

STATEMENT SUBMITTED
BY THE
UNITED STATES NUCLEAR REGULATORY COMMISSION
TO THE
SENATE ENERGY AND NATURAL RESOURCES COMMITTEE

CONCERNING
YEAR 2000 READINESS
OF NUCLEAR POWER PLANTS

SUBMITTED BY
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U.S. NUCLEAR REGULATORY COMMISSION
TESTIMONY ON YEAR 2000 READINESS

Introduction

Mr. Chairman, members of the Committee, I am pleased to submit this testimony on behalf of the Commission regarding the Year 2000 readiness of the U.S. nuclear industry and the NRC's internal Year 2000 readiness preparations. Based on our review of responses from the nuclear power industry concerning Year 2000 readiness, our independent inspection efforts at all 103 units, and our ongoing regulatory oversight activities, we conclude that the Year 2000 problem will not adversely affect the continued safe operation of U.S. nuclear power plants.

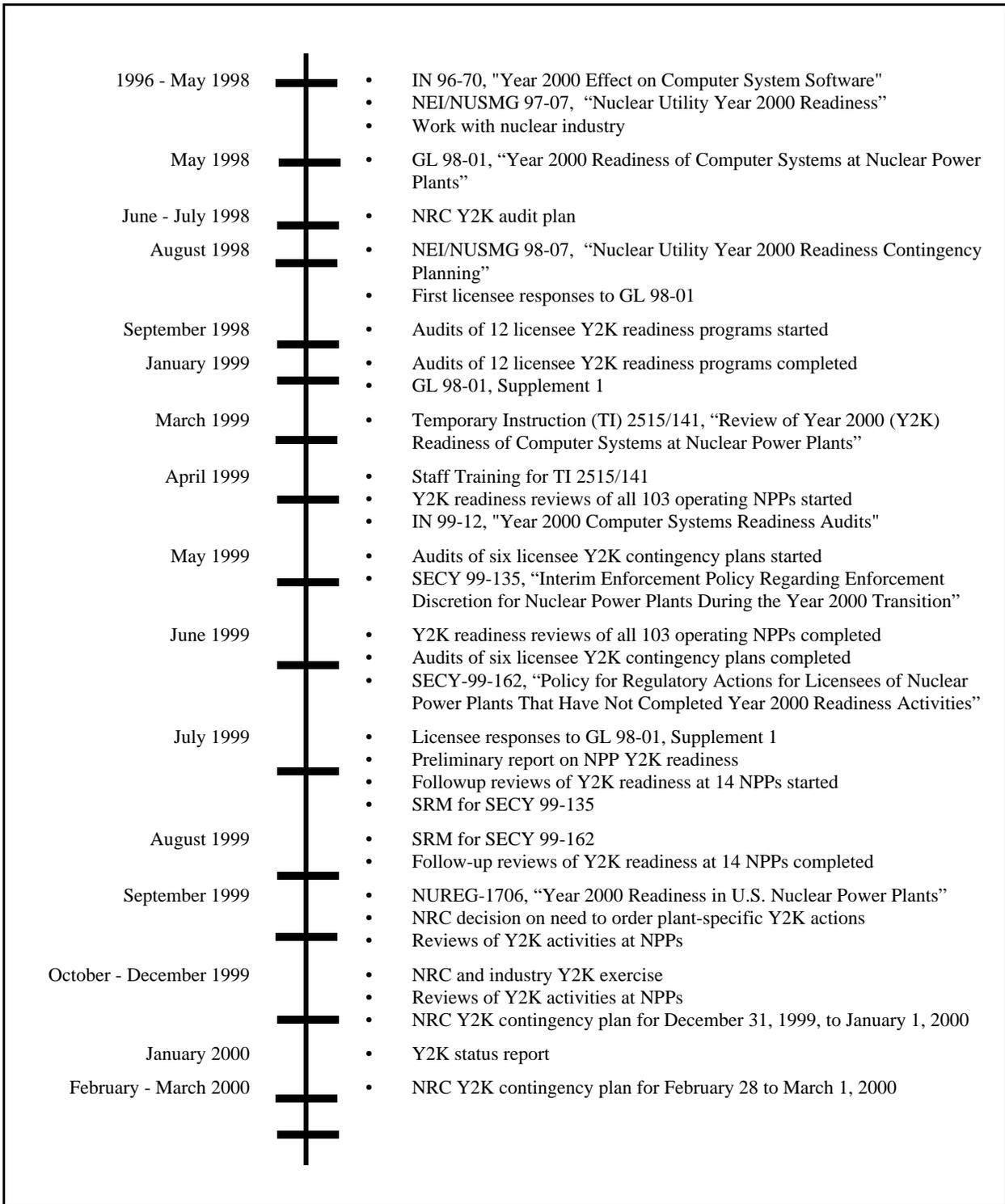
The Y2K problem has presented the NRC with a unique challenge, because NRC regulatory oversight and authority does not extend to the U.S. offsite electrical grid system. Nonetheless, we recognize the national importance of a broader focus that helps to ensure that potential concerns with electrical grid reliability are identified and resolved. The NRC supports the efforts of the President's Council on Year 2000 Conversion. As members of the Energy/Electric Power Sector Working Group, we understand the importance not only of maintaining nuclear power plant safety, but of enhancing safe grid operation in the face of the Y2K problem as well.

NRC Actions With Reactor Licensees

In 1996, the NRC began to evaluate the impact of the Year 2000 (Y2K) problem on U.S. nuclear power plants. To ensure that senior level management at operating U.S. nuclear facilities was aware of the issues related to Y2K, the NRC issued Information Notice (IN) 96-70, "Year 2000 Effect on Computer System Software," on December 24, 1996. This notice described the potential problems that nuclear facility computer systems and software might encounter during the transition to the next century. All U.S. nuclear power plants, fuel cycle facilities, and other materials licensees were provided with copies of this document.

Since then (as depicted in the following time line), the NRC has been working with nuclear industry organizations and licensees to address issues related to transition into the next century.

TIMELINE OF SIGNIFICANT NRC Y2K REGULATORY ACTIVITIES



In 1997, the Nuclear Energy Institute (NEI) agreed to take the lead in developing industry-wide guidance for addressing the Y2K problem at nuclear power reactors. In November 1997, NEI issued a guidance document to all U.S. nuclear power plant licensees, entitled "Nuclear Utility Year 2000 Readiness" (NEI/NUSMG 97-07). This document provides a step-by-step method to identify, test, and repair potential Y2K computer problems and contains detailed procedures and checklists for resolving Y2K issues, based on the best utility practices available. The NRC subsequently accepted this guidance as an appropriate program for nuclear power plant Y2K readiness.

NEI/NUSMG 97-07 contains examples of test specifications, test strategies and test development guidelines for Y2K testing. These guidelines are used by licensees in preparing plant-specific Y2K test procedures for assessing both embedded systems and application software. NRC staff audits of licensee Y2K readiness programs reviewed Y2K testing methodologies, test procedures and their implementation. Where possible, the audit team witnessed the performance of Y2K testing.

In Generic Letter 98-01, issued in May 1998, the NRC accepted the NEI/NUSMG 97-07 guidance as an appropriate program for nuclear power plant Y2K readiness. GL 98-01 requested written responses from each operating U.S. nuclear power plant licensee, to confirm that the Y2K problem was being addressed effectively. All licensees initially responded in August 1998, stating that they had adopted plant-specific programs intended to make the plants "Y2K Ready"¹ by July 1, 1999. GL 98-01 also required written confirmation of Y2K readiness no later than July 1, 1999, or, for licensees not Y2K ready by that date, a status report and schedule for the remaining work needed to ensure timely Y2K readiness.

On January 14, 1999, the NRC issued Supplement 1 to GL 98-01, providing an alternative to the response required by GL 98-01. The alternate response, also due by July 1, 1999, was to voluntarily include a broader spectrum of information on the overall Y2K readiness of the plant, including those systems necessary for continued plant operation that are not covered by the terms and conditions of the license and NRC regulations. By July 1, 1999, all licensees of operating nuclear plants had responded to the request in GL 98-01, Supplement 1. A summary of the reports was posted on the NRC external web site at <http://www.nrc.gov/NRC/Y2K/plantstatus.html>.

¹ A computer system or application is defined as "Y2K Ready" when it has been found suitable for continued use into the Year 2000, even if it has not been made fully Y2K Compliant ("Y2K Ready" systems will continue to function correctly). "Y2K Compliant" means that the computer systems or applications will accurately process date/time (including but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, the years 1999 and 2000, and leap-year calculations.

At this time, we are not aware of any Y2K problems in nuclear power plant systems that directly impact actuation of safety functions. The majority of commercial nuclear power plants have protection systems that are analog rather than digital or software-based, and thus are not impacted by the Y2K problem. Errors such as incorrect dates in print-outs, logs or displays have been identified and corrected by licensees in some safety-related devices, but these errors have not affected the functions performed by the devices or systems. Most Y2K issues are in non-safety systems such as security systems and plant monitoring systems which support day-to-day plant operation but have no functions necessary for reactor safety. These systems are being addressed in the licensee Y2K readiness programs, in a manner consistent with the industry guidance and GL 98-01 schedule.

As you know, in ensuring public health and safety across the full range of our regulatory programs, we rely on both our own independent oversight and the recognized ability of our licensees to complete critical self-assessments and to initiate appropriate corrective actions. In the Y2K readiness arena, in addition to the comprehensive industry efforts, we have recognized the importance of providing an appropriate level of NRC oversight of nuclear power plant Y2K preparations.

One such NRC initiative was to audit, on a sample basis, the plant-specific Y2K programs at 12 nuclear power plant sites. The audit sample included a variety of plants of different ages, types, and locations, to provide an effective evaluation of Y2K readiness program implementation. These audits were completed in January 1999. Based on the results, we concluded that licensees were taking effective actions to achieve Y2K readiness by the GL 98-01 target date. We did not identify any issues that would preclude licensees from achieving Y2K readiness. These findings were consistent with those recently reported by the Department of Energy in the July 1999 report prepared by the North American Electric Reliability Council on the status of Y2K readiness of the electric power grid.

NRC audit results were reported on the NRC web site and discussed at industry workshops. In April 1999, we communicated a summary of audit observations and lessons learned through NRC Information Notice 99-12. The audit results indicated several common factors among effective programs. We found that properly following the industry guidance documents resulted in an overall functional and straightforward Y2K readiness program. Effective Y2K programs have generally received appropriate management attention and support, and we continue to believe that active management oversight is essential for program effectiveness. We found that central control of Y2K activities, independent peer reviews, and aggressive quality assurance involvement promoted

consistency across program activities and products. In addition, we recognized the helpfulness to licensees of sharing information via owners groups and utility alliances.

In NRC Generic Letter 98-01, we also noted that despite the best of efforts to achieve Y2K readiness, unanticipated problems (particularly external events) could disrupt continued plant operation, and contingency plans were needed to deal with these potential unanticipated Y2K problems. To address this need, in August 1998, NEI issued another guidance document, "Nuclear Utility Year 2000 Readiness Contingency Planning" (NEI/NUSMG 98-07). This guidance, which was found acceptable by the staff, has been incorporated into Y2K readiness programs by all U.S. nuclear power plant licensees. Plant-specific Y2K contingency plans were also developed.

The audit results indicated that, in general, licensees began to develop contingency plans late in the Y2K preparation process. Consequently, we concluded that six additional reviews were needed, focused differently and involving licensees other than the previous 12, to determine the effectiveness of licensee contingency planning. These reviews, which were completed in June 1999, focused on the licensees' approach to addressing both internal and external Y2K risks to safe plant operations based on the guidance in NEI/NUSMG 98-07 and included that licensee contingency planning progress was acceptable. The results of these additional audits were also placed on the NRC's Y2K web site.

To gain additional confidence that nuclear power plant licensees were effectively implementing Y2K readiness programs, NRC regional staff reviewed plant-specific Y2K program implementation activities at all 103 NRC-licensed commercial nuclear power plant facilities. These inspection activities were completed between April and June 1999 and provided an independent assessment of licensee Y2K readiness programs. The results of these inspections were used as a benchmark to compare with licensee responses to Generic Letter 98-01 Supplement 1, and to provide an informed approach for determining any further regulatory responses.

Current Status of Nuclear Power Industry Year 2000 Readiness

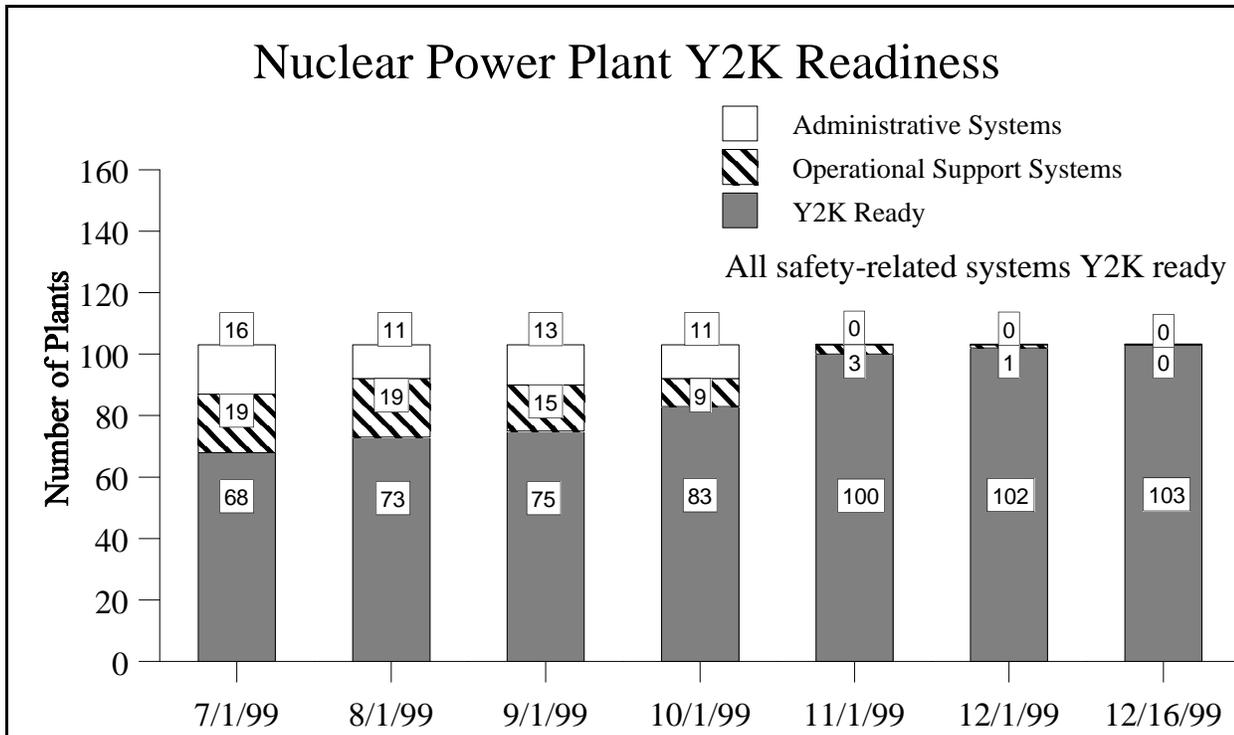
The NRC has received reports from all 103 operating nuclear power plants. Regarding our highest priority—the uninterrupted performance of plant safety systems—all nuclear power plants report that their efforts are complete, and that no remaining Y2K-related problems exist that could directly affect the performance of safety systems or the capability for safe shutdown. As of September 1, seventy-five of these plants had also completed the next order of priority stating that all of their computer systems that support plant operation are "Y2K ready and that contingency plans were in place." The remaining 28

plants reported that, to be fully Y2K ready, they still have additional work to complete on a few non-safety computer systems or devices. For about one half of those 28 plants, some work remains on systems that could affect power operations. Other plants must perform remediation on plant monitoring and administrative systems. Typically, the remaining Y2K work is waiting on a scheduled plant outage in the fall, or delayed while awaiting the delivery of a replacement component. In each case, the licensees with Y2K work remaining have provided satisfactory schedules for completing that work.

During our integrated review of the GL 98-01 responses and the results of our independent inspection activities, we did not identify any significant inconsistencies or issues that required additional regulatory action. However, since we were not able to complete our assessment checklist at 14 plants, in large part due to the state of readiness and program implementation of some of our licensees at the time of the review, we conducted follow-up reviews at those 14 plants to provide additional confidence that implementation of their readiness activities is consistent with NRC-endorsed industry guidance.

The plants that have Y2K work remaining are continuing to progress toward Y2K readiness. As of September 1, 1999, 7 more plants have reported that they are Y2K ready. As a result, as of September 1, only 28 of 103 plants had Y2K work remaining. As depicted in the chart that follows, we expect this trend to continue. Based on the information available today, by November 1, 1999, only three plants will have Y2K work remaining. The three remaining plants are Comanche Peak (Unit 1), Farley (Unit 2), and Salem (Unit 1). The Y2K work remaining for all three plants is on non-safety plant support systems and an outage is required to complete the Y2K activities. The outages have been scheduled, and each of these licensees have experience on sister units in completing the most significant Y2K remediation activities.

In early September NRC published NUREG-1706, "Year 2000 Readiness in U.S. Nuclear Power Plants," providing detailed information on plant readiness, remaining work to be done, and staff activities. Copies have been provided to the Committee and been placed on the NRC Y2K Website.



The NRC will continue to monitor progress at those plants that, as of July 1, 1999, had remaining work to be performed and will independently verify completion of these items, including Y2K contingency plans. Additionally, by September 30, 1999, we will be sending letters to the 20 licensees with remaining work to confirm the completion schedules. At this time, we believe that all licensees will be able to operate their plants safely during the transition from 1999 to 2000, and we do not anticipate the need for the NRC to direct any plant-specific action.

NRC Actions With Materials Licensees and Fuel Cycle Facilities

To alert licensees and certificate holders to the Y2K problem, the NRC has issued four Information Notices to all materials licensees and fuel cycle facilities. An additional notice, which forwarded a copy of an FDA letter to medical device manufacturers, was sent to medical licensees only. These notices described potential Y2K problems, encouraged development of a Y2K readiness program (e.g., inventory, testing, remediation), alerted licensees and certificate holders to systems that were known to be or may be affected by Y2K problems, provided updates of the NRC's Y2K activities, provided sources of Y2K information, and encouraged development of Y2K contingency plans.

The NRC has placed on its Y2K web site all Y2K related notices and Generic Letters that were sent to materials licensees and fuel cycle facilities. The site provides updates on the NRC's Y2K activities and links to sites that have Y2K information that may be useful to our licensees and facilities.

In order to assess the potential safety significance of Y2K information problems at materials licensees and fuel cycle facilities, the Office of Nuclear Material Safety and Safeguards formed a Y2K Team which visited a cross-section of materials licensees and fuel cycle facilities and conducted Y2K interviews. Each licensee or facility visited by the team indicated that they were aware of the Y2K issue and were in various stages of implementing their Y2K readiness programs. The NRC was assured by licensees and facilities that health and safety at materials licensees and fuel cycle facilities would not be compromised due to Y2K problems.

Based on responses to inquiries made during routine inspections, the NRC has determined that Y2K problems have been identified in some materials licensee equipment and systems (e.g., treatment planning systems, dose calibrators, and nuclear medicine dose/operational management systems). The NRC has informed the FDA of applicable systems that have been found to have Y2K problems. Upgrades for these systems are available from manufacturers. NRC materials inspectors reported that licensees were aware of these upgrades, and that the licensees intended to complete the upgrades before the end of 1999. Overall, few materials licensees use processes that are computer controlled. As a result, the NRC focused on the Y2K vulnerability of any commercially available devices (medical and industrial), and ensured that materials licensees evaluated self-developed systems, commercial-off-the-shelf software and hardware, and safety systems. The NRC has not identified any generic Y2K issue for NRC regulated material used by materials licensees.

The NRC inspected the ten major fuel cycle facilities between September 1997 and October 1998 to assess the status of the facilities' Y2K programs and other safety matters. These inspections indicated that the facilities were adequately addressing Y2K issues.

To confirm that major fuel cycle facilities were effectively addressing the Y2K issue, the NRC issued Generic Letter (GL) 98-03, "NMSS Licensees' and Certificate Holders' Year 2000 Readiness Programs." As with GL 98-01 for nuclear power plants, GL 98-03 required that major fuel cycle facilities submit written responses regarding their facility-specific Y2K readiness program. All ten facilities provided the required response, with six facilities Y2K ready by September 1, 1999. The remaining facilities provided a status report and schedule for remaining work to become Y2K ready well

before December 31, 1999. No risk-significant Y2K concerns were identified for fuel cycle facilities. The NRC conducted a follow-up Y2K inspection at the Portsmouth Gaseous Diffusion Plant (PORTS GDP) in August 1999. The PORTS GDP Y2K program had ensured that the actions taken were effective in resolving the Y2K issue and had adequately addressed management planning, implementation, quality assurance, regulatory considerations, and documentation.

The NRC will continue to make Y2K inquiries during inspections. We will continue to monitor list servers, manufacturer web sites, news media, Congressional reports, and the President's Y2K Council reports for Y2K issues that may affect materials licensees and fuel cycle facilities. If Y2K issues that will affect materials licensees and fuel cycle facilities are discovered, the information will be forwarded to licensees and placed on the NRC Y2K web site. The NRC will conduct a follow-up Y2K inspection at the Paducah GDP in September 1999. NRC will also confirm that the remaining fuel cycle facilities have completed Y2K readiness actions prior to the transition.

NRC Internal Year 2000 Readiness Preparations

As of February 5, 1999, all of NRC's systems have been examined and, as needed, fixed or replaced with regard to the Y2K problem. This work was accomplished more than a month ahead of OMB's established milestone and well under budget.

As part of this effort, we analyzed and identified embedded chip systems at the NRC and made necessary upgrades or replacements to make them Y2K compliant. Also, we worked with our data exchange partners and repaired, validated, and implemented those systems requiring changes.

We have completed all work necessary to ensure that 100 percent of our telecommunications infrastructure is compliant or not affected by Y2K issues. We have contacted our telecommunications service providers, and all have responded that they are Y2K compliant. The one mission-critical telecommunications system that is directly linked to operating nuclear power plants is our Emergency Response Data System (ERDS). This application performs the communication and data transmission functions that provide near real-time data to NRC incident response personnel during declared emergencies.

Since September 1998, the NRC has convened an agency-wide task force to develop a contingency plan for dealing with Y2K problems that could potentially affect one or more of our licensees. A draft of the NRC Y2K contingency plan was made available for public comment in December 1998.

Comments received from the public and from industry were considered and incorporated into the final Y2K contingency plan, which the Commission approved in June 1999. The plan includes an assessment of potential Y2K issues for all types of NRC licensees, with particular emphasis on external interfaces, such as the electric grid and telecommunications infrastructures. This assessment was used as the basis for developing a set of reasonably conservative planning assumptions for the contingency plan.

The NRC's Y2K Contingency Plan describes steps the staff will take in the unlikely event that a Y2K problem would result in a safety concern at a nuclear power plant or gaseous diffusion plant. Beginning at noon on New Year's Eve, a team of specialists will staff the NRC Headquarters Operations Center to monitor, evaluate, and communicate any Y2K problems at foreign reactors that have potential safety implications for domestic reactor licensees. This team will also be available to respond to any potential Y2K problems caused by embedded chips that have a date stamp based on an earlier time zone. At 10:00 p.m. the Headquarters Operations Center will be staffed by a multi-disciplinary Y2K response team, headed by a senior NRC manager.

In addition to Headquarters staff, the Y2K response team will include inspectors stationed at each nuclear power plant and gaseous diffusion plant site and a team of specialists at the incident response centers in each region. The NRC regional office in Arlington, Texas, will be prepared to assume the functions of Headquarters if an unanticipated Y2K problem results in the unavailability of the Headquarters Operations Center. In addition, the inspectors on site as well as the regional incident response centers and the Headquarters Operations Center will be equipped with satellite phones for use in the unlikely event that there is a major problem with the telephone network. The NRC is also one of the Federal agencies on the National Telecommunications Coordinating Network—another back-up communication system that could be used if there were a major telephone network problem.

Yet another aspect of the NRC's Contingency Plan involves the sharing of information. The NRC is developing a Y2K Early Warning System to facilitate the sharing of information. We are working with our international partners to invite countries with major nuclear power programs to participate in this system. So far, about 25 countries, including Japan, South Korea, Taiwan, several Western European countries, Canada, and Mexico have committed to using this system. In addition, the NRC is working with the Department of Energy to encourage the participation of former Soviet Union countries, like Russia and Ukraine. Each country will enter into this system relevant information on their nuclear power plants. The information will address whether plant operations have been affected and whether

there are any infrastructure problems, such as grid stability concerns or a loss of telecommunications. The NRC will share this information with its nuclear power plant licensees and with DOE and the State Department.

The NRC has coordinated and communicated our Y2K Contingency Plan with our Federal partners, including the Federal Emergency Management Agency (FEMA), the Department of Energy, the Environmental Protection Agency, the National Communication System, the Federal Communications Commission, and the President's Council on the Year 2000 Conversion. We have supported FEMA regional workshops on Y2K, and we have participated in the FEMA Catastrophic Disaster Response Group and Emergency Services Sector meetings on Y2K. In May, we participated in the Federal Response Plan Tabletop exercise on Y2K.

We also recently conducted our own Y2K Tabletop exercise involving NRC, Baltimore Gas and Electric, the State of Maryland and the counties surrounding the Calvert Cliffs nuclear power plant. The exercise tested the NRC Y2K contingency plan procedures against a number of scenarios, including loss of power and loss of telecommunications. The exercise confirmed that each participant had put a considerable amount of thought into preparing for potential problems during the Y2K transition. Although no major Y2K contingency plan inconsistencies were identified, there were a number of valuable observations and lessons from this tabletop. We have put a synopsis of this exercise on our Y2K web site, so that the information can be shared with other stakeholders.

A full scale exercise is planned for October 15th. This exercise will test all aspects of the NRC Y2K contingency plan, including the use of back-up satellite communication systems and the sharing of information using the Y2K early warning system. Several utilities are working together to simulate Y2K problems to which the NRC must respond. We expect this exercise to be more challenging than the actual Y2K transition.

On the Federal level, the coordination and cooperation between Federal agencies on the Y2K issue are a foundation upon which the Federal government is building for future cooperative efforts. Much of the effort being spent on the Y2K problem will help Federal agencies better respond to emerging unconventional threats to the United States, such as terrorist acts. For example, the National Communication System, in partnership with the telecommunications industry, has established a telecommunications network used for communicating national security and emergency preparedness information that is independent of the public telephone network. Although the Y2K problem was the

impetus for enhancing this network, it will become permanent following the Y2K transition. The President's Council on the Y2K Conversion also has established a command center that will collect and disseminate information during the Y2K transition. After the Y2K transition, this center will be turned over to the Critical Infrastructure Assurance Office to support our national response to emergent threats. NRC has purchased satellite phones for all of our nuclear power plant resident inspector locations as part of our Y2K contingency plan, and many utilities are also investing in upgraded communication systems. Our new satellite phones have already been put to use in our response to the recent hurricanes. These are just a few examples of how the Y2K effort will pay off long after the Year 2000 transition.

This broadened thinking associated with the Y2K problem has assisted us in developing an NRC continuity of operations (COOP) plan. The NRC COOP plan further identifies those requirements necessary to support the primary function, such as emergency communications, establishing chain-of-command, and delegation of authority. While the details of the Y2K and COOP plans differ, the agency's responses will be consistent.

The Commission has recognized that continued safe operation of nuclear power plants during the transition to the Year 2000 may be important to help maintain reliable electrical power supplies. As such, as a companion to the NRC Y2K contingency plan, the Commission has expanded its enforcement discretion policy to allow for rapid decision-making under circumstances where an emergent, unanticipated Y2K problem might result in licensee non-compliance, but would not affect continued safe plant operation. The NRC has a policy of exercising its enforcement discretion with regard to temporary non-compliance of license conditions when it can be demonstrated that it is in the interest of safety. The Y2K transition enforcement policy builds on the existing enforcement discretion policy and continues to ensure public health and safety while appropriately considering some of the unique aspects associated with the Y2K transition.

Our Executive Director for Operations has instructed the staff to consider the impacts of imposing requirements that may affect licensee resources working on the Y2K issues. If a proposed new requirement may affect licensee Y2K resources, then the staff has been directed to consider alternative approaches or delay implementation of the requirement until after the Y2K transition. We believe that this guidance has been effective and, since mid-1998, proposed new regulatory actions have not adversely impacted our licensees' ability to address the Y2K problem.

We consider public awareness a vital aspect of our Y2K program and have kept the public informed about our Y2K activities through numerous media releases, responses to questions by telephone, electronic mail, and letters, interviews with reporters, participation at workshops, public meetings, and maintenance of current Y2K information on our web site.

We have seen first-hand the benefit of the Year 2000 Readiness and Information Disclosure Act. This Act has facilitated the flow of information from our licensees and the nuclear industry and allowed us to gain a broader assessment of facility Y2K readiness. Similarly, we understand that the Act has facilitated and improved the flow of information between our licensees and their vendors to allow for more detailed and useful information for assessing Y2K readiness of equipment and components.

International Activities

We are involved in promoting awareness of the Y2K issues internationally. For consideration at the 42nd International Atomic Energy Agency (IAEA) General Conference in September 1998, the NRC took the lead in drafting a resolution on Y2K as it applies to the safety of nuclear power plants, fuel cycle facilities, and other enterprises using radioactive materials. The resolution was adopted by the IAEA Member States and urged, among other things, that: (1) member States submit information to the IAEA on activities underway to inventory and remediate Y2K problems at their nuclear facilities; and (2) the IAEA act as a central coordination point in disseminating information about Member State Y2K activities.

Since the General Conference, the NRC has worked with the IAEA to formulate a Y2K program that would address nuclear safety aspects of the Y2K problem. We requested that State Department funds be allocated, under the FY98 Voluntary Contribution, to fund a Cost-Free Expert (an individual who would work at the IAEA for one year at no cost to the IAEA) to work specifically on Y2K nuclear safety matters in the Department of Nuclear Safety. The Cost-Free Expert assumed his post in December 1998. Since that time, the Department of Nuclear Safety has convened several meetings for Member States to discuss their Y2K-related activities at nuclear power plants, medical and fuel cycle facilities. The IAEA convened a meeting in July, attended by NRC staff, to review and evaluate results of assessments and remediation measures at nuclear power plants in Member States. Member States have also submitted answers to an IAEA Y2K Questionnaire on assessment and remediation activities at their plants which have been posted on the IAEA web site.

In the nuclear materials arena, NRC staff has participated in an International Workshop entitled, "Safety Measures to Address the Year 2000 Issue at Medical Facilities which Use Radiation Generators and Radioactive Materials," that was organized by the International Atomic Energy Agency and the World Health Organization. Presentations on Y2K activities were provided by several member states. A presentation on the NRC's Y2K activities was given and copies of Y2K Information Notices were provided to attendees. After the presentations, the workshop participants drafted a Y2K document. The document provides more detailed information and supplements existing IAEA guidance dated March 1999. The guidance documents will be sent to Member States, professional societies, and, if possible, directly to medical institutions.

The NRC's Office of International Programs has also been working with its foreign bilateral nuclear safety cooperation partners on raising awareness of the Y2K problem and offering assistance within its means. The most notable development in this area has been the creation of the Y2K Early Warning System, discussed earlier, which will allow all participating countries to rapidly share Y2K related information on nuclear facility and grid performance.

Summary

The Commission has been active in addressing the Y2K problem with our licensees and continues to work, both nationally and internationally, to promote awareness and provide assistance in addressing the Y2K problem. We recognize that despite efforts of the industry and the NRC, unexpected events could occur; consequently contingency plans have been established.

With that said, it is of paramount importance to note that the NRC and the U.S. nuclear power industry are addressing the Y2K computer problem in a comprehensive, thorough and deliberate manner. Licensees for all 103 nuclear power plants have reported that the safety systems are Y2K ready. We expect all nuclear power licensees will complete their remaining Y2K readiness activities before the Y2K transition. The NRC has also conducted independent reviews of Y2K programs at all operating U.S. nuclear power plants. The results of these reviews all indicate that licensees have taken the proper steps to identify and remediate systems that could be affected by the Y2K bug. We will closely monitor the progress of plants that still have some systems left to remediate, but we fully expect that all commercial nuclear power plants will operate safely, as planned and without interruption, through the Y2K transition. Further, we believe that, through Generic Letter 98-01, the sample audits, inspection activities, and other oversight activities, we have established a framework that appropriately ensures

that the Year 2000 problem will not have an adverse impact on the ability of a nuclear power plant to safely operate or safely shut down.

I look forward to working with the Committee, and I welcome your comments and questions.