

October 13, 1999

MEMORANDUM TO: Chairman Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield

FROM: William D. Travers
Executive Director for Operations

SUBJECT: OCTOBER 1999 STATUS REPORT ON /GENCY YEAR 2000 ACTIVITIES

Original Signed by
William D. Travers

The October 1999 Status Report on Agency Year 2000 Activities is attached for your information. This report updates information provided in the September 1999 report on Year 2000 (Y2K) activities that was forwarded to you on September 13, 1999.

In order to keep both internal and external stakeholders informed of Agency Y2K activities as they relate to our licensees, this report will be made publically available and placed on NRC's Y2K website.

Attachment:
As stated

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ROPMS:TA ROMPS:C DEDR
MSatorius *noy* GTracy *for* FJM *for*
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20585-0001

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**United States
Nuclear Regulatory Commission
Status Report on Year 2000 Activities for
October 1999**

INTRODUCTION

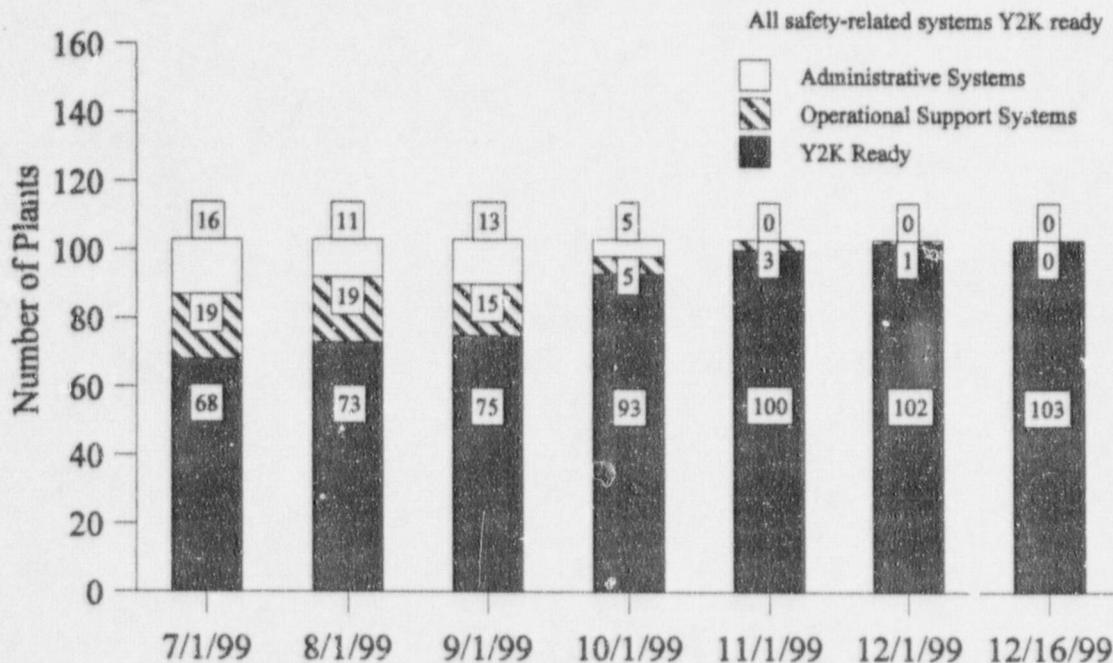
This report is the tenth periodic report on the status of agency Y2K activities. The report covers the period from September 1 through September 30, 1999. More detailed Y2K-related information and the previous periodic reports to the Commission can be found on NRC's Y2K website at <http://www.nrc.gov/NRC/NEWS/year2000.html>.

POWER REACTORS

As previously reported, by July 1, 1999, all 103 operating nuclear power plants reported status of Y2K readiness to the NRC. Regarding NRC's highest priority—the uninterrupted performance of plant safety systems—all nuclear power plants report that their efforts are complete, and that no remaining Y2K-related problems exist that could directly affect the performance of safety systems or the capability for safe shutdown. Sixty-eight of these plants had also completed the next order of priority as of July 1, stating that all of their computer systems that support plant operation are "Y2K ready." The remaining 35 plants reported that, to be fully Y2K ready, they still have additional work to complete on a few non-safety computer systems or devices. Typically, the remaining Y2K work is waiting on a scheduled plant outage or the delivery of a replacement component. In each case, the licensees with work remaining have provided schedules for completing that work.

The plants that have Y2K work remaining are continuing to progress toward Y2K readiness. As of September 30, 1999, only 10 plants had Y2K work remaining and 93 plants have reported that they were Y2K ready. During September, we received letters from Beaver Valley 1 & 2, Browns Ferry 2 & 3, Clinton 1, Cooper, Diablo Canyon 1 & 2, Limerick 2, North Anna 2, Oyster Creek, Peach Bottom 2, Sequoyah 1 & 2, South Texas 1 & 2, Vermont Yankee, and Watts Bar 1 reporting that they were Y2K ready. Table 1 (Attachment 1A) provides a summary of nuclear power plant (NPP) Y2K readiness status. Table 2 (Attachment 1B) provides a summary of NPP systems and components requiring completion of Y2K readiness activities. The NRC will continue to monitor progress at those plants with remaining work and will independently verify completion of the scheduled items, including reviews of licensee Y2K contingency plans. The following chart illustrates plant readiness.

Nuclear Power Plant Y2K Readiness



The solid shaded regions of the chart represent the number of NPPs that are already Y2K ready or are scheduled to be Y2K ready on the corresponding date. The diagonally shaded regions of the chart represent the number of NPPs that are not scheduled to be Y2K ready on the corresponding date, and have systems to be remediated that could affect power operations. (Remediation is defined in Nuclear Energy Institute/Nuclear Utilities Software Management Group (NEI/NUSMG) 98-07 "Nuclear Utility Year 2000 Readiness Contingency Planning" (an NRC endorsed industry guidance document) as the process of retiring, replacing, or modifying software or devices that have been determined to be affected by the Y2K problem.) The unshaded regions of the chart represent the number of NPPs that are not scheduled to be Y2K ready on the corresponding date, and that have only systems that could affect NPP administrative functions.

As discussed in the previous monthly report, the staff identified 14 of the 103 operating NPPs that required additional staff follow-up reviews in order for the staff to evaluate more fully each phase of the licensee's Y2K program. In 13 of the 14 reviews, the staff was able to conclude that the licensees were following a program that was consistent with industry guidance. However, in reviewing the integrated contingency planning activities at Cooper Nuclear Station (CNS), the staff determined that the licensee's Integrated Contingency Plan (ICP) was not sufficiently complete for the staff to conclude that CNS was fully Y2K ready, although all safety-related systems and components were Y2K ready. The licensee for CNS has since revised the ICP to include twenty-four new or enhanced individual contingency plans. The licensee reported that the revised Y2K contingency plans were approved on September 2, 1999, and that they include sufficient detail to meet the guidelines of NEI/NUSMG 98-07. Additionally, the

licensee reported that a thorough review of additional assessment packages, including material in the database, revealed no other deficiencies related to the earlier reported three instances of inaccurate information being provided by the contractor (none of these components involved systems needed to safely shut down the plant and the licensee's Y2K readiness status was not affected). The licensee has updated the documentation to correct the inaccuracies. The resident inspector has confirmed that CNS has satisfactorily addressed the above items, including the integrated contingency planning that had previously been assessed as "not ready" by the staff.

During September, the staff sent letters to the licensees of the 12 facilities that were not expected to be Y2K ready by September 30, 1999, to confirm their completion schedules for the remaining work. These plants included Comanche Peak Units 1 & 2, Cook Unit 1 & 2, Hope Creek, Farley Unit 2, Peach Bottom Unit 3, Salem Units 1 & 2, South Texas Units 1 & 2, and Three Mile Island Unit 1. However, it should be noted that on September 28, South Texas Units 1 & 2 reported that they had completed their work ahead of schedule and were Y2K ready.

Typically, the remaining work will be completed in conjunction with a scheduled plant outage or when a replacement component is delivered. At this time, we believe that all licensees will be able to operate their plants safely during the transition from 1999 to 2000 and beyond, and we do not anticipate the need for the NRC to direct any plant-specific action.

OTHER Y2K RELATED ACTIVITIES

NUREG-1706, "Year 2000 Readiness in US Nuclear Power Plants," was published. This NUREG provides the results of NRC conducted onsite reviews of licensee Y2K programs at the 103 nuclear power plants, additional staff assessment of followup reviews of 14 plants, and updated information relating to plant-specific reviews. On the basis of the results of the completed reviews, the staff concluded that all licensees were implementing Y2K programs that were consistent with the NRC-approved industry guidance. NUREG-1706 is available on the NRC's web site at <http://www.nrc.gov/NRC/NEWS/year2000.html>.

On September 9, 1999, the staff monitored one of the critical dates (9/9/99) considered in the Y2K readiness programs at nuclear power plants and found that no plant problems attributable to this date were reported.

The staff continues to work with industry to address situations where a licensee or vendor discovers that a component or equipment previously thought to be Y2K ready, is found to have a Y2K deficiency. The staff met with NEI on September 10, 1999, to discuss Y2K readiness activities, including configuration control and sharing of generic Y2K information. Additionally, during the last week of October the staff will be participating in the NUSMG 21st Semi-Annual Workshop entitled, "Software Project Controls & Software Configuration Management," hosted by the New York Power Authority. A presentation on the NRC's Y2K activities and various other Y2K related issues will be given. Lessons learned from Y2K programs will also be discussed with NUSMG representatives. Also, the staff is participating in EPRI 7th Y2K Embedded Systems Workshop in San Diego on October 28.

The staff has nearly completed implementing procedures for Y2K-related Notices of Enforcement Discretion (NOEDs) for inclusion in the NRC Contingency Plan. This procedure contains the process for granting Y2K-related and other NOEDs during the Y2K transition, the

delegation of authority memorandum from the Director of NRR, the staffing plan, a sample NOED processing worksheet, and examples of possible NOED scenarios. This implementing procedure will be finalized after the October 15, 1999, Y2K exercise. The staff is also preparing responses to individuals who provided comments on the Interim Enforcement Policy Regarding Enforcement Discretion for Nuclear Power Plants During the Year 2000 Transition.

FUEL CYCLE FACILITIES AND MATERIALS LICENSEES

The Office of Nuclear Material Safety and Safeguards (NMSS) representatives visited the Paducah gaseous diffusion plant during the week of September 20, 1999, to discuss Y2K readiness activities. An NMSS inspection report on the Paducah visit is being written and is expected to be issued in October and will be placed on the NMSS Y2K webpage.

An NMSS inspection report for the Y2K inspection at the Portsmouth gaseous diffusion plant has been completed. A summary of the report will be placed on the NMSS Y2K webpage.

NMSS will provide an expert in gaseous diffusion plants and high enriched uranium fuel fabrication facilities to Region IV during the October 15 Y2K exercise and during the Y2K transition.

An updated status of the Y2K readiness of fuel cycle facilities as of September 30, 1999 is provided as Table 3 (Attachment 1C).

CONGRESSIONAL INTERACTION

On September 23, Mr. Frank Miraglia, Deputy Executive Director for Reactor Programs, testified before the Senate Energy and Natural Resources Committee on "Y2K: Will the Lights Go Out?" Mr. Miraglia reported on the Y2K readiness of nuclear plants' safety systems and on the NRC's plans for those plants with remaining Y2K issues. Witnesses from the Department of Energy and the North American Electric Reliability Council also presented testimony. A tentative hearing is being planned for October 22 to be jointly conducted by the House Government Reform Sub Committee on Government Management, Information, and Technology and the House Science Technology Committee on the Y2K readiness of nuclear power plants domestically and abroad.

NRC responded to one controlled correspondence item on Y2K issues from Representative Barbara Lee. Several other replies to Congressional letters are being prepared.

CONTINGENCY PLANNING AND INTERNATIONAL PROGRAMS

Final plans and preparations for the October 15th exercise were made during the month of September. On September 29-30, an Emergency Response Coordinator (ERC) counterpart meeting was held in Region III to discuss the detailed Y2K implementing procedures that will be tested during the October 15th exercise. Testing of the satellite phones has progressed as planned. Regions that have completed their testing report that the Iridium phones work well. A Y2K Contingency Plan Task Force representative observed the North American Electric Reliability Council drill on September 9th, 1999. The exercise successfully demonstrated how grid stability concerns would ultimately be communicated from the source to the White House Information Coordination Center (ICC) during the Y2K transition. The staff prepared a memo to the Commission outlining plans for staffing the White House ICC. The ICC exercise scheduled

for October 13-14th has been canceled. There will now be only two ICC exercises; the first exercise will be on November 3-4th and the second (stressed) exercise will be December 8-9. The staff plans to make use of the press center facilities in the NRC auditorium to simulate the ICC Joint Public Information Center during the October 15th exercise.

The prototype of the Y2K Early Warning System (YEWS) went online during the week of September 27 to allow users to familiarize themselves with its features and to solicit user comments. So far there are 107 registered users from 25 countries and 17 U.S. utilities. After modifications to YEWS, based on user comments, the system will be made available again during the week of October 11 and for the NRC's Y2K contingency plan exercise on October 15, which will have international participation.

PUBLIC AFFAIRS AND Y2K COMMUNICATIONS ACTIVITIES

During September, the Office of Public Affairs issued three press releases on Y2K--

9/2 - Notice on 9/10 meeting with the Nuclear Energy Institute to discuss the status of Y2K readiness at nuclear power plants and how Y2K readiness will be maintained as well as reporting any changes in readiness to the NRC.

9/7 - NRC's confirmation of no Y2K problems affecting safety systems of nuclear power plants and an update showing 75 plants fully Y2K ready.

9/28 - Notice of NRC sending follow-up letters to 12 nuclear power plants to verify work to be completed and the dates when they will be fully Y2K ready; 91 plants fully Y2K ready.

During the month of September 1999, the NRC Web site saw a lower demand for Year 2000 information. The NRC Year 2000 Page dropped to 24th most requested page on the NRC Web site but remains the 7th most popular single entry page. A single entry page indicates visitors have either bookmarked the page or have obtained the page address from another source.

NUREG-1706, "Year 2000 Readiness in U.S. Nuclear Power Plants," (an Adobe Acrobat file) was the 4th most downloaded file on the NRC Web site. This report has now replaced the NRC Y2K Contingency Plan on the agency's top 10 downloads list.

- Attachments:
- 1A. Table 1, "NPP Y2K Readiness Status as of October 1, 1999"
 - 1B. Table 2, "NPP Systems and Components Requiring Completion of Year 2000 Readiness Activities as of October 1, 1999"
 - 1C. Table 3, "Fuel Fabrication and Gaseous Diffusion Plant Systems and Components Requiring Completion of Year 2000 Readiness Activities as of October 1, 1999"

**Table 1 NPP Y2K Readiness Status
as of October 1, 1999***

NPP Name	NPP Licensee	Readiness Status/Date**
Arkansas Nuclear One, Units 1 and 2	Entergy Operations, Inc.	Y2K Ready
Beaver Valley Power Station, Units 1 and 2	Duquesne Light Company	Y2K Ready
Braidwood Station, Units 1 and 2	Commonwealth Edison Company	Y2K Ready
Brown Ferry Nuclear Power Station, Units 2 and 3	Tennessee Valley Authority	Y2K Ready
Brunswick Steam Electric Plant, Units 1 and 2	Carolina Power and Light Company	Y2K Ready
Byron Station, Units 1 and 2	Commonwealth Edison Company	Y2K Ready
Callaway Plant, Unit 1	Union Electric Company	Y2K Ready
Calvert Cliffs Nuclear Power Plant, Units 1 and 2	Baltimore Gas and Electric Company	Y2K Ready
Catawba Nuclear Station, Units 1 and 2	Duke Energy Corporation	Y2K Ready
Clinton Power Station, Unit 1	Illinois Power Company	Y2K Ready
Comanche Peak Steam Electric Station, Unit 1	Texas Utilities Electric Company	11/30/99
Comanche Peak Steam Electric Station, Unit 2	Texas Utilities Electric Company	10/30/99
Cooper Nuclear Station	Nebraska Public Power District	Y2K Ready
Crystal River Unit 3 Nuclear Generating Plant	Florida Power Corporation	Y2K Ready
Davis-Besse Nuclear Power Station, Unit 1	First Energy Services Corporation	Y2K Ready
Diablo Canyon Nuclear Power Plant, Units 1 and 2	Pacific Gas and Electric Company	Y2K Ready
Donald C. Cook Nuclear Plant, Units 1 and 2	Indiana Michigan Power Company	10/30/99
Dresden Nuclear Power Station, Units 2 and 3	Commonwealth Edison Company	Y2K Ready

* The status of this table represents Y2K readiness as confirmed by staff and will be updated in the next report.
 ** All safety-related systems are Y2K ready.

**Table 1 NPP Y2K Readiness Status
as of October 1, 1999.**

NPP Name	NPP Licensee	Readiness Status/Date**
Duane Arnold Energy Center	IES Utilities, Inc.	Y2K Ready
Edwin I. Hatch Nuclear Plant, Units 1 and 2	Southern Nuclear Operating Company, Inc.	Y2K Ready
Enrico Fermi Atomic Power Plant, Unit 2	Detroit Edison Company	Y2K Ready
Fort Calhoun Station, Unit 1	Omaha Public Power District	Y2K Ready
Grand Gulf Nuclear Station, Unit 1	Entergy Operations, Inc.	Y2K Ready
H. B. Robinson Plant, Unit 2	Carolina Power and Light Company	Y2K Ready
Hope Creek Nuclear Station, Unit 1	Public Service Electric and Gas Co. of New Jersey	10/29/99
Indian Point Unit No. 2	Consolidated Edison Company of New York, Inc.	Y2K Ready
Indian Point Station, Unit 3	Power Authority of the State of New York	Y2K Ready
James A. FitzPatrick Nuclear Power Plant	Power Authority of the State of New York	Y2K Ready
Joseph M. Farley Nuclear Plant, Unit 1	Southern Nuclear Operating Company, Inc.	Y2K Ready
Joseph M. Farley Nuclear Plant, Unit 2	Southern Nuclear Operating Company, Inc.	12/16/99
Keweenaw Nuclear Power Plant	Wisconsin Public Service Corporation	Y2K Ready
LaSalle County Station, Units 1 and 2	Commonwealth Edison Company	Y2K Ready
Limerick Generating Station, Unit 1	PECO Energy Company	Y2K Ready
Limerick Generating Station, Unit 2	PECO Energy Company	Y2K Ready
Millstone Nuclear Power Station, Units 2 and 3	Northeast Nuclear Energy Company	Y2K Ready
Monticello Nuclear Generating Plant	Northern States Power Company	Y2K Ready
Nine Mile Point Nuclear Station, Units 1 and 2	Niagara Mohawk Power Corporation	Y2K Ready

ATTACHMENT 1-A

- 2 -

* The status of this table will be updated in the next report.

** All safety-related systems are Y2K ready.

**Table 1 NPP Y2K Readiness Status
as of October 1, 1999***

NPP Name	NPP Licensee	Readiness Status/Date**
North Anna Power Station, Unit 1	Virginia Electric and Power Company	Y2K Ready
North Anna Power Station, Unit 2	Virginia Electric and Power Company	Y2K Ready
Oconee Nuclear Station, Units 1, 2, and 3	Duke Energy Corporation	Y2K Ready
Oyster Creek Nuclear Generating Station	GPU Nuclear Corp.	Y2K Ready
Palisades Nuclear Plant	Consumers Energy Company	Y2K Ready
Palo Verde Nuclear Generating Station, Units 1, 2, and 3	Arizona Public Service Company	Y2K Ready
Peach Bottom Atomic Power Station, Unit 2	PECO Energy Company	Y2K Ready
Peach Bottom Atomic Power Station, Unit 3	PECO Energy Company	10/31/99
Perry Nuclear Power Plant, Unit 1	First Energy Nuclear Operating Company	Y2K Ready
Pilgrim Nuclear Power Station, Unit 1	Boston Edison Company	Y2K Ready
Point Beach Nuclear Plant, Units 1 and 2	Wisconsin Electric Power Company	Y2K Ready
Prairie Island Nuclear Generating Plant, Units 1 and 2	Northern States Power Company	Y2K Ready
Quad Cities Nuclear Power Station, Units 1 and 2	Commonwealth Edison Company	Y2K Ready
River Bend Station, Unit 1	Entergy Operations, Inc.	Y2K Ready
Robert Emmet Ginna Nuclear Plant, Unit 1	Rochester Gas and Electric Corp.	Y2K Ready
Salem Nuclear Generating Station, Unit 1	Public Service Electric and Gas Co. of New Jersey	11/6/99
Salem Nuclear Generating Station, Unit 2	Public Service Electric and Gas Co. of New Jersey	10/29/99
San Onofre Nuclear Generating Station, Units 2 and 3	Southern California Edison Company	Y2K Ready

ATTACHMENT 1-A

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** All safety-related systems are Y2K ready.

**Table 1 NPP Y2K Readiness Status
as of October 1, 1999***

NPP Name	NPP Licensee	Readiness Status/Date**
Seabrook, Unit 1	North Atlantic Energy Service Corporation	Y2K Ready
Sequoyah Nuclear Plant, Units 1 and 2	Tennessee Valley Authority	Y2K Ready
Shearon Harris Nuclear Power Plant, Unit 1	Carolina Power and Light Company	Y2K Ready
South Texas Project Electric Generating Station, Units 1 and 2	South Texas Project Nuclear Operating Company	Y2K Ready
St. Lucie Plant, Units 1 and 2	Florida Power and Light Company	Y2K Ready
Surry Power Station, Units 1 and 2	Virginia Electric and Power Company	Y2K Ready
Susquehanna Steam Electric Station, Units 1 and 2	Pennsylvania Power and Light Company	Y2K Ready
Three Mile Island Nuclear Station, Unit 1	GPU Nuclear Corp.	10/21/99
Turkey Point Plant, Units 3 and 4	Florida Power and Light Company	Y2K Ready
Vermont Yankee Nuclear Power Station	Vermont Yankee Nuclear Power Corporation	Y2K Ready
Virgil C. Summer Nuclear Station, Unit 1	South Carolina Electric & Gas Company	Y2K Ready
Vogtle Electric Generating Plant, Units 1 and 2	Southern Nuclear Operating Company, Inc.	Y2K Ready
Washington Public Power Supply System Nuclear Project No. 2	Washington Public Power Supply System	Y2K Ready
Waterford Steam Electric Station, Unit 3	E-tergy Operations, Inc.	Y2K Ready
Watts Bar Nuclear Plant, Unit 1	Tennessee Valley Authority	Y2K Ready
William R. McGuire Nuclear Station, Units 1 and 2	Duke Energy Corporation	Y2K Ready
Wolf Creek Generating Station	Wolf Creek Nuclear Operating Corporation	Y2K Ready

ATTACHMENT 1-A

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** All safety-related systems are Y2K ready.

**Table 2 NPP Systems and Components Requiring Completion of
Year 2000 Readiness Activities as of October 1, 1999***

NPP	NPP System and Completion Activities	NPP System Type	Completion Date**
Comanche Peak Steam Electric Station, Unit 1	Unit 1 Condensate Polishing Programmable Logic Controller System. This non-safety related computer system controls feedwater treatment processes for water being drawn off the condenser. If this system is left uncorrected and it fails because of a Y2K-related failure, this system may be bypassed. The Unit 1 modification is similar to the successful modification at Unit 2. Modification of this system requires a plant outage.	Operations	11/30/99
Comanche Peak Steam Electric Station, Units 1 and 2	Common Facility - Plant Simulator. The plant training simulator provides operator training in a simulated control room environment identical to the plant control room. If this system is left uncorrected and it fails because of a Y2K-related failure, the plant would not meet its regulatory commitment regarding on-site training facility capabilities, and plant operator training schedules could be affected.	Admin.	10/30/99
Donald C. Cook Nuclear Plant, Units 1 and 2	Meteorological Information and Dispersion Assessment System (MIDAS). This administrative computer system tracks meteorological conditions and calculates radioactivity release dispersion patterns based on existing meteorological data. If this system is left uncorrected and it fails because of a Y2K-related failure, entry into a technical specification action statement would be required. Meteorological information can be manually obtained from the meteorological towers and transmitted to the control room for manual calculations. A design upgrade is in progress to install new computer hardware and software that is Y2K ready.	Admin.	10/30/99

* The status of this table will be updated in the next report.
** All safety-related systems are Y2K ready.

Table 2 NPP Systems and Components Requiring Completion of Year 2000 Readiness Activities as of October 1, 1999*

NPP	NPP System and Completion Activities	NPP System Type	Completion Date**
Hope Creek Nuclear Station, Unit 1	<p><u>Plant Training Simulator.</u> This system provides operator training in a simulated control room environment identical to the plant control room. If this system is left uncorrected and it fails because of a Y2K-related failure, the plant would not meet its regulatory commitment regarding on site training facility capabilities, and plant operator training schedules could be affected. The licensee is upgrading the plant simulator with the same software being used to upgrade the SPDS.</p> <p><u>Emergency Response Data System (ERDS).</u> This PC-based system sends emergency response data information to the NRC and local authorities. If this system is left uncorrected and it fails because of a Y2K-related failure, the licensee would report information using existing plant emergency operating procedures. The licensee is waiting for a replacement engineer workstation to be delivered.</p>	Admin.	10/29/99
Joseph M. Farley Nuclear Plant, Unit 2	<p><u>Unit 2 Turbine Digital Electrohydraulic Controller.</u> This system controls steam flow to the plant main turbine, and provides turbine overspeed protection. If this system is left uncorrected and it fails because of a Y2K-related failure, the plant could not control turbine speed, which could affect electrical power generation. Contingency plans have been developed to mitigate the impact of Y2K-related events at key rollover dates. This system was successfully installed on Unit 1 and was tested for Y2K dates. Remediation of this system is scheduled for a plant refueling outage from October 16 to December 16, 1999.</p>	Operations	12/16/99

* The status of this table will be updated in the next report.

** All safety-related systems are Y2K ready.

**Table 2 NPI Systems and Components Requiring Completion of
Year 2000 Readiness Activities as of October 1, 1999***

NPP	NPP System and Completion Activities	NPP System Type	Completion Date**
Peach Bottom Atomic Power Station, Unit 3	Digital Feedwater System. This non-safety-related system controls feedwater flow rate into the reactor vessel, and is required for plant operation. The digital feedwater system to be installed in Unit 3 is identical to the Peach Bottom Unit 2 system, which has been installed, tested, and is operational. The hardware and software have been developed, and are on-site, ready for installation. A planned outage for installing this system is currently scheduled.	Operations	10/31/99
	Turbine Vibration Monitor. This system monitors reactor feedwater pump turbine and the main turbine system: operation and trips these turbines when excessive vibration is detected. If this system is left uncorrected and it fails because of a Y2K-related failure, it will not result in a spurious pump turbine trip or a main turbine trip. These two trips are for equipment protection only. An identical computer system has been performed on Peach Bottom Unit 2. The Unit 3 work will be performed during the next outage.	Operations	
	3D Monicore. This system monitors reactor operation processes and calculates reactor thermal power operating limits. If this system is left uncorrected and it fails because of a Y2K-related failure, the plant operators would calculate thermal operating limits manually. The Unit 3 work will be performed during the next outage.	Operations	

* The status of this table will be updated in the next report.

** All safety-related systems are Y2K ready.

**Table 2 NPP Systems and Components Requiring Completion of
Year 2000 Readiness Activities as of October 1, 1999***

NPP	NPP System and Completion Activities	NPP System Type	Completion Date**
Salem Nuclear Generating Station, Unit 1	<p><u>Advanced Digital Feedwater System.</u> This non-safety-related system controls feedwater flow rate into the steam generators, and is required for plant operation. The system is identical to the Salem Unit 2 system, which has been installed, tested, and is operational. The only part of this system affected by Y2K-related issues is an engineering workstation, which provides the human interface to the feedwater system. If this system is left uncorrected and the workstation fails because of a Y2K-related failure, the operators could adjust feedwater flow rate manually using existing control room instrumentation and controls. This upgrade has been performed on Salem Unit 2 and is scheduled for installation during the Unit 1 refueling outage.</p> <p><u>Overhead Annunciators.</u> These components provide primary and intermediate notifications of plant equipment status and plant operating status information in the main control room. The overhead annunciators are referenced in the plant emergency operating procedures as part of the instructions for confirming plant component status. If the annunciators are left uncorrected and it fails because of a Y2K-related failure, plant equipment status would be monitored manually. Replacement of this system is outage-dependent. This upgrade has been performed on Salem Unit 2 and a similar upgrade is scheduled for the Unit 1 refueling outage.</p>	Operations	11/6/99

* The status of this table will be updated in the next report.

** All safety-related systems are Y2K ready.

**Table 2 NPP Systems and Components Requiring Completion of
Year 2000 Readiness Activities as of October 1, 1999***

NPP	NPP System and Completion Activities	NPP System Type	Completion Date**
Salem Nuclear Generating Station, Unit 1 (cont)	Plant Computer Monitoring and Alarm System. This system monitors and displays plant data for reactor operations. If this system is left uncorrected and it fails because of a Y2K-related failure, the operators would obtain needed plant information from the normal plant indications. This system is needed for operations when the reactor core coolant level is lowered to support mid-loop operations (a special refueling outage maintenance procedure for steam generator maintenance). There are no regulatory requirements for this system while the plant is at full power. This upgrade must be performed while the plant is in an outage. This upgrade has been performed on Salem Unit 2 and a similar upgrade is scheduled for the Unit 1 refueling outage.	Operations	11/6/99
Salem Nuclear Generating Station, Units 1 and 2	Plant Training Simulator. The plant training simulator provides operator training in a simulated control room environment identical to the plant control room. If this system is left uncorrected and it fails because of a Y2K-related failure, the plant would not meet its regulatory commitment regarding on site training facility capabilities, and plant operator training schedules could be affected. The licensee is upgrading the plant simulator with the same software being used to upgrade the SPDS. Emergency Response Data System (ERDS). This PC-based system sends emergency response data information to the NRC and local authorities. If this system is left uncorrected and it fails because of a Y2K-related failure, the licensee would report information using existing plant emergency operating procedures. The licensee is waiting for a replacement engineer workstation to be delivered.	Admin.	10/29/99

ATTACHMENT 1-B

* The status of this table will be updated in the next report.

** All safety-related systems are Y2K ready.

**Table 2 NPP Systems and Components Requiring Completion of
Year 2000 Readiness Activities as of October 1, 1999***

NPP	NPP System and Completion Activities [†]	NPP System Type	Completion Date**
Three Mile Island Nuclear Station, Unit 1	Digital Turbine Control System. This system controls steam flow to the plant main turbine. If this system is left uncorrected and it fails because of a Y2K-related failure, the plant could not control turbine speed, which could affect electrical power generation. Contingency plans have been developed to mitigate the impact of Y2K-related events at key rollover dates. A replica simulation of the digital turbine control system was configured and tested in the designer/supplier's shop to demonstrate the system is Y2K ready. REMAACS/CISCO. This system manages personnel radiation exposures and controls access to radiologically controlled areas. If this system is left uncorrected and it fails because of a Y2K-related failure, control of radiation exposure and access would be tracked manually.	Operations Admin.	10/21/99

* The status of this table will be updated in the next report.

** All safety-related systems are Y2K ready.

Table 3 Fuel Fabrication and Gaseous Diffusion Plant Systems and Components Requiring Completion of Year 2000 Readiness Activities as of October 1, 1999

Site	Is The Site Y2K Ready	Will Site be Operating During Y2K Transition?	Systems That Need to be Made Y2K Ready	When Will Site be Y2K Ready?
AlliedSignal ¹	Yes	No	N/A	07/01/99
BWX Technologies	No	No	Badging and access systems Nuclear Criticality Safety Analysis Server	11/01/99
Combustion Engineering-Hematite	Yes	Unknown	N/A	07/01/99
Framatome Cogema Fuels	Yes	No	N/A	07/01/99
General Electric-Wilmington	Yes	No	N/A	09/01/99
Nuclear Fuel Services	No	Unknown	Nuclear Material Management and Safeguards System Bioassay analysis software	11/01/99
Siemens Power Corporation	No	Unknown	Inventory Control and Maintenance Tracking System Material Control and Accounting System Primary Process Control System for the Dry Conversion Process	11/01/99
United States Enrichment Corporation	Yes, for both GDPS	Yes, for both GDPS	N/A	07/01/99
Westinghouse Electric Company	No	No	Chemical Area Manufacturing Processing System Westinghouse Accountability, Tracking, and Traceability System	11/01/99

¹ Allied Signal responded that they would be Y2K Compliant by 12/31/99; however in a telephone conversation they indicated that they were Y2K Ready by July 1, 1999. A letter dated 8/16/99 confirmed that Allied Signal was Y2K ready by 8/2/99.

Amplifying Notes:

- (1) NRC inspected the Y2K status at the facilities in 1997 and 1998, in conjunction with other safety inspections
- (2) NRC conducted follow-up Y2K inspections at the Portsmouth GDP in August 1999 and at the Paducah GDP in September 1999
- (3) NRC will have cognizant staff in the Operations Center to respond to the facilities during the Y2K transition on December 21, 1999
- (4) NRC will have a resident inspector at each GDP during the Y2K transition on December 31, 1999
- (5) NRC will have cognizant staff in the RIV IRC to respond to the facilities during the Y2K transition on December 31, 1999

COVER SHEET FOR CORRESPONDENCE

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