CR reports.

CONFIRMATORY SOURCES

- Automated Information Document System (AIDS), listing of application maintenance and development in IRM/Systems Development and Integration Branch
- *Agency Text/Document Systems* icon in the Agency-Wide AUTOS menu (Office Applications)
- List of software supported by the Customer Support Center.
- List of software supported by the NRC Training Center
- NRC's biannual list of systems subject to the Privacy Act, last published in the *Federal Register*, Volume 58, Number 128 (Wednesday, July 7, 1993), pp. 36455-36482.
- List of computer systems subject to computer security certification and accreditation.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
OFFICE OF NUCLEAR REACTOR REGULATION
WASHINGTON, D.C. 20555

December 24, 1996

NRC INFORMATION NOTICE 96-70: YEAR 2000 EFFECT ON COMPUTER SYSTEM
SOFTWARE

Addressees

All U.S. Nuclear Regulatory Commission licensees, certificate holders, and registrants (hereafter referred to as licensees).

Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to alert addressees to the potential problems their computer systems and software may encounter as a result of the change to the new century. It is expected that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid potential problems. However, suggestions contained in this information notice are not NRC requirements; therefore, no specific action nor written response is required.

Description of Circumstances

Earlier this year, the U.S. House of Representatives held hearings on an issue known as the "Year 2000" software problem. These hearings identified that some of the most important computer software used by the Federal government may not work correctly starting in the year 2000, because the software can only use single years or decades in performing calculations; it will not be able to recognize a change to the new century. Many computer systems will potentially fail to recognize this change to a new century and will misread "00" or the year 2000, as 1900, and thus may cause the system to fail or generate faulty data. The NRC, along with several other Federal agencies, is currently examining computer software used to support Agency functions that may be affected. Specific problems have already been identified and will be corrected. In some instances where future dates are used to schedule actions, problems have already occurred - well before the end of the century.

Discussion

The Year 2000 issue affects everyone. It will have an impact on State and local governments, NRC licensees, and businesses. The magnitude of the Year 2000 issue poses a challenge to all those potentially affected. Dates are involved in many facets of computer systems and software. Neither industry nor the Federal government has yet identified the scope of the situation.

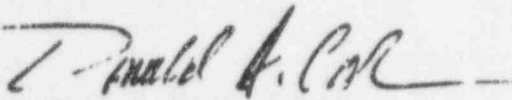
96-12-200-319 3pp.

This issue may affect NRC licensees in many different ways. For example, computer software used to calculate dose or to account for radioactive decay may not recognize the turn of the century, which could lead to incorrectly calculated doses or exposure times for treatment planning. Other examples of software that may be affected include security control, radiation monitoring, technical specification surveillance testing, and accumulated burn-up programs. Also, equipment that licensees have purchased may contain computer software susceptible to the Year 2000 problem. The problem could occur not only in computer software or data that have been acquired from external sources, but also in programs developed by licensees or consultants. For many licensees, this issue may not prove to be a significant health and safety concern. However, to prevent any other potential problems this issue may precipitate, licensees are encouraged to examine their uses of computer systems and software well before the turn of the century. In assessing computer software, licensees may want to consider reviewing those programs that are used to meet licensing requirements or those that have safety significance.

To facilitate the exchange of information among licensees, NRC, and the public, information related to the Year 2000 problem is posted on NRC's World Wide Web server (www.nrc.gov) under the "News and Information" option. An example of information that has already been posted is contract language developed by the Federal government for acquisition of new information technology to avoid the Year 2000 problem. In addition to the information presented on NRC's homepage, an Internet list server has been established to encourage discussion of Year 2000 issues. To subscribe to this list, Internet e-mail may be sent to listproc@nrc.gov with the message: subscribe year-2000 username, where the username is the first and last name of the individual making the request (e.g., John Doe).

Licensees may wish to consider what actions may be appropriate to examine and evaluate their software systems, and whether to designate an individual to monitor the continuing activities in government and industry to determine the extent of potential problems and proposed solutions. Any additional contact regarding the Year 2000 problem between NRC and licensees will be made through the addressee of this information notice, unless a separate point of contact is designated by the licensee. Licensees who wish to designate a separate point of contact should provide the contact name and address, including telephone and fax number and email address if available, to the appropriate technical contact of this information notice. Holders of Title 10 of the Code of Federal Regulations (CFR) Part 50 licenses are requested to provide this information to the appropriate Office of Nuclear Reactor Regulation (NRR) project manager (courtesy copy to the NRR technical contact listed below).

This information notice requires no specific action nor written response. If you have any questions about the information in this notice, please contact the technical contacts listed below or the appropriate regional office.



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Office of Nuclear Material Safety
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Thomas T. Martin, Director
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Attachments:

1. List of Recently Issued NMSS Information Notices
2. List of Recently Issued NRC Information Notices