

January 16, 2001

The Honorable George V. Voinovich, Chairman  
Subcommittee on Clean Air, Wetlands,  
Private Property and Nuclear Safety  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

The Fiscal Year 2001 Energy and Water Development Appropriations Act, House Report 106-693, directed the Nuclear Regulatory Commission (NRC) to continue to provide a monthly report on the status of its licensing and regulatory duties. The initial reporting requirement arose in the Fiscal Year 1999 Energy and Water Development Appropriations Act, Senate Report 105-206. The FY 2000 Energy and Water Development Appropriations Act, House Report 106-253, expanded the scope of the report requirement to include regulatory reform efforts affecting power reactor operations beyond 10 CFR Part 50, particularly NRC efforts to evaluate NRC security regulations. In FY 2000, we also expanded the monthly report to include the status of all license renewal applications that are under active review and other NRC initiatives in developing implementation guidance for the license renewal rule. I am pleased to transmit the twenty-fourth report, which covers the month of November (Enclosure 1).

The October report provided information on a number of significant NRC activities, including NRC's assessment that Consolidated Edison Company of New York's (Con Edison) Indian Point 2 facility had multiple "degraded cornerstones" as determined by the Revised Reactor Oversight Process, NRC's final significance determination for a "Red" inspection finding relating to deficiencies in the 1997 Indian Point 2 steam generator inservice examinations, and a status report on a crack located at a weld where a large pipe attaches to the reactor vessel at the South Carolina Electric & Gas Co. (SCE&G) V.C. Summer nuclear power plant. I would like update you on recent activities at both Indian Point 2 and Summer plants since our last report.

As you know, while NRC approval was not required for restart of Indian Point 2, we have been closely monitoring Con Edison's activities. Our inspection activities did not identify any significant conditions that would prevent the plant from meeting its license conditions related to the operability of the plants safety systems. Following successful replacement of all four steam generators, Con Edison restarted the reactor on December 30 and reconnected the unit to the grid on January 3. Even so, because NRC's assessment determined that Indian Point 2 had multiple degraded cornerstones, NRC will continue to conduct additional oversight in problem areas -- including, among other things, design controls and corrective actions.

With regard to the pipe crack at the V.C. Summer plant, on December 20 plant personnel briefed NRC staff on the licensee's initial root cause determination. At this point, the root cause analysis indicates pressurized water stress corrosion cracking (PWSCC). This weld was more susceptible to PWSCC because repairs performed during initial installation induced higher stresses. We continue to closely monitor the licensee's activities relating to the pipe crack analysis and repair. We have issued an Information Notice to all reactor licensees about the crack. We have also established a dedicated website to help keep NRC staff, the public, and other interested parties informed regarding the activities associated with the pipe crack at the Summer nuclear power plant (<http://www.nrc.gov/NRC/REACTOR/SUMMER/index.htm>). We will keep you informed of the licensee's final root cause determination, including any generic implications for other U.S. nuclear power plants.

Since our last report, the Commission and the NRC staff also:

- ! approved an amendment to 10 CFR 50.47 that requires states to consider the use of potassium iodide (KI) as a protective measure for the general public to supplement sheltering and evacuation in the event of a severe nuclear power plant accident. If taken in time, KI blocks the thyroid's uptake of radioactive iodine and thus could help prevent the development of thyroid cancer and other thyroid diseases, especially in children. Reversing an earlier decision, the Commission agreed to provide funding for a supply of KI for a State, or, in some cases, local governments designated by the State to request such funding, that choose to incorporate KI for the general public in their emergency plans. After funding the initial purchases of KI, the Commission may consider extending the program to fund stockpile replenishment, but has made no commitments in this regard.
- ! published in the Federal Register (65 FR 77773) an announcement of the availability of Regulatory Guide 1.187, Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments. In accordance with the publication of the final rule, the revision to 10 CFR 50.59 has an effective date of March 13, 2001, which is 90 days from approval of the regulatory guidance.
- ! determined on December 13 that the performance improvements and plant modifications at the D. C. Cook Nuclear Power Station were sufficient for Unit 1 to resume operations and operate safely. Plant operators restarted the reactor on December 18, and reconnected Unit 1 to the grid on December 21. Cook Unit 2 returned to operations in June 2000. Both units at the plant were shut down in September 1997 as a result of NRC inspection findings which questioned the capability of key plant emergency systems to meet their design requirements. Since then, the utility has completed major reviews of plant safety systems and corrected problems which were identified.
- ! issued, under NRC's Revised Reactor Oversight Program, mid-cycle reviews for all commercial nuclear power plants. Results of these reviews and copies of letters sent to each licensee are available from the NRC Office of Public Affairs and on the NRC web site at: <http://www.nrc.gov/OPA/ppr>.
- ! approved a final rule which amends 10 CFR Part 26, which sets out the Commission's fitness-for-duty requirements. The new rule is designed to ensure compatibility with

changes in the Department of Health and Human Services guidelines, to reduce regulatory burden in some areas, clarify the Commission's original intent of the rule, and improve overall program effectiveness and efficiency. In addition, the rule also granted a December 30, 1993, petition for rulemaking submitted by Virginia Power, by changing the audit frequency of fitness-for-duty programs from one year to three years.

- ! issued on November 9, NRC authorization for the transfer of the Indian Point Unit 3 and James A. FitzPatrick licenses to Entergy. On November 21, the transfer was completed and the conforming amendments were issued.
- ! dispatched a special inspection team on November 7, to the Seabrook nuclear power plant in response to the failure of the "B" emergency diesel generator (EDG) during a 24-hour surveillance test on November 1. The team evaluated the licensee's root cause investigation and corrective actions, the risk significance of the potential common cause failure mechanism, and possible generic implications of the event. Seabrook had been shut down on October 21 for refueling and will remain shut down until the EDG is repaired and the cause of the failures are understood.
- ! issued a proposed rule that would amend the Certificate of Compliance (CoC) for the NAC-UMS spent fuel storage system. The proposed amendment principally involves five changes to the CoC, including allowing the storage of Maine Yankee site specific spent fuel, and damaged or consolidated fuel in a Maine Yankee fuel can.
- ! conducted a public meeting on November 13, with U.S. Enrichment Corporation (USEC) and Department of Energy (DOE) Oak Ridge staff to discuss USEC's planned shutdown of uranium enrichment activities at the Portsmouth Gaseous Diffusion Plant in June 2001, and the regulatory implications of the transfer of the enrichment facilities regulatory oversight from the NRC to the DOE.
- ! issued a license amendment on December 21, 2000, approving Carolina Power & Light Company's (CP&L's) request to expand the capacity for storage of spent nuclear fuel at its Shearon Harris Nuclear Power plant by placing two additional spent fuel pools in service. A contention by the Board of Commissioners of Orange County is still under review by the Atomic Safety and Licensing Board (ASLB). However, since the staff has made a final determination that the amendment for Harris involves no significant hazards considerations, the amendment has been issued and made immediately effective. The amendment is subject to modification or other action that may result from the ASLB's decision on the completion of the adjudicatory proceeding.
- ! conducted a meeting on October 31-November 2, with the Department of Energy (DOE) on the technical issue of saturated zone flow at Yucca Mountain. All subissues with respect to flow in the saturated zone were closed contingent on DOE's development of test plans and documentation of hydrogeologic work done over the last few years. A key agreement was for DOE to acquire hydraulic and tracer test data in the valley fill aquifer south of Yucca Mountain most likely to contain potential releases from the proposed high-level waste repository.

- ! made effective on November 28, 2000, the revised maintenance rule (10 CFR Part 50.65). The key revision to the rule was the new paragraph (a)(4), which requires licensees to assess the increase in risk that may result from proposed maintenance activity and to manage that risk. Previously, pre-maintenance assessments had only been recommended. Paragraph (a)(4) also gives licensees the option of reducing the scope of structures, systems, and components (SSCs) to be considered in the pre-maintenance assessment to those "that a risk-informed evaluation process has shown to be significant to public health and safety." The revised rule also clarifies that the maintenance rule is applicable during all conditions of operation, including normal shutdown operations.
- ! appointed two new members to the Initial Implementation Evaluation Panel (IIEP), which will provide recommendations on how to improve the Revised Reactor Oversight Process after its first year of initial implementation. The new members are Mr. Raymond Shadis and Ms. Mary Ferdig. These appointments were in response to the resignation of a stakeholder member after the first meeting. Mr. Shadis is a representative of the New England Coalition on Nuclear Pollution. Ms. Ferdig is a Ph.D. candidate in the Organization and Development Program at Benedictine University and has been following the development of the Reactor Oversight Process for the past year. She has a grant from the National Science Foundation to explore the interactions among stakeholders involved in the development and implementation of the Reactor Oversight Process. The second IIEP meeting was held on December 11-12, 2000, at the NRC's Region II Office in Atlanta, Georgia. Among various topics discussed at that meeting, the staff heard from invited representatives from the States of Illinois, New Jersey, Pennsylvania, and Vermont their views of the NRC's Revised Reactor Oversight Process.

I have enclosed (Enclosure 2) the update to the Tasking Memorandum which delineates the specific initiatives completed by the agency since August 1998 and future milestones.

Please do not hesitate to contact me if I may provide additional information.

Sincerely,

/RA/

Richard A. Meserve

Enclosures:

1. Monthly Report
2. Tasking Memorandum

cc: Senator Joseph I. Lieberman

January 16, 2001

The Honorable Joe Barton, Chairman  
Subcommittee on Energy and Air Quality  
Committee on Energy and Commerce  
United States House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

The Fiscal Year 2001 Energy and Water Development Appropriations Act, House Report 106-693, directed the Nuclear Regulatory Commission (NRC) to continue to provide a monthly report on the status of its licensing and regulatory duties. The initial reporting requirement arose in the Fiscal Year 1999 Energy and Water Development Appropriations Act, Senate Report 105-206. The FY 2000 Energy and Water Development Appropriations Act, House Report 106-253, expanded the scope of the report requirement to include regulatory reform efforts affecting power reactor operations beyond 10 CFR Part 50, particularly NRC efforts to evaluate NRC security regulations. In FY 2000, we also expanded the monthly report to include the status of all license renewal applications that are under active review and other NRC initiatives in developing implementation guidance for the license renewal rule. I am pleased to transmit the twenty-fourth report, which covers the month of November (Enclosure 1).

The October report provided information on a number of significant NRC activities, including NRC's assessment that Consolidated Edison Company of New York's (Con Edison) Indian Point 2 facility had multiple "degraded cornerstones" as determined by the Revised Reactor Oversight Process, NRC's final significance determination for a "Red" inspection finding relating to deficiencies in the 1997 Indian Point 2 steam generator inservice examinations, and a status report on a crack located at a weld where a large pipe attaches to the reactor vessel at the South Carolina Electric & Gas Co. (SCE&G) V.C. Summer nuclear power plant. I would like update you on recent activities at both Indian Point 2 and Summer plants since our last report.

As you know, while NRC approval was not required for restart of Indian Point 2, we have been closely monitoring Con Edison's activities. Our inspection activities did not identify any significant conditions that would prevent the plant from meeting its license conditions related to the operability of the plants safety systems. Following successful replacement of all four steam generators, Con Edison restarted the reactor on December 30 and reconnected the unit to the grid on January 3. Even so, because NRC's assessment determined that Indian Point 2 had multiple degraded cornerstones, NRC will continue to conduct additional oversight in problem areas -- including, among other things, design controls and corrective actions.

With regard to the pipe crack at the V.C. Summer plant, on December 20 plant personnel briefed NRC staff on the licensee's initial root cause determination. At this point, the root cause analysis indicates pressurized water stress corrosion cracking (PWSCC). This weld

was more susceptible to PWSCC because repairs performed during initial installation induced higher stresses. We continue to closely monitor the licensee's activities relating to the pipe crack analysis and repair. We have issued an Information Notice to all reactor licensees about the crack. We have also established a dedicated website to help keep NRC staff, the public, and other interested parties informed regarding the activities associated with the pipe crack at the Summer nuclear power plant (<http://www.nrc.gov/NRC/REACTOR/SUMMER/index.htm>). We will keep you informed of the licensee's final root cause determination, including any generic implications for other U.S. nuclear power plants.

Since our last report, the Commission and the NRC staff also:

- ! approved an amendment to 10 CFR 50.47 that requires states to consider the use of potassium iodide (KI) as a protective measure for the general public to supplement sheltering and evacuation in the event of a severe nuclear power plant accident. If taken in time, KI blocks the thyroid's uptake of radioactive iodine and thus could help prevent the development of thyroid cancer and other thyroid diseases, especially in children. Reversing an earlier decision, the Commission agreed to provide funding for a supply of KI for a State, or, in some cases, local governments designated by the State to request such funding, that choose to incorporate KI for the general public in their emergency plans. After funding the initial purchases of KI, the Commission may consider extending the program to fund stockpile replenishment, but has made no commitments in this regard.
- ! published in the Federal Register (65 FR 77773) an announcement of the availability of Regulatory Guide 1.187, Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments. In accordance with the publication of the final rule, the revision to 10 CFR 50.59 has an effective date of March 13, 2001, which is 90 days from approval of the regulatory guidance.
- ! determined on December 13 that the performance improvements and plant modifications at the D. C. Cook Nuclear Power Station were sufficient for Unit 1 to resume operations and operate safely. Plant operators restarted the reactor on December 18, and reconnected Unit 1 to the grid on December 21. Cook Unit 2 returned to operations in June 2000. Both units at the plant were shut down in September 1997 as a result of NRC inspection findings which questioned the capability of key plant emergency systems to meet their design requirements. Since then, the utility has completed major reviews of plant safety systems and corrected problems which were identified.
- ! issued, under NRC's Revised Reactor Oversight Program, mid-cycle reviews for all commercial nuclear power plants. Results of these reviews and copies of letters sent to each licensee are available from the NRC Office of Public Affairs and on the NRC web site at: <http://www.nrc.gov/OPA/ppr>.
- ! approved a final rule which amends 10 CFR Part 26, which sets out the Commission's fitness-for-duty requirements. The new rule is designed to ensure compatibility with changes in the Department of Health and Human Services guidelines, to reduce regulatory burden in some areas, clarify the Commission's original intent of the rule, and improve overall program effectiveness and efficiency. In addition, the rule also

granted a December 30, 1993, petition for rulemaking submitted by Virginia Power, by changing the audit frequency of fitness-for-duty programs from one year to three years.

- ! issued on November 9, NRC authorization for the transfer of the Indian Point Unit 3 and James A. FitzPatrick licenses to Entergy. On November 21, the transfer was completed and the conforming amendments were issued.
- ! dispatched a special inspection team on November 7, to the Seabrook nuclear power plant in response to the failure of the "B" emergency diesel generator (EDG) during a 24-hour surveillance test on November 1. The team evaluated the licensee's root cause investigation and corrective actions, the risk significance of the potential common cause failure mechanism, and possible generic implications of the event. Seabrook had been shut down on October 21 for refueling and will remain shut down until the EDG is repaired and the cause of the failures are understood.
- ! issued a proposed rule that would amend the Certificate of Compliance (CoC) for the NAC-UMS spent fuel storage system. The proposed amendment principally involves five changes to the CoC, including allowing the storage of Maine Yankee site specific spent fuel, and damaged or consolidated fuel in a Maine Yankee fuel can.
- ! conducted a public meeting on November 13, with U.S. Enrichment Corporation (USEC) and Department of Energy (DOE) Oak Ridge staff to discuss USEC's planned shutdown of uranium enrichment activities at the Portsmouth Gaseous Diffusion Plant in June 2001, and the regulatory implications of the transfer of the enrichment facilities regulatory oversight from the NRC to the DOE.
- ! issued a license amendment on December 21, 2000, approving Carolina Power & Light Company's (CP&L's) request to expand the capacity for storage of spent nuclear fuel at its Shearon Harris Nuclear Power plant by placing two additional spent fuel pools in service. A contention by the Board of Commissioners of Orange County is still under review by the Atomic Safety and Licensing Board (ASLB). However, since the staff has made a final determination that the amendment for Harris involves no significant hazards considerations, the amendment has been issued and made immediately effective. The amendment is subject to modification or other action that may result from the ASLB's decision on the completion of the adjudicatory proceeding.
- ! conducted a meeting on October 31-November 2, with the Department of Energy (DOE) on the technical issue of saturated zone flow at Yucca Mountain. All subissues with respect to flow in the saturated zone were closed contingent on DOE's development of test plans and documentation of hydrogeologic work done over the last few years. A key agreement was for DOE to acquire hydraulic and tracer test data in the valley fill aquifer south of Yucca Mountain most likely to contain potential releases from the proposed high-level waste repository.
- ! made effective on November 28, 2000, the revised maintenance rule (10 CFR Part 50.65). The key revision to the rule was the new paragraph (a)(4), which requires licensees to assess the increase in risk that may result from proposed maintenance activity and to manage that risk. Previously, pre-maintenance assessments had only been recommended. Paragraph (a)(4) also gives licensees the option of reducing the

scope of structures, systems, and components (SSCs) to be considered in the pre-maintenance assessment to those "that a risk-informed evaluation process has shown to be significant to public health and safety." The revised rule also clarifies that the maintenance rule is applicable during all conditions of operation, including normal shutdown operations.

! appointed two new members to the Initial Implementation Evaluation Panel (IIEP), which will provide recommendations on how to improve the Revised Reactor Oversight Process after its first year of initial implementation. The new members are Mr. Raymond Shadis and Ms. Mary Ferdig. These appointments were in response to the resignation of a stakeholder member after the first meeting. Mr. Shadis is a representative of the New England Coalition on Nuclear Pollution. Ms. Ferdig is a Ph.D. candidate in the Organization and Development Program at Benedictine University and has been following the development of the Reactor Oversight Process for the past year. She has a grant from the National Science Foundation to explore the interactions among stakeholders involved in the development and implementation of the Reactor Oversight Process. The second IIEP meeting was held on December 11-12, 2000, at the NRC's Region II Office in Atlanta, Georgia. Among various topics discussed at that meeting, the staff heard from invited representatives from the States of Illinois, New Jersey, Pennsylvania, and Vermont their views of the NRC's Revised Reactor Oversight Process.

I have enclosed (Enclosure 2) the update to the Tasking Memorandum which delineates the specific initiatives completed by the agency since August 1998 and future milestones.

Please do not hesitate to contact me if I may provide additional information.

Sincerely,

/RA/

Richard A. Meserve

Enclosures:

1. Monthly Report
2. Tasking Memorandum

cc: Representative Rick Boucher



January 16, 2001

The Honorable Sonny Callahan, Chairman  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

The Fiscal Year 2001 Energy and Water Development Appropriations Act, House Report 106-693, directed the Nuclear Regulatory Commission (NRC) to continue to provide a monthly report on the status of its licensing and regulatory duties. The initial reporting requirement arose in the Fiscal Year 1999 Energy and Water Development Appropriations Act, Senate Report 105-206. The FY 2000 Energy and Water Development Appropriations Act, House Report 106-253, expanded the scope of the report requirement to include regulatory reform efforts affecting power reactor operations beyond 10 CFR Part 50, particularly NRC efforts to evaluate NRC security regulations. In FY 2000, we also expanded the monthly report to include the status of all license renewal applications that are under active review and other NRC initiatives in developing implementation guidance for the license renewal rule. I am pleased to transmit the twenty-fourth report, which covers the month of November (Enclosure 1).

The October report provided information on a number of significant NRC activities, including NRC's assessment that Consolidated Edison Company of New York's (Con Edison) Indian Point 2 facility had multiple "degraded cornerstones" as determined by the Revised Reactor Oversight Process, NRC's final significance determination for a "Red" inspection finding relating to deficiencies in the 1997 Indian Point 2 steam generator inservice examinations, and a status report on a crack located at a weld where a large pipe attaches to the reactor vessel at the South Carolina Electric & Gas Co. (SCE&G) V.C. Summer nuclear power plant. I would like update you on recent activities at both Indian Point 2 and Summer plants since our last report.

As you know, while NRC approval was not required for restart of Indian Point 2, we have been closely monitoring Con Edison's activities. Our inspection activities did not identify any significant conditions that would prevent the plant from meeting its license conditions related to the operability of the plants safety systems. Following successful replacement of all four steam generators, Con Edison restarted the reactor on December 30 and reconnected the unit to the grid on January 3. Even so, because NRC's assessment determined that Indian Point 2 had multiple degraded cornerstones, NRC will continue to conduct additional oversight in problem areas -- including, among other things, design controls and corrective actions.

With regard to the pipe crack at the V.C. Summer plant, on December 20 plant personnel briefed NRC staff on the licensee's initial root cause determination. At this point, the root cause analysis indicates pressurized water stress corrosion cracking (PWSCC). This weld

was more susceptible to PWSCC because repairs performed during initial installation induced higher stresses. We continue to closely monitor the licensee's activities relating to the pipe crack analysis and repair. We have issued an Information Notice to all reactor licensees about the crack. We have also established a dedicated website to help keep NRC staff, the public, and other interested parties informed regarding the activities associated with the pipe crack at the Summer nuclear power plant (<http://www.nrc.gov/NRC/REACTOR/SUMMER/index.htm>). We will keep you informed of the licensee's final root cause determination, including any generic implications for other U.S. nuclear power plants.

Since our last report, the Commission and the NRC staff also:

- ! approved an amendment to 10 CFR 50.47 that requires states to consider the use of potassium iodide (KI) as a protective measure for the general public to supplement sheltering and evacuation in the event of a severe nuclear power plant accident. If taken in time, KI blocks the thyroid's uptake of radioactive iodine and thus could help prevent the development of thyroid cancer and other thyroid diseases, especially in children. Reversing an earlier decision, the Commission agreed to provide funding for a supply of KI for a State, or, in some cases, local governments designated by the State to request such funding, that choose to incorporate KI for the general public in their emergency plans. After funding the initial purchases of KI, the Commission may consider extending the program to fund stockpile replenishment, but has made no commitments in this regard.
- ! published in the Federal Register (65 FR 77773) an announcement of the availability of Regulatory Guide 1.187, Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments. In accordance with the publication of the final rule, the revision to 10 CFR 50.59 has an effective date of March 13, 2001, which is 90 days from approval of the regulatory guidance.
- ! determined on December 13 that the performance improvements and plant modifications at the D. C. Cook Nuclear Power Station were sufficient for Unit 1 to resume operations and operate safely. Plant operators restarted the reactor on December 18, and reconnected Unit 1 to the grid on December 21. Cook Unit 2 returned to operations in June 2000. Both units at the plant were shut down in September 1997 as a result of NRC inspection findings which questioned the capability of key plant emergency systems to meet their design requirements. Since then, the utility has completed major reviews of plant safety systems and corrected problems which were identified.
- ! issued, under NRC's Revised Reactor Oversight Program, mid-cycle reviews for all commercial nuclear power plants. Results of these reviews and copies of letters sent to each licensee are available from the NRC Office of Public Affairs and on the NRC web site at: <http://www.nrc.gov/OPA/ppr>.
- ! approved a final rule which amends 10 CFR Part 26, which sets out the Commission's fitness-for-duty requirements. The new rule is designed to ensure compatibility with changes in the Department of Health and Human Services guidelines, to reduce regulatory burden in some areas, clarify the Commission's original intent of the rule, and improve overall program effectiveness and efficiency. In addition, the rule also

granted a December 30, 1993, petition for rulemaking submitted by Virginia Power, by changing the audit frequency of fitness-for-duty programs from one year to three years.

- ! issued on November 9, NRC authorization for the transfer of the Indian Point Unit 3 and James A. FitzPatrick licenses to Entergy. On November 21, the transfer was completed and the conforming amendments were issued.
- ! dispatched a special inspection team on November 7, to the Seabrook nuclear power plant in response to the failure of the "B" emergency diesel generator (EDG) during a 24-hour surveillance test on November 1. The team evaluated the licensee's root cause investigation and corrective actions, the risk significance of the potential common cause failure mechanism, and possible generic implications of the event. Seabrook had been shut down on October 21 for refueling and will remain shut down until the EDG is repaired and the cause of the failures are understood.
- ! issued a proposed rule that would amend the Certificate of Compliance (CoC) for the NAC-UMS spent fuel storage system. The proposed amendment principally involves five changes to the CoC, including allowing the storage of Maine Yankee site specific spent fuel, and damaged or consolidated fuel in a Maine Yankee fuel can.
- ! conducted a public meeting on November 13, with U.S. Enrichment Corporation (USEC) and Department of Energy (DOE) Oak Ridge staff to discuss USEC's planned shutdown of uranium enrichment activities at the Portsmouth Gaseous Diffusion Plant in June 2001, and the regulatory implications of the transfer of the enrichment facilities regulatory oversight from the NRC to the DOE.
- ! issued a license amendment on December 21, 2000, approving Carolina Power & Light Company's (CP&L's) request to expand the capacity for storage of spent nuclear fuel at its Shearon Harris Nuclear Power plant by placing two additional spent fuel pools in service. A contention by the Board of Commissioners of Orange County is still under review by the Atomic Safety and Licensing Board (ASLB). However, since the staff has made a final determination that the amendment for Harris involves no significant hazards considerations, the amendment has been issued and made immediately effective. The amendment is subject to modification or other action that may result from the ASLB's decision on the completion of the adjudicatory proceeding.
- ! conducted a meeting on October 31-November 2, with the Department of Energy (DOE) on the technical issue of saturated zone flow at Yucca Mountain. All subissues with respect to flow in the saturated zone were closed contingent on DOE's development of test plans and documentation of hydrogeologic work done over the last few years. A key agreement was for DOE to acquire hydraulic and tracer test data in the valley fill aquifer south of Yucca Mountain most likely to contain potential releases from the proposed high-level waste repository.
- ! made effective on November 28, 2000, the revised maintenance rule (10 CFR Part 50.65). The key revision to the rule was the new paragraph (a)(4), which requires licensees to assess the increase in risk that may result from proposed maintenance activity and to manage that risk. Previously, pre-maintenance assessments had only been recommended. Paragraph (a)(4) also gives licensees the option of reducing the

scope of structures, systems, and components (SSCs) to be considered in the pre-maintenance assessment to those "that a risk-informed evaluation process has shown to be significant to public health and safety." The revised rule also clarifies that the maintenance rule is applicable during all conditions of operation, including normal shutdown operations.

! appointed two new members to the Initial Implementation Evaluation Panel (IIEP), which will provide recommendations on how to improve the Revised Reactor Oversight Process after its first year of initial implementation. The new members are Mr. Raymond Shadis and Ms. Mary Ferdig. These appointments were in response to the resignation of a stakeholder member after the first meeting. Mr. Shadis is a representative of the New England Coalition on Nuclear Pollution. Ms. Ferdig is a Ph.D. candidate in the Organization and Development Program at Benedictine University and has been following the development of the Reactor Oversight Process for the past year. She has a grant from the National Science Foundation to explore the interactions among stakeholders involved in the development and implementation of the Reactor Oversight Process. The second IIEP meeting was held on December 11-12, 2000, at the NRC's Region II Office in Atlanta, Georgia. Among various topics discussed at that meeting, the staff heard from invited representatives from the States of Illinois, New Jersey, Pennsylvania, and Vermont their views of the NRC's Revised Reactor Oversight Process.

I have enclosed (Enclosure 2) the update to the Tasking Memorandum which delineates the specific initiatives completed by the agency since August 1998 and future milestones.

Please do not hesitate to contact me if I may provide additional information.

Sincerely,

/RA/

Richard A. Meserve

Enclosures:

1. Monthly Report
2. Tasking Memorandum

cc: Representative Peter J. Visclosky

January 16, 2001

The Honorable Pete V. Domenici, Chairman  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

The Fiscal Year 2001 Energy and Water Development Appropriations Act, House Report 106-693, directed the Nuclear Regulatory Commission (NRC) to continue to provide a monthly report on the status of its licensing and regulatory duties. The initial reporting requirement arose in the Fiscal Year 1999 Energy and Water Development Appropriations Act, Senate Report 105-206. The FY 2000 Energy and Water Development Appropriations Act, House Report 106-253, expanded the scope of the report requirement to include regulatory reform efforts affecting power reactor operations beyond 10 CFR Part 50, particularly NRC efforts to evaluate NRC security regulations. In FY 2000, we also expanded the monthly report to include the status of all license renewal applications that are under active review and other NRC initiatives in developing implementation guidance for the license renewal rule. I am pleased to transmit the twenty-fourth report, which covers the month of November (Enclosure 1).

The October report provided information on a number of significant NRC activities, including NRC's assessment that Consolidated Edison Company of New York's (Con Edison) Indian Point 2 facility had multiple "degraded cornerstones" as determined by the Revised Reactor Oversight Process, NRC's final significance determination for a "Red" inspection finding relating to deficiencies in the 1997 Indian Point 2 steam generator inservice examinations, and a status report on a crack located at a weld where a large pipe attaches to the reactor vessel at the South Carolina Electric & Gas Co. (SCE&G) V.C. Summer nuclear power plant. I would like update you on recent activities at both Indian Point 2 and Summer plants since our last report.

As you know, while NRC approval was not required for restart of Indian Point 2, we have been closely monitoring Con Edison's activities. Our inspection activities did not identify any significant conditions that would prevent the plant from meeting its license conditions related to the operability of the plants safety systems. Following successful replacement of all four steam generators, Con Edison restarted the reactor on December 30 and reconnected the unit to the grid on January 3. Even so, because NRC's assessment determined that Indian Point 2 had multiple degraded cornerstones, NRC will continue to conduct additional oversight in problem areas -- including, among other things, design controls and corrective actions.

With regard to the pipe crack at the V.C. Summer plant, on December 20 plant personnel briefed NRC staff on the licensee's initial root cause determination. At this point, the root cause analysis indicates pressurized water stress corrosion cracking (PWSCC). This weld

was more susceptible to PWSCC because repairs performed during initial installation induced higher stresses. We continue to closely monitor the licensee's activities relating to the pipe crack analysis and repair. We have issued an Information Notice to all reactor licensees about the crack. We have also established a dedicated website to help keep NRC staff, the public, and other interested parties informed regarding the activities associated with the pipe crack at the Summer nuclear power plant (<http://www.nrc.gov/NRC/REACTOR/SUMMER/index.htm>). We will keep you informed of the licensee's final root cause determination, including any generic implications for other U.S. nuclear power plants.

Since our last report, the Commission and the NRC staff also:

- ! approved an amendment to 10 CFR 50.47 that requires states to consider the use of potassium iodide (KI) as a protective measure for the general public to supplement sheltering and evacuation in the event of a severe nuclear power plant accident. If taken in time, KI blocks the thyroid's uptake of radioactive iodine and thus could help prevent the development of thyroid cancer and other thyroid diseases, especially in children. Reversing an earlier decision, the Commission agreed to provide funding for a supply of KI for a State, or, in some cases, local governments designated by the State to request such funding, that choose to incorporate KI for the general public in their emergency plans. After funding the initial purchases of KI, the Commission may consider extending the program to fund stockpile replenishment, but has made no commitments in this regard.
- ! published in the Federal Register (65 FR 77773) an announcement of the availability of Regulatory Guide 1.187, Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments. In accordance with the publication of the final rule, the revision to 10 CFR 50.59 has an effective date of March 13, 2001, which is 90 days from approval of the regulatory guidance.
- ! determined on December 13 that the performance improvements and plant modifications at the D. C. Cook Nuclear Power Station were sufficient for Unit 1 to resume operations and operate safely. Plant operators restarted the reactor on December 18, and reconnected Unit 1 to the grid on December 21. Cook Unit 2 returned to operations in June 2000. Both units at the plant were shut down in September 1997 as a result of NRC inspection findings which questioned the capability of key plant emergency systems to meet their design requirements. Since then, the utility has completed major reviews of plant safety systems and corrected problems which were identified.
- ! issued, under NRC's Revised Reactor Oversight Program, mid-cycle reviews for all commercial nuclear power plants. Results of these reviews and copies of letters sent to each licensee are available from the NRC Office of Public Affairs and on the NRC web site at: <http://www.nrc.gov/OPA/ppr>.
- ! approved a final rule which amends 10 CFR Part 26, which sets out the Commission's fitness-for-duty requirements. The new rule is designed to ensure compatibility with changes in the Department of Health and Human Services guidelines, to reduce regulatory burden in some areas, clarify the Commission's original intent of the rule, and improve overall program effectiveness and efficiency. In addition, the rule also

granted a December 30, 1993, petition for rulemaking submitted by Virginia Power, by changing the audit frequency of fitness-for-duty programs from one year to three years.

- ! issued on November 9, NRC authorization for the transfer of the Indian Point Unit 3 and James A. FitzPatrick licenses to Entergy. On November 21, the transfer was completed and the conforming amendments were issued.
- ! dispatched a special inspection team on November 7, to the Seabrook nuclear power plant in response to the failure of the "B" emergency diesel generator (EDG) during a 24-hour surveillance test on November 1. The team evaluated the licensee's root cause investigation and corrective actions, the risk significance of the potential common cause failure mechanism, and possible generic implications of the event. Seabrook had been shut down on October 21 for refueling and will remain shut down until the EDG is repaired and the cause of the failures are understood.
- ! issued a proposed rule that would amend the Certificate of Compliance (CoC) for the NAC-UMS spent fuel storage system. The proposed amendment principally involves five changes to the CoC, including allowing the storage of Maine Yankee site specific spent fuel, and damaged or consolidated fuel in a Maine Yankee fuel can.
- ! conducted a public meeting on November 13, with U.S. Enrichment Corporation (USEC) and Department of Energy (DOE) Oak Ridge staff to discuss USEC's planned shutdown of uranium enrichment activities at the Portsmouth Gaseous Diffusion Plant in June 2001, and the regulatory implications of the transfer of the enrichment facilities regulatory oversight from the NRC to the DOE.
- ! issued a license amendment on December 21, 2000, approving Carolina Power & Light Company's (CP&L's) request to expand the capacity for storage of spent nuclear fuel at its Shearon Harris Nuclear Power plant by placing two additional spent fuel pools in service. A contention by the Board of Commissioners of Orange County is still under review by the Atomic Safety and Licensing Board (ASLB). However, since the staff has made a final determination that the amendment for Harris involves no significant hazards considerations, the amendment has been issued and made immediately effective. The amendment is subject to modification or other action that may result from the ASLB's decision on the completion of the adjudicatory proceeding.
- ! conducted a meeting on October 31-November 2, with the Department of Energy (DOE) on the technical issue of saturated zone flow at Yucca Mountain. All subissues with respect to flow in the saturated zone were closed contingent on DOE's development of test plans and documentation of hydrogeologic work done over the last few years. A key agreement was for DOE to acquire hydraulic and tracer test data in the valley fill aquifer south of Yucca Mountain most likely to contain potential releases from the proposed high-level waste repository.
- ! made effective on November 28, 2000, the revised maintenance rule (10 CFR Part 50.65). The key revision to the rule was the new paragraph (a)(4), which requires licensees to assess the increase in risk that may result from proposed maintenance activity and to manage that risk. Previously, pre-maintenance assessments had only been recommended. Paragraph (a)(4) also gives licensees the option of reducing the

scope of structures, systems, and components (SSCs) to be considered in the pre-maintenance assessment to those "that a risk-informed evaluation process has shown to be significant to public health and safety." The revised rule also clarifies that the maintenance rule is applicable during all conditions of operation, including normal shutdown operations.

! appointed two new members to the Initial Implementation Evaluation Panel (IIEP), which will provide recommendations on how to improve the Revised Reactor Oversight Process after its first year of initial implementation. The new members are Mr. Raymond Shadis and Ms. Mary Ferdig. These appointments were in response to the resignation of a stakeholder member after the first meeting. Mr. Shadis is a representative of the New England Coalition on Nuclear Pollution. Ms. Ferdig is a Ph.D. candidate in the Organization and Development Program at Benedictine University and has been following the development of the Reactor Oversight Process for the past year. She has a grant from the National Science Foundation to explore the interactions among stakeholders involved in the development and implementation of the Reactor Oversight Process. The second IIEP meeting was held on December 11-12, 2000, at the NRC's Region II Office in Atlanta, Georgia. Among various topics discussed at that meeting, the staff heard from invited representatives from the States of Illinois, New Jersey, Pennsylvania, and Vermont their views of the NRC's Revised Reactor Oversight Process.

I have enclosed (Enclosure 2) the update to the Tasking Memorandum which delineates the specific initiatives completed by the agency since August 1998 and future milestones.

Please do not hesitate to contact me if I may provide additional information.

Sincerely,

*/RA/*

Richard A. Meserve

Enclosures:

1. Monthly Report
2. Tasking Memorandum

cc: Senator Harry Reid



January 16, 2001

The Honorable W.J. "Billy" Tauzin, Chairman  
Committee on Energy and Commerce  
United States House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

The Fiscal Year 2001 Energy and Water Development Appropriations Act, House Report 106-693, directed the Nuclear Regulatory Commission (NRC) to continue to provide a monthly report on the status of its licensing and regulatory duties. The initial reporting requirement arose in the Fiscal Year 1999 Energy and Water Development Appropriations Act, Senate Report 105-206. The FY 2000 Energy and Water Development Appropriations Act, House Report 106-253, expanded the scope of the report requirement to include regulatory reform efforts affecting power reactor operations beyond 10 CFR Part 50, particularly NRC efforts to evaluate NRC security regulations. In FY 2000, we also expanded the monthly report to include the status of all license renewal applications that are under active review and other NRC initiatives in developing implementation guidance for the license renewal rule. I am pleased to transmit the twenty-fourth report, which covers the month of November (Enclosure 1).

The October report provided information on a number of significant NRC activities, including NRC's assessment that Consolidated Edison Company of New York's (Con Edison) Indian Point 2 facility had multiple "degraded cornerstones" as determined by the Revised Reactor Oversight Process, NRC's final significance determination for a "Red" inspection finding relating to deficiencies in the 1997 Indian Point 2 steam generator inservice examinations, and a status report on a crack located at a weld where a large pipe attaches to the reactor vessel at the South Carolina Electric & Gas Co. (SCE&G) V.C. Summer nuclear power plant. I would like update you on recent activities at both Indian Point 2 and Summer plants since our last report.

As you know, while NRC approval was not required for restart of Indian Point 2, we have been closely monitoring Con Edison's activities. Our inspection activities did not identify any significant conditions that would prevent the plant from meeting its license conditions related to the operability of the plants safety systems. Following successful replacement of all four steam generators, Con Edison restarted the reactor on December 30 and reconnected the unit to the grid on January 3. Even so, because NRC's assessment determined that Indian Point 2 had multiple degraded cornerstones, NRC will continue to conduct additional oversight in problem areas -- including, among other things, design controls and corrective actions.

With regard to the pipe crack at the V.C. Summer plant, on December 20 plant personnel briefed NRC staff on the licensee's initial root cause determination. At this point, the root cause analysis indicates pressurized water stress corrosion cracking (PWSCC). This weld was more susceptible to PWSCC because repairs performed during initial installation induced

higher stresses. We continue to closely monitor the licensee's activities relating to the pipe crack analysis and repair. We have issued an Information Notice to all reactor licensees about the crack. We have also established a dedicated website to help keep NRC staff, the public, and other interested parties informed regarding the activities associated with the pipe crack at the Summer nuclear power plant (<http://www.nrc.gov/NRC/REACTOR/SUMMER/index.htm>). We will keep you informed of the licensee's final root cause determination, including any generic implications for other U.S. nuclear power plants.

Since our last report, the Commission and the NRC staff also:

- ! approved an amendment to 10 CFR 50.47 that requires states to consider the use of potassium iodide (KI) as a protective measure for the general public to supplement sheltering and evacuation in the event of a severe nuclear power plant accident. If taken in time, KI blocks the thyroid's uptake of radioactive iodine and thus could help prevent the development of thyroid cancer and other thyroid diseases, especially in children. Reversing an earlier decision, the Commission agreed to provide funding for a supply of KI for a State, or, in some cases, local governments designated by the State to request such funding, that choose to incorporate KI for the general public in their emergency plans. After funding the initial purchases of KI, the Commission may consider extending the program to fund stockpile replenishment, but has made no commitments in this regard.
- ! published in the Federal Register (65 FR 77773) an announcement of the availability of Regulatory Guide 1.187, Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments. In accordance with the publication of the final rule, the revision to 10 CFR 50.59 has an effective date of March 13, 2001, which is 90 days from approval of the regulatory guidance.
- ! determined on December 13 that the performance improvements and plant modifications at the D. C. Cook Nuclear Power Station were sufficient for Unit 1 to resume operations and operate safely. Plant operators restarted the reactor on December 18, and reconnected Unit 1 to the grid on December 21. Cook Unit 2 returned to operations in June 2000. Both units at the plant were shut down in September 1997 as a result of NRC inspection findings which questioned the capability of key plant emergency systems to meet their design requirements. Since then, the utility has completed major reviews of plant safety systems and corrected problems which were identified.
- ! issued, under NRC's Revised Reactor Oversight Program, mid-cycle reviews for all commercial nuclear power plants. Results of these reviews and copies of letters sent to each licensee are available from the NRC Office of Public Affairs and on the NRC web site at: <http://www.nrc.gov/OPA/ppr>.
- ! approved a final rule which amends 10 CFR Part 26, which sets out the Commission's fitness-for-duty requirements. The new rule is designed to ensure compatibility with changes in the Department of Health and Human Services guidelines, to reduce regulatory burden in some areas, clarify the Commission's original intent of the rule, and improve overall program effectiveness and efficiency. In addition, the rule also granted a December 30, 1993, petition for rulemaking submitted by Virginia Power, by

changing the audit frequency of fitness-for-duty programs from one year to three years.

- ! issued on November 9, NRC authorization for the transfer of the Indian Point Unit 3 and James A. FitzPatrick licenses to Entergy. On November 21, the transfer was completed and the conforming amendments were issued.
- ! dispatched a special inspection team on November 7, to the Seabrook nuclear power plant in response to the failure of the "B" emergency diesel generator (EDG) during a 24-hour surveillance test on November 1. The team evaluated the licensee's root cause investigation and corrective actions, the risk significance of the potential common cause failure mechanism, and possible generic implications of the event. Seabrook had been shut down on October 21 for refueling and will remain shut down until the EDG is repaired and the cause of the failures are understood.
- ! issued a proposed rule that would amend the Certificate of Compliance (CoC) for the NAC-UMS spent fuel storage system. The proposed amendment principally involves five changes to the CoC, including allowing the storage of Maine Yankee site specific spent fuel, and damaged or consolidated fuel in a Maine Yankee fuel can.
- ! conducted a public meeting on November 13, with U.S. Enrichment Corporation (USEC) and Department of Energy (DOE) Oak Ridge staff to discuss USEC's planned shutdown of uranium enrichment activities at the Portsmouth Gaseous Diffusion Plant in June 2001, and the regulatory implications of the transfer of the enrichment facilities regulatory oversight from the NRC to the DOE.
- ! issued a license amendment on December 21, 2000, approving Carolina Power & Light Company's (CP&L's) request to expand the capacity for storage of spent nuclear fuel at its Shearon Harris Nuclear Power plant by placing two additional spent fuel pools in service. A contention by the Board of Commissioners of Orange County is still under review by the Atomic Safety and Licensing Board (ASLB). However, since the staff has made a final determination that the amendment for Harris involves no significant hazards considerations, the amendment has been issued and made immediately effective. The amendment is subject to modification or other action that may result from the ASLB's decision on the completion of the adjudicatory proceeding.
- ! conducted a meeting on October 31-November 2, with the Department of Energy (DOE) on the technical issue of saturated zone flow at Yucca Mountain. All subissues with respect to flow in the saturated zone were closed contingent on DOE's development of test plans and documentation of hydrogeologic work done over the last few years. A key agreement was for DOE to acquire hydraulic and tracer test data in the valley fill aquifer south of Yucca Mountain most likely to contain potential releases from the proposed high-level waste repository.
- ! made effective on November 28, 2000, the revised maintenance rule (10 CFR Part 50.65). The key revision to the rule was the new paragraph (a)(4), which requires licensees to assess the increase in risk that may result from proposed maintenance activity and to manage that risk. Previously, pre-maintenance assessments had only been recommended. Paragraph (a)(4) also gives licensees the option of reducing the

scope of structures, systems, and components (SSCs) to be considered in the pre-maintenance assessment to those "that a risk-informed evaluation process has shown to be significant to public health and safety." The revised rule also clarifies that the maintenance rule is applicable during all conditions of operation, including normal shutdown operations.

! appointed two new members to the Initial Implementation Evaluation Panel (IIEP), which will provide recommendations on how to improve the Revised Reactor Oversight Process after its first year of initial implementation. The new members are Mr. Raymond Shadis and Ms. Mary Ferdig. These appointments were in response to the resignation of a stakeholder member after the first meeting. Mr. Shadis is a representative of the New England Coalition on Nuclear Pollution. Ms. Ferdig is a Ph.D. candidate in the Organization and Development Program at Benedictine University and has been following the development of the Reactor Oversight Process for the past year. She has a grant from the National Science Foundation to explore the interactions among stakeholders involved in the development and implementation of the Reactor Oversight Process. The second IIEP meeting was held on December 11-12, 2000, at the NRC's Region II Office in Atlanta, Georgia. Among various topics discussed at that meeting, the staff heard from invited representatives from the States of Illinois, New Jersey, Pennsylvania, and Vermont their views of the NRC's Revised Reactor Oversight Process.

I have enclosed (Enclosure 2) the update to the Tasking Memorandum which delineates the specific initiatives completed by the agency since August 1998 and future milestones.

Please do not hesitate to contact me if I may provide additional information.

Sincerely,

/RA/

Richard A. Meserve

Enclosures:

1. Monthly Report
2. Tasking Memorandum

cc: Representative John D. Dingell

January 16, 2001

The Honorable Bob Smith, Chairman  
Committee on Environment and Public Works  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

The Fiscal Year 2001 Energy and Water Development Appropriations Act, House Report 106-693, directed the Nuclear Regulatory Commission (NRC) to continue to provide a monthly report on the status of its licensing and regulatory duties. The initial reporting requirement arose in the Fiscal Year 1999 Energy and Water Development Appropriations Act, Senate Report 105-206. The FY 2000 Energy and Water Development Appropriations Act, House Report 106-253, expanded the scope of the report requirement to include regulatory reform efforts affecting power reactor operations beyond 10 CFR Part 50, particularly NRC efforts to evaluate NRC security regulations. In FY 2000, we also expanded the monthly report to include the status of all license renewal applications that are under active review and other NRC initiatives in developing implementation guidance for the license renewal rule. I am pleased to transmit the twenty-fourth report, which covers the month of November (Enclosure 1).

The October report provided information on a number of significant NRC activities, including NRC's assessment that Consolidated Edison Company of New York's (Con Edison) Indian Point 2 facility had multiple "degraded cornerstones" as determined by the Revised Reactor Oversight Process, NRC's final significance determination for a "Red" inspection finding relating to deficiencies in the 1997 Indian Point 2 steam generator inservice examinations, and a status report on a crack located at a weld where a large pipe attaches to the reactor vessel at the South Carolina Electric & Gas Co. (SCE&G) V.C. Summer nuclear power plant. I would like update you on recent activities at both Indian Point 2 and Summer plants since our last report.

As you know, while NRC approval was not required for restart of Indian Point 2, we have been closely monitoring Con Edison's activities. Our inspection activities did not identify any significant conditions that would prevent the plant from meeting its license conditions related to the operability of the plants safety systems. Following successful replacement of all four steam generators, Con Edison restarted the reactor on December 30 and reconnected the unit to the grid on January 3. Even so, because NRC's assessment determined that Indian Point 2 had multiple degraded cornerstones, NRC will continue to conduct additional oversight in problem areas -- including, among other things, design controls and corrective actions.

With regard to the pipe crack at the V.C. Summer plant, on December 20 plant personnel briefed NRC staff on the licensee's initial root cause determination. At this point, the root cause analysis indicates pressurized water stress corrosion cracking (PWSCC). This weld was more susceptible to PWSCC because repairs performed during initial installation induced

higher stresses. We continue to closely monitor the licensee's activities relating to the pipe crack analysis and repair. We have issued an Information Notice to all reactor licensees about the crack. We have also established a dedicated website to help keep NRC staff, the public, and other interested parties informed regarding the activities associated with the pipe crack at the Summer nuclear power plant (<http://www.nrc.gov/NRC/REACTOR/SUMMER/index.htm>). We will keep you informed of the licensee's final root cause determination, including any generic implications for other U.S. nuclear power plants.

Since our last report, the Commission and the NRC staff also:

- ! approved an amendment to 10 CFR 50.47 that requires states to consider the use of potassium iodide (KI) as a protective measure for the general public to supplement sheltering and evacuation in the event of a severe nuclear power plant accident. If taken in time, KI blocks the thyroid's uptake of radioactive iodine and thus could help prevent the development of thyroid cancer and other thyroid diseases, especially in children. Reversing an earlier decision, the Commission agreed to provide funding for a supply of KI for a State, or, in some cases, local governments designated by the State to request such funding, that choose to incorporate KI for the general public in their emergency plans. After funding the initial purchases of KI, the Commission may consider extending the program to fund stockpile replenishment, but has made no commitments in this regard.
- ! published in the Federal Register (65 FR 77773) an announcement of the availability of Regulatory Guide 1.187, Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments. In accordance with the publication of the final rule, the revision to 10 CFR 50.59 has an effective date of March 13, 2001, which is 90 days from approval of the regulatory guidance.
- ! determined on December 13 that the performance improvements and plant modifications at the D. C. Cook Nuclear Power Station were sufficient for Unit 1 to resume operations and operate safely. Plant operators restarted the reactor on December 18, and reconnected Unit 1 to the grid on December 21. Cook Unit 2 returned to operations in June 2000. Both units at the plant were shut down in September 1997 as a result of NRC inspection findings which questioned the capability of key plant emergency systems to meet their design requirements. Since then, the utility has completed major reviews of plant safety systems and corrected problems which were identified.
- ! issued, under NRC's Revised Reactor Oversight Program, mid-cycle reviews for all commercial nuclear power plants. Results of these reviews and copies of letters sent to each licensee are available from the NRC Office of Public Affairs and on the NRC web site at: <http://www.nrc.gov/OPA/ppr>.
- ! approved a final rule which amends 10 CFR Part 26, which sets out the Commission's fitness-for-duty requirements. The new rule is designed to ensure compatibility with changes in the Department of Health and Human Services guidelines, to reduce regulatory burden in some areas, clarify the Commission's original intent of the rule, and improve overall program effectiveness and efficiency. In addition, the rule also granted a December 30, 1993, petition for rulemaking submitted by Virginia Power, by

changing the audit frequency of fitness-for-duty programs from one year to three years.

- ! issued on November 9, NRC authorization for the transfer of the Indian Point Unit 3 and James A. FitzPatrick licenses to Entergy. On November 21, the transfer was completed and the conforming amendments were issued.
- ! dispatched a special inspection team on November 7, to the Seabrook nuclear power plant in response to the failure of the "B" emergency diesel generator (EDG) during a 24-hour surveillance test on November 1. The team evaluated the licensee's root cause investigation and corrective actions, the risk significance of the potential common cause failure mechanism, and possible generic implications of the event. Seabrook had been shut down on October 21 for refueling and will remain shut down until the EDG is repaired and the cause of the failures are understood.
- ! issued a proposed rule that would amend the Certificate of Compliance (CoC) for the NAC-UMS spent fuel storage system. The proposed amendment principally involves five changes to the CoC, including allowing the storage of Maine Yankee site specific spent fuel, and damaged or consolidated fuel in a Maine Yankee fuel can.
- ! conducted a public meeting on November 13, with U.S. Enrichment Corporation (USEC) and Department of Energy (DOE) Oak Ridge staff to discuss USEC's planned shutdown of uranium enrichment activities at the Portsmouth Gaseous Diffusion Plant in June 2001, and the regulatory implications of the transfer of the enrichment facilities regulatory oversight from the NRC to the DOE.
- ! issued a license amendment on December 21, 2000, approving Carolina Power & Light Company's (CP&L's) request to expand the capacity for storage of spent nuclear fuel at its Shearon Harris Nuclear Power plant by placing two additional spent fuel pools in service. A contention by the Board of Commissioners of Orange County is still under review by the Atomic Safety and Licensing Board (ASLB). However, since the staff has made a final determination that the amendment for Harris involves no significant hazards considerations, the amendment has been issued and made immediately effective. The amendment is subject to modification or other action that may result from the ASLB's decision on the completion of the adjudicatory proceeding.
- ! conducted a meeting on October 31-November 2, with the Department of Energy (DOE) on the technical issue of saturated zone flow at Yucca Mountain. All subissues with respect to flow in the saturated zone were closed contingent on DOE's development of test plans and documentation of hydrogeologic work done over the last few years. A key agreement was for DOE to acquire hydraulic and tracer test data in the valley fill aquifer south of Yucca Mountain most likely to contain potential releases from the proposed high-level waste repository.
- ! made effective on November 28, 2000, the revised maintenance rule (10 CFR Part 50.65). The key revision to the rule was the new paragraph (a)(4), which requires licensees to assess the increase in risk that may result from proposed maintenance activity and to manage that risk. Previously, pre-maintenance assessments had only been recommended. Paragraph (a)(4) also gives licensees the option of reducing the

scope of structures, systems, and components (SSCs) to be considered in the pre-maintenance assessment to those "that a risk-informed evaluation process has shown to be significant to public health and safety." The revised rule also clarifies that the maintenance rule is applicable during all conditions of operation, including normal shutdown operations.

! appointed two new members to the Initial Implementation Evaluation Panel (IIEP), which will provide recommendations on how to improve the Revised Reactor Oversight Process after its first year of initial implementation. The new members are Mr. Raymond Shadis and Ms. Mary Ferdig. These appointments were in response to the resignation of a stakeholder member after the first meeting. Mr. Shadis is a representative of the New England Coalition on Nuclear Pollution. Ms. Ferdig is a Ph.D. candidate in the Organization and Development Program at Benedictine University and has been following the development of the Reactor Oversight Process for the past year. She has a grant from the National Science Foundation to explore the interactions among stakeholders involved in the development and implementation of the Reactor Oversight Process. The second IIEP meeting was held on December 11-12, 2000, at the NRC's Region II Office in Atlanta, Georgia. Among various topics discussed at that meeting, the staff heard from invited representatives from the States of Illinois, New Jersey, Pennsylvania, and Vermont their views of the NRC's Revised Reactor Oversight Process.

I have enclosed (Enclosure 2) the update to the Tasking Memorandum which delineates the specific initiatives completed by the agency since August 1998 and future milestones.

Please do not hesitate to contact me if I may provide additional information.

Sincerely,

/RA/

Richard A. Meserve

Enclosures:

1. Monthly Report
2. Tasking Memorandum

cc: Senator Harry Reid



January 16, 2001

The Honorable Pete V. Domenici  
United States Senate  
Washington, D.C. 20510

Dear Senator Domenici:

The Fiscal Year 2001 Energy and Water Development Appropriations Act, House Report 106-693, directed the Nuclear Regulatory Commission (NRC) to continue to provide a monthly report on the status of its licensing and regulatory duties. The initial reporting requirement arose in the Fiscal Year 1999 Energy and Water Development Appropriations Act, Senate Report 105-206. The FY 2000 Energy and Water Development Appropriations Act, House Report 106-253, expanded the scope of the report requirement to include regulatory reform efforts affecting power reactor operations beyond 10 CFR Part 50, particularly NRC efforts to evaluate NRC security regulations. In FY 2000, we also expanded the monthly report to include the status of all license renewal applications that are under active review and other NRC initiatives in developing implementation guidance for the license renewal rule. I am pleased to transmit the twenty-fourth report, which covers the month of November (Enclosure 1).

The October report provided information on a number of significant NRC activities, including NRC's assessment that Consolidated Edison Company of New York's (Con Edison) Indian Point 2 facility had multiple "degraded cornerstones" as determined by the Revised Reactor Oversight Process, NRC's final significance determination for a "Red" inspection finding relating to deficiencies in the 1997 Indian Point 2 steam generator inservice examinations, and a status report on a crack located at a weld where a large pipe attaches to the reactor vessel at the South Carolina Electric & Gas Co. (SCE&G) V.C. Summer nuclear power plant. I would like update you on recent activities at both Indian Point 2 and Summer plants since our last report.

As you know, while NRC approval was not required for restart of Indian Point 2, we have been closely monitoring Con Edison's activities. Our inspection activities did not identify any significant conditions that would prevent the plant from meeting its license conditions related to the operability of the plants safety systems. Following successful replacement of all four steam generators, Con Edison restarted the reactor on December 30 and reconnected the unit to the grid on January 3. Even so, because NRC's assessment determined that Indian Point 2 had multiple degraded cornerstones, NRC will continue to conduct additional oversight in problem areas -- including, among other things, design controls and corrective actions.

With regard to the pipe crack at the V.C. Summer plant, on December 20 plant personnel briefed NRC staff on the licensee's initial root cause determination. At this point, the root cause analysis indicates pressurized water stress corrosion cracking (PWSCC). This weld was more susceptible to PWSCC because repairs performed during initial installation induced higher stresses. We continue to closely monitor the licensee's activities relating to the pipe

crack analysis and repair. We have issued an Information Notice to all reactor licensees about the crack. We have also established a dedicated website to help keep NRC staff, the public, and other interested parties informed regarding the activities associated with the pipe crack at the Summer nuclear power plant (<http://www.nrc.gov/NRC/REACTOR/SUMMER/index.htm>). We will keep you informed of the licensee's final root cause determination, including any generic implications for other U.S. nuclear power plants.

Since our last report, the Commission and the NRC staff also:

- ! approved an amendment to 10 CFR 50.47 that requires states to consider the use of potassium iodide (KI) as a protective measure for the general public to supplement sheltering and evacuation in the event of a severe nuclear power plant accident. If taken in time, KI blocks the thyroid's uptake of radioactive iodine and thus could help prevent the development of thyroid cancer and other thyroid diseases, especially in children. Reversing an earlier decision, the Commission agreed to provide funding for a supply of KI for a State, or, in some cases, local governments designated by the State to request such funding, that choose to incorporate KI for the general public in their emergency plans. After funding the initial purchases of KI, the Commission may consider extending the program to fund stockpile replenishment, but has made no commitments in this regard.
- ! published in the Federal Register (65 FR 77773) an announcement of the availability of Regulatory Guide 1.187, Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments. In accordance with the publication of the final rule, the revision to 10 CFR 50.59 has an effective date of March 13, 2001, which is 90 days from approval of the regulatory guidance.
- ! determined on December 13 that the performance improvements and plant modifications at the D. C. Cook Nuclear Power Station were sufficient for Unit 1 to resume operations and operate safely. Plant operators restarted the reactor on December 18, and reconnected Unit 1 to the grid on December 21. Cook Unit 2 returned to operations in June 2000. Both units at the plant were shut down in September 1997 as a result of NRC inspection findings which questioned the capability of key plant emergency systems to meet their design requirements. Since then, the utility has completed major reviews of plant safety systems and corrected problems which were identified.
- ! issued, under NRC's Revised Reactor Oversight Program, mid-cycle reviews for all commercial nuclear power plants. Results of these reviews and copies of letters sent to each licensee are available from the NRC Office of Public Affairs and on the NRC web site at: <http://www.nrc.gov/OPA/ppr>.
- ! approved a final rule which amends 10 CFR Part 26, which sets out the Commission's fitness-for-duty requirements. The new rule is designed to ensure compatibility with changes in the Department of Health and Human Services guidelines, to reduce regulatory burden in some areas, clarify the Commission's original intent of the rule, and improve overall program effectiveness and efficiency. In addition, the rule also granted a December 30, 1993, petition for rulemaking submitted by Virginia Power, by

changing the audit frequency of fitness-for-duty programs from one year to three years.

- ! issued on November 9, NRC authorization for the transfer of the Indian Point Unit 3 and James A. FitzPatrick licenses to Entergy. On November 21, the transfer was completed and the conforming amendments were issued.
- ! dispatched a special inspection team on November 7, to the Seabrook nuclear power plant in response to the failure of the "B" emergency diesel generator (EDG) during a 24-hour surveillance test on November 1. The team evaluated the licensee's root cause investigation and corrective actions, the risk significance of the potential common cause failure mechanism, and possible generic implications of the event. Seabrook had been shut down on October 21 for refueling and will remain shut down until the EDG is repaired and the cause of the failures are understood.
- ! issued a proposed rule that would amend the Certificate of Compliance (CoC) for the NAC-UMS spent fuel storage system. The proposed amendment principally involves five changes to the CoC, including allowing the storage of Maine Yankee site specific spent fuel, and damaged or consolidated fuel in a Maine Yankee fuel can.
- ! conducted a public meeting on November 13, with U.S. Enrichment Corporation (USEC) and Department of Energy (DOE) Oak Ridge staff to discuss USEC's planned shutdown of uranium enrichment activities at the Portsmouth Gaseous Diffusion Plant in June 2001, and the regulatory implications of the transfer of the enrichment facilities regulatory oversight from the NRC to the DOE.
- ! issued a license amendment on December 21, 2000, approving Carolina Power & Light Company's (CP&L's) request to expand the capacity for storage of spent nuclear fuel at its Shearon Harris Nuclear Power plant by placing two additional spent fuel pools in service. A contention by the Board of Commissioners of Orange County is still under review by the Atomic Safety and Licensing Board (ASLB). However, since the staff has made a final determination that the amendment for Harris involves no significant hazards considerations, the amendment has been issued and made immediately effective. The amendment is subject to modification or other action that may result from the ASLB's decision on the completion of the adjudicatory proceeding.
- ! conducted a meeting on October 31-November 2, with the Department of Energy (DOE) on the technical issue of saturated zone flow at Yucca Mountain. All subissues with respect to flow in the saturated zone were closed contingent on DOE's development of test plans and documentation of hydrogeologic work done over the last few years. A key agreement was for DOE to acquire hydraulic and tracer test data in the valley fill aquifer south of Yucca Mountain most likely to contain potential releases from the proposed high-level waste repository.
- ! made effective on November 28, 2000, the revised maintenance rule (10 CFR Part 50.65). The key revision to the rule was the new paragraph (a)(4), which requires licensees to assess the increase in risk that may result from proposed maintenance activity and to manage that risk. Previously, pre-maintenance assessments had only been recommended. Paragraph (a)(4) also gives licensees the option of reducing the

scope of structures, systems, and components (SSCs) to be considered in the pre-maintenance assessment to those "that a risk-informed evaluation process has shown to be significant to public health and safety." The revised rule also clarifies that the maintenance rule is applicable during all conditions of operation, including normal shutdown operations.

! appointed two new members to the Initial Implementation Evaluation Panel (IIEP), which will provide recommendations on how to improve the Revised Reactor Oversight Process after its first year of initial implementation. The new members are Mr. Raymond Shadis and Ms. Mary Ferdig. These appointments were in response to the resignation of a stakeholder member after the first meeting. Mr. Shadis is a representative of the New England Coalition on Nuclear Pollution. Ms. Ferdig is a Ph.D. candidate in the Organization and Development Program at Benedictine University and has been following the development of the Reactor Oversight Process for the past year. She has a grant from the National Science Foundation to explore the interactions among stakeholders involved in the development and implementation of the Reactor Oversight Process. The second IIEP meeting was held on December 11-12, 2000, at the NRC's Region II Office in Atlanta, Georgia. Among various topics discussed at that meeting, the staff heard from invited representatives from the States of Illinois, New Jersey, Pennsylvania, and Vermont their views of the NRC's Revised Reactor Oversight Process.

I have enclosed (Enclosure 2) the update to the Tasking Memorandum which delineates the specific initiatives completed by the agency since August 1998 and future milestones.

Please do not hesitate to contact me if I may provide additional information.

Sincerely,

/RA/

Richard A. Meserve

Enclosures:

1. Monthly Report
2. Tasking Memorandum

MONTHLY STATUS REPORT ON THE  
LICENSING ACTIVITIES AND REGULATORY DUTIES OF THE  
UNITED STATES NUCLEAR REGULATORY COMMISSION

**November 2000**

## TABLE OF CONTENTS

	<u>Page</u>
I. Implementing Risk-Informed Regulations . . . . .	1
II. Revised Reactor Oversight Process . . . . .	2
III. Status of Issues in the Reactor Generic Issue Program . . . . .	4
IV. Licensing Actions and Other Licensing Tasks . . . . .	4
V. Status of License Renewal Activities . . . . .	9
VI. Status of Review of Private Fuel Storage, Limited Liability Corporation's Application for a License to Operate an Independent Spent Fuel Storage Installation . . . . .	10
VII. Summary of Reactor Enforcement by Region . . . . .	10
VIII. Power Reactor Security Regulations . . . . .	12

## **I. Implementing Risk-Informed Regulations**

The staff continues to make progress on tasks involving use of the probabilistic risk information in many areas. The milestone schedule for the more significant risk-informed activities are included in the Commission Tasking Memorandum (Enclosure 2 to the letter from Richard A. Meserve, NRC Chairman, forwarding the November 2000 monthly report to Congress on the status of NRC licensing and regulatory duties). The following activities have seen substantial progress since the last report.

### Risk-Informed Regulation Implementation Plan

In SECY-00-0213, "Risk-Informed Regulation Implementation Plan," dated October 26, 2000, the staff provided the Commission with the first complete version of the Risk-Informed Regulation Implementation Plan (RIRIP) and described internal and external factors that may impede the implementation of risk-informed activities. The RIRIP contains (1) a statement of objectives and their relevance to both the PRA policy statement and the NRC strategic plan; (2) a set of criteria and a process for deciding what to risk-inform; (3) guidelines for risk-informed activities; (4) a summary of activities planned to implement the risk-informed regulatory strategies that are described in the agency's strategic plan; (5) a description of an internal communication plan for soliciting and considering staff input and feedback on the NRC plan and reports on the progress toward implementing risk-informed regulatory initiatives; and (6) a description of a training program that ensures that the staff has the knowledge and skills needed to implement risk-informed regulations. The staff briefed the Commission on the RIRIP and SECY-00-0213 on November 17, 2000.

## South Texas Project Exemption Requests from Special Treatment Requirements

On November 15, 2000, the NRC provided a draft safety evaluation (SE) regarding the South Texas Project's July 13, 1999, application, as supplemented, for exemptions from certain requirements of 10 CFR Parts 21, 50 and 100. The exemption request is based on a risk-informed categorization of components in the South Texas plant. The draft SE addresses each of the regulations from which an exemption is sought, and expresses the extent to which the NRC has found the request reasonable. The draft SE identifies areas (open items) where additional interaction with the NRC is necessary.

In the draft SE, the NRC identifies a number of issues that need to be addressed, including: (1) concerns with the categorization process, (2) concerns with the proposed treatment that will be used to provide confidence that an exempted structure, system or component will remain functional, (3) the need to ensure that the bases for exemptions remain valid, (4) a need for limiting any exemption from 10 CFR 50.59 to the specific regulations identified in the licensee's submittal where the staff grants the requested exemption, and (5) the denial of the request for an exemption from the requirement to submit a change to the QA program description that would result from the implementation of the categorization and alternative treatment processes.

The NRC indicated in the November 15, 2000, letter that none of the conclusions in the draft SE represent the final position of the NRC. In addition, the NRC requested that the licensee respond to the open items by January 15, 2001, to support NRC resolution by February 15, 2001.

## **II. Reactor Oversight Process**

The NRC commenced initial implementation of its Reactor Oversight Process (ROP) at all nuclear plants (except D.C. Cook) in April 2000. It has continued meeting with the interested stakeholders on a periodic basis to continue refining the ROP and collect lessons learned information. Recent activities include:

- a. The NRC staff held public meetings in the vicinity of Regions II, III, and IV to discuss the status of implementation of the agency's new reactor oversight process. A similar meeting in the vicinity of Region I was held on December 13, 2000. These meetings provide a forum at which representatives from the NRC, licensees, the nuclear industry and the public can discuss the ROP's progress, challenges, and successes. The meetings are designed to provide an opportunity for discussion and exchange of information through 90-minute panel sessions on (1) the significance determination process, (2) inspection activities, (3) performance indicators (PIs), and (4) the NRC assessment and enforcement process. The panels consist of representatives from the NRC Regions and Headquarters, and representatives from the nuclear industry.
- b. The NRC's ROP Initial Implementation Evaluation Panel (IIEP) held its first meeting, which was open to the public, on November 1-2, 2000, in Rockville, Maryland. The NRC established the panel to obtain advice and recommendations on the ROP in accordance with the Federal Advisory Committee Act (FACA). The panel will



independently evaluate the results of the first year of implementation of the ROP. It will provide its views and advice on possible revisions to the program in a written report. The panel includes representatives from the NRC headquarters and regional offices, the Georgia Department of Natural Resources, the California Energy Commission, the Nuclear Energy Institute, the New England Coalition on Nuclear Pollution, Ferdig Inc., and reactor licensees.

- c. The Inspection Program Branch (IIPB) staff participated in an international meeting on Safety Performance Indicators co-sponsored by the Nuclear Energy Agency (NEA) and the International Atomic Energy Agency (IAEA) in Madrid, Spain, from October 17 through 19, 2000. There were 22 presentations on the use of performance indicators by various regulatory and industry organizations from around the world. These presentations demonstrated a variety of approaches to the subject. On the last day of the meeting, the Chief of the IIPB chaired a round table discussion on the possibility of establishing international cooperation in the development of an international set of indicators appropriate for use by regulatory bodies. There was sufficient interest in this concept that NEA and IAEA will continue ongoing efforts to develop the concept further.
- d. The Chief of IIPB participated in the 20<sup>th</sup> meeting of the Committee on Nuclear Regulatory Activities (CNRA) Working Group on Inspection Practices (WGIP) in Madrid, Spain, on October 16-17, 2000. The purpose of WGIP is to provide a forum for exchange of information related to inspection practices and development of commendable practices for consideration by its member organizations.
- e. During the last two weeks of October, the IIPB staff visited all Regions, including six reactor site visits in each region, to solicit feedback on the implementation of the reactor oversight process from licensees and regional inspectors and management. The site visits with opportunity to talk with the resident inspectors, regional managers, and licensee management, is one of the ways the IIPB is collecting feedback on the efficacy of the ROP.

The feedback from these site visits will be factored as appropriate into the initial implementation self-assessment effort, along with other feedback and input, to identify lessons learned and develop appropriate program revisions. Feedback from these visits will also be used to help structure other forums for feedback, such as, internal surveys and lessons learned workshops.

- f. The data and graphs for the performance indicators and the current plant issues matrix, which consist of inspection findings and related inspection reports for the third quarter 2000 under the ROP have been posted on the NRC internal and external web site. This performance assessment information will be updated every quarter and is available on the NRC web page address at:  
<http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>.
- g. The Inspection Manual Chapter (IMC) 1245 Working Group on Inspector Qualifications met in Region III on October 25-26, 2000, and Region IV on November 29-30, 2000. The working group discussed the results of the electronic survey on training and qualification previously sent to inspectors, which described core tasks that changed as a result of the ROP. This survey ranked the frequency and difficulty of tasks. The return rate of the survey was very high. The task group completed the definition of 12

core competency areas and began the task of identifying the knowledge, skills, and abilities for core tasks. The task group also ranked the consequence of low frequency tasks.

- h. The NRC mid-cycle performance review of all plants was completed during the week of November 6, 2000. This review utilized the performance indicators and inspection results to integrate performance information and to plan for inspection activities. Based on the review, the NRC issued mid-cycle assessment letters to each licensee on November 27-29, 2000, informing them of the assessment of their safety performance and the NRC's inspection activities for the next 12 months.
- i. The NRC managers and members of the IIPB are continuing efforts to interface with the NRC staff and stakeholders to discuss ROP initial implementation issues. On November 3, 2000, the IIPB staff made a presentation to the Nuclear Energy Institute Licensing Forum regarding the status of the ROP. The topics for discussion included initial implementation status, program feedback, key issues, and future activities/program development.
- j. On October 31, 2000, the NRC issued Regulatory Issue Summary (RIS) 2000-21, "Changes to the Unplanned Scram and Unplanned Scram with Loss of Normal Heat Removal Performance Indicators." This RIS informed power reactor licensees that a six-month pilot test would be conducted to evaluate changes to the "unplanned scrams per 7,000 critical hours" and the "unplanned scrams with loss of normal heat removal" performance indicators. This RIS also provided information on the process to be used by licensees participating in the pilot test to voluntarily submit performance indicator data to the NRC beginning December 21, 2000.

### **III. Status of Issues in the Reactor Generic Issue Program**

Changes in the status or resolution dates for Generic Safety Issues since the October 2000 report and the reasons for the changes are described below:

GSI Number:	168
TITLE:	Environmental Qualification of Electrical Equipment
STATUS:	Revised Date: TBD

Technical work, including testing of several types of cables, is complete. The NRC staff is entering into discussions with the industry to explore voluntary industry initiatives to resolve the issue. The schedule for final resolution will be established after these interactions.

### **IV. Licensing Actions and Other Licensing Tasks**

Licensing actions are defined as requests for: license amendments, exemptions from regulations, relief from inspection or surveillance requirements, topical reports submitted on a plant-specific basis, notices of enforcement discretion, or other licensee requests requiring NRC review and approval before it can be implemented by the licensee. The FY 2001 NRC

Performance Plan incorporates three output measures related to licensing actions. These are: number of licensing action completions per year, size of the licensing action inventory, and age of the licensing action inventory.

Other licensing tasks are defined as: licensee responses to NRC requests for information through generic letters or bulletins, NRC responses to 2.206 petitions, NRC review of licensee topical reports, NRR responses to regional requests for assistance, and NRC review of licensee 10 CFR 50.59 analyses and FSAR updates. The FY 2001 NRC Performance Plan incorporates one output measure related to other licensing tasks, which is the number of other licensing tasks completed.

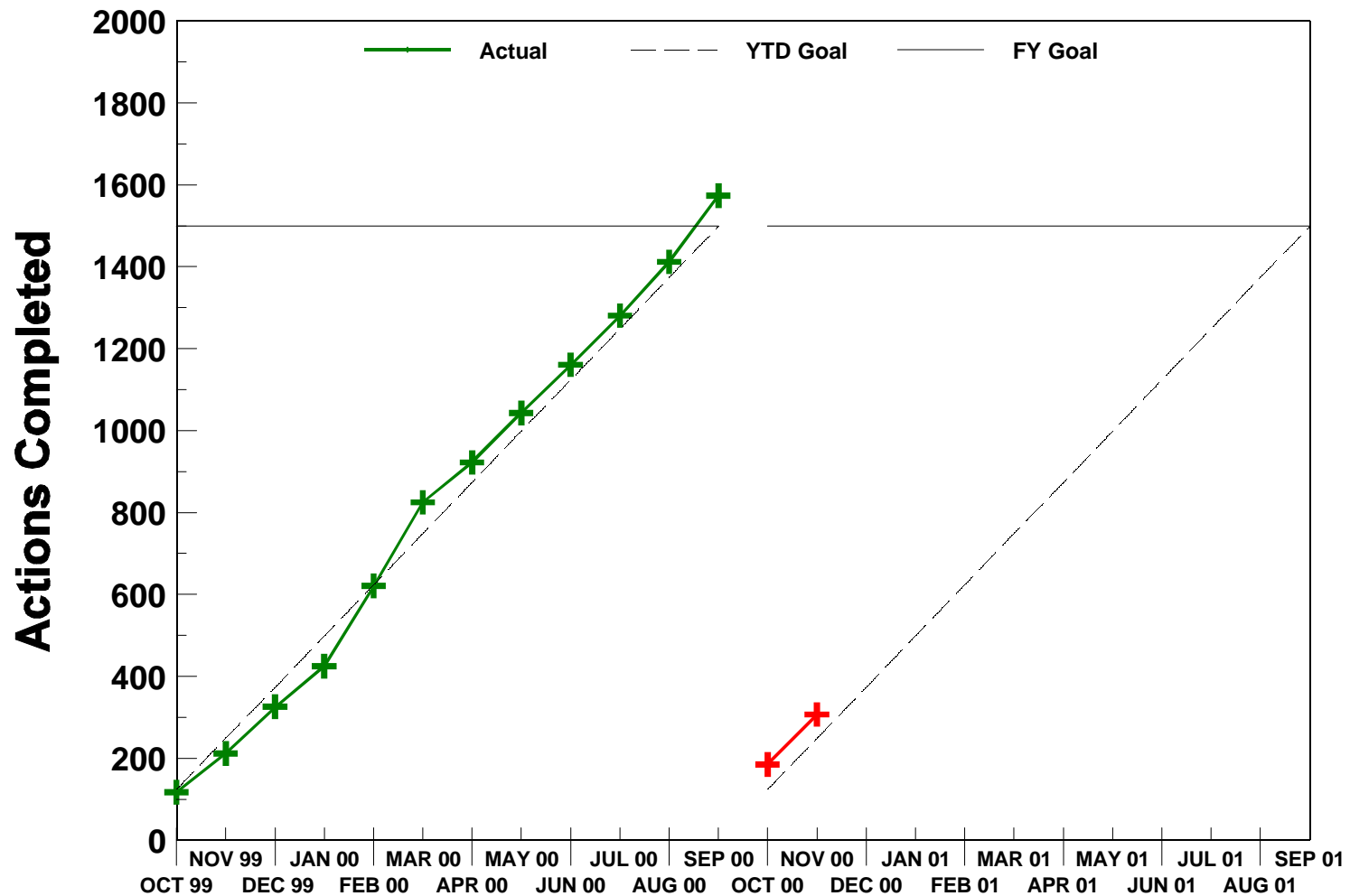
The actual FY 1999 and FY 2000 results, the FY 2001 goals and the actual FY 2001 results, as of November 30, 2000, for the four NRC Performance Plan output measures for licensing actions and other licensing tasks are shown in the table below.

PERFORMANCE PLAN				
Output Measure	FY 1999 Actual	FY 2000 Actual	FY 2001 Goals	FY 2001 Actual (thru 11/30/2000)
Licensing actions completed/year	1727	1574	\$ 1500	307
Size of licensing action inventory	857	962	# 650	929
Age of licensing action inventory	86.2% # 1 year; and 100% # 2 years	98.3%# 1 year; and 100% # 2 years	95% # 1 year and 100% # 2 years old	89.7% # 1 year; 100.0% # 2 years
Other licensing tasks completed	939	1100	\$ 775	107

The following charts demonstrate NRC's FY 2001 trends for the four licensing action and other licensing task output measure goals.

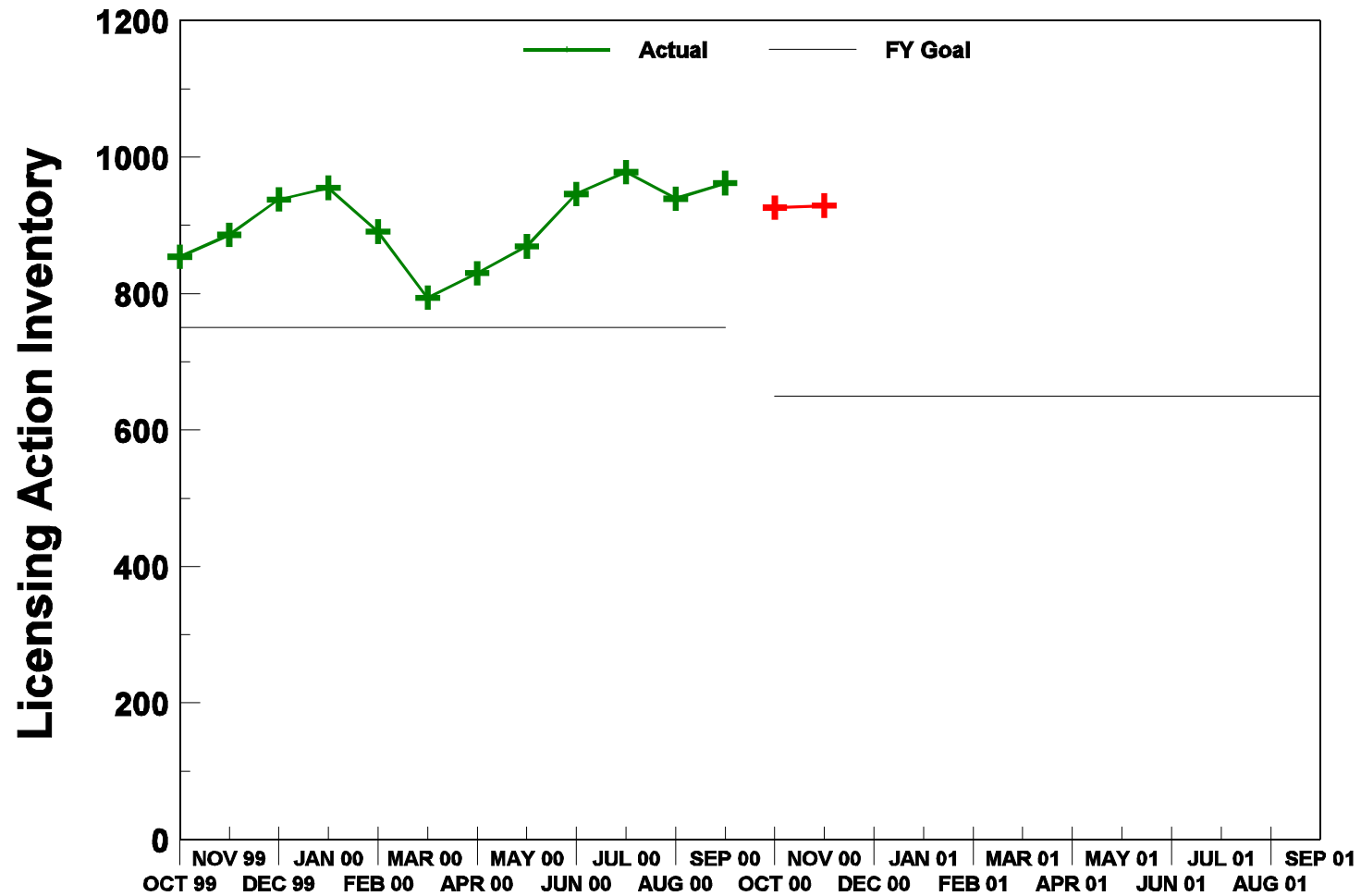
# Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Licensing Actions



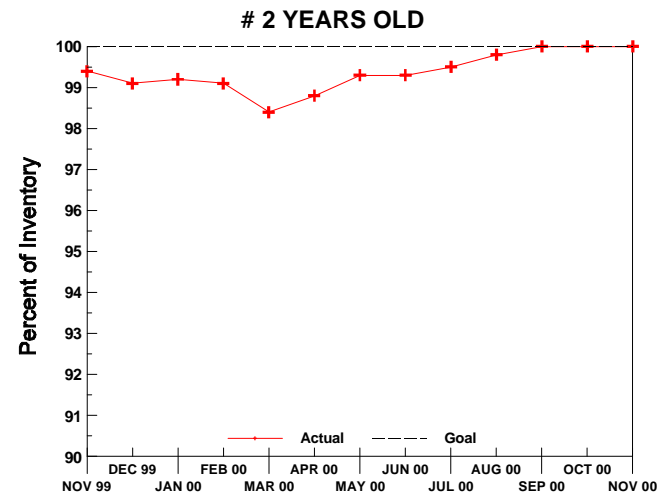
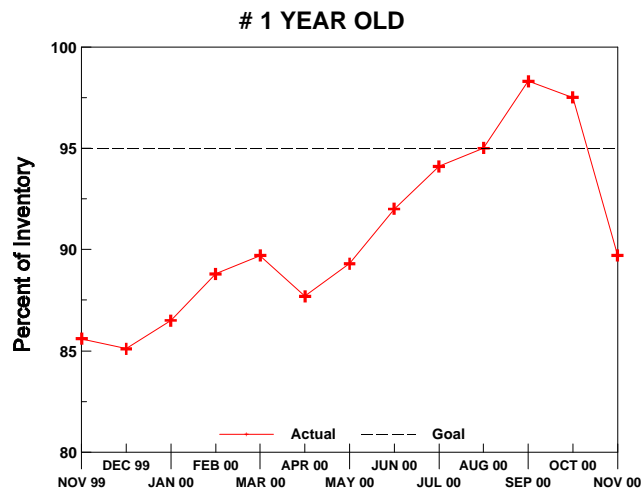
# Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Licensing Action Inventory



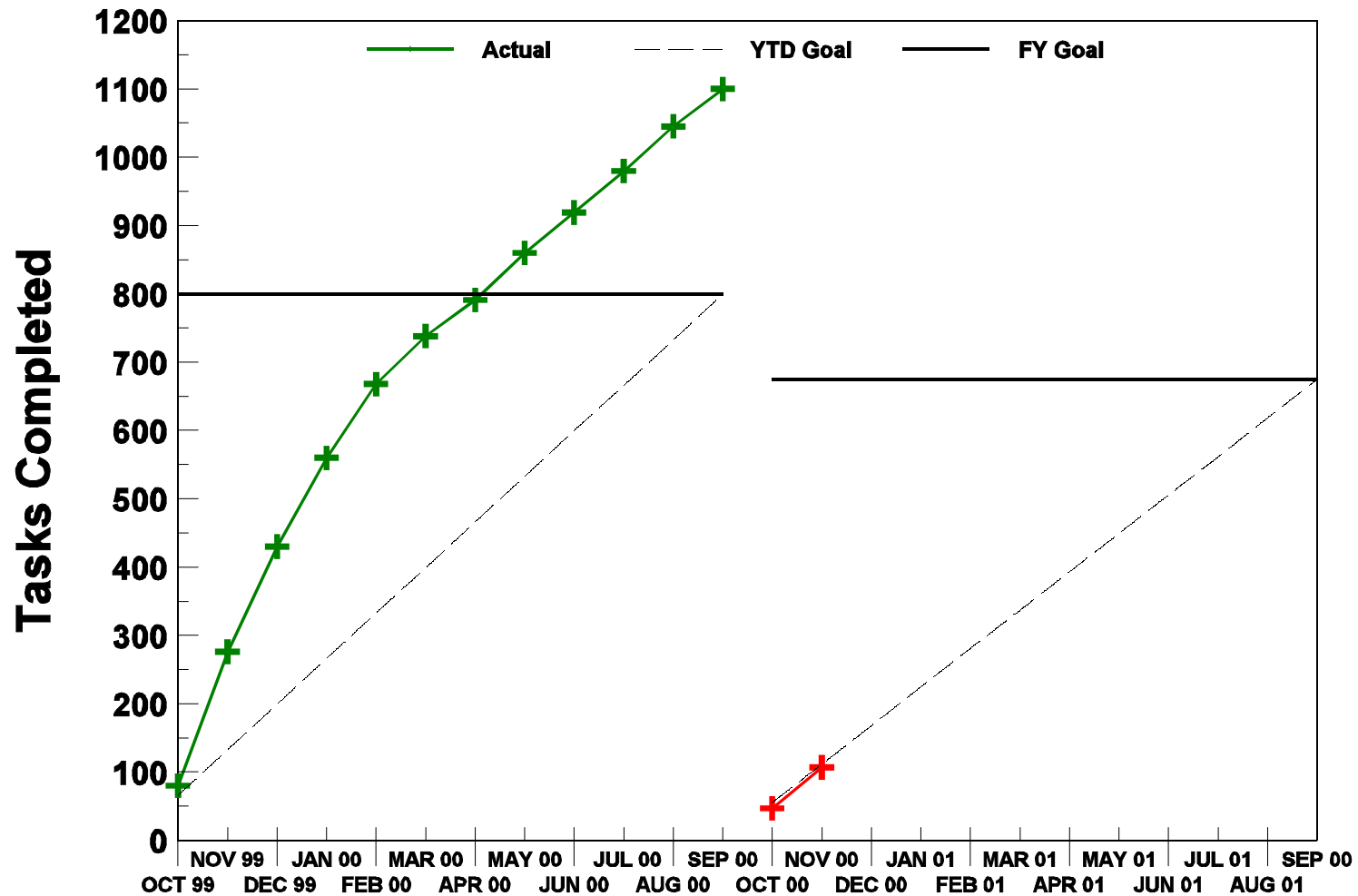
# Nuclear Reactor Safety - Reactor Licensing

## Performance Plan Target: Age of Licensing Action Inventory



# Nuclear Reactor Safety - Reactor Licensing

Performance Plan Target: Completed Other Licensing Tasks



## **V. Status of License Renewal Activities**

### Calvert Cliffs Renewal Application

The renewed licenses for Calvert Cliffs were issued on March 23, 2000, completing the NRC's review of the license renewal applications.

The Commission's denial of a request for hearing on the Calvert Cliffs application was appealed to the Court of Appeals for the D.C. Circuit. On April 11, 2000, the court issued its decision denying the petition for review. The petitioner requested a rehearing by the full Court of Appeals which was denied on June 15, 2000. The petitioner's request for review of the appellate court's decision is still before the Supreme Court.

### Arkansas Nuclear One, Unit 1, Renewal Application

The review of the Arkansas Nuclear One, Unit 1, renewal application is on schedule. All safety and environmental requests for additional information (RAIs) were issued and the applicant's responses have been received. The draft supplemental environmental impact statement was issued for comment on October 3, 2000. The staff is currently preparing the safety evaluation report.

### Hatch, Units 1 and 2, Renewal Application

The review of the Hatch renewal application is on schedule. All safety and environmental RAIs were issued and the applicant's responses were received. The draft supplemental environmental impact supplement was published in November 2000. The staff is currently preparing the safety evaluation.

### Turkey Point, Units 3 and 4, Renewal Application

The application is currently under review and the staff is preparing RAIs. The environmental review has begun and a public scoping meeting was held in the vicinity of the site on December 6, 2000. Requests for hearing have been received in response to the October 12, 2000, public notice of an opportunity for hearing. Until it is determined whether a hearing will be conducted, a 30-month review schedule has been established with a final decision on issuance of the license scheduled for March 2003. The deadline for filing hearing requests on Florida Power & Light Co.'s renewal application was extended from November 13 to November 27 in response to a request by a public citizen. The NRC does not expect that this modest extension of time will adversely impact the established review schedule since it was still in the very early stage of this license renewal proceeding.

### License Renewal Implementation Guidance Development

The NRC staff issued the revised standard review plan, generic aging lessons learned report, and regulatory guide for public comment in August 2000. Public comments have been received and the staff is currently evaluating the comments. The revised documents are scheduled to be issued by the summer of 2001.



**VI. Status of Review of Private Fuel Storage, Limited Liability Corporation's Application for a License to Operate an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians**

During this reporting period, the NRC staff (lead agency) and the three cooperating Federal agencies (the U.S. Department of the Interior's Bureau of Indian Affairs and Bureau of Land Management and the Surface Transportation Board) continued to review and prepare responses to the public comments received on NUREG-1714, "Draft Environmental Impact Statement for the Construction and Operation of an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians and the Related Transportation Facility in Tooele County, Utah." In addition, several requests have come to the NRC requesting extensions to the public comment period for NUREG-1714. Requests were made by members of Congress, the Governor of Utah, and members of the public. These requests were all denied based on the extensive public comment period provided (90 days) and the other opportunities for public participation provided through the NRC's licensing and adjudicatory processes. As part of the Environmental Impact Statement development process, the NRC staff and the three cooperating Federal agencies are carrying out consultations, pursuant to the National Historic Preservation Act. Meetings were held in Salt Lake City, Utah, with the Skull Valley Band of Goshute Indians and with representatives of several organizations concerned with historic trails and highways in Utah. In addition, a meeting was held in Wendover, Utah, with the Confederated Tribes of the Goshute Reservation. Additional consultations are planned with other interested Tribes and Tribal groups. The Final Environmental Impact Statement should be completed by February 28, 2001.

Litigation in the adjudicatory proceeding on the Private Fuel Storage, Limited Liability Company application continued during this reporting period. Five late-filed contentions were rejected by the Atomic Safety and Licensing Board; discovery continued on the two remaining safety contentions; the parties filed additional pleadings on financial issues; the NRC staff responded to a petitioner's appeal filed from the denial of his late petition to intervene; and various procedural motions and responses were filed before the Atomic Safety and Licensing Board.

**VII. Enforcement Process and Summary of Reactor Enforcement by Region**

**Reactor Enforcement by Region**

		Reactor Enforcement Actions*				
		Region I	Region II**	Region III	Region IV	TOTAL
Severity Level I	Oct 2000	0	0	0	0	0
	FY 2000 Total	0	0	0	0	0
	FY 99 Total	0	0	0	0	0
	FY 98 Total	0	0	0	0	0

	Reactor Enforcement Actions*					
Severity Level II	Oct 2000	0	0	0	0	0
	FY 2000 Total	1	2	0	0	3
	FY 99 Total	5	0	2	0	7
	FY 98 Total	3	1	1	1	6
Severity Level III	Oct 2000	0	1	0	0	1
	FY 2000 Total	5	0	4	4	13
	FY 99 Total	9	2	7	8	26
	FY 98 Total	46	11	15	19	91
Severity Level IV	Oct 2000	0	0	0	0	0
	FY 2000 Total	4	1	3	5	13
	FY 99 Total	52	42	57	60	211
	FY 98 Total	383	271	392	261	1307
Non-Cited Severity Level IV	Oct 2000	27	23	27	12	89
	FY 2000 Total	313	190	289	258	1050
	FY 99 Total	343	267	334	305	1249
	FY 98 Total	372	240	307	214	1133

<b>Escalated Reactor Enforcement Actions Associated with the Revised Reactor Oversight Process</b>						
		Region I	Region II	Region III	Region IV	Total
NOVs related to white, yellow or red findings	Oct 2000 -Red	0	0	0	0	0
	-Yellow	0	0	0	0	0
	-White	0	0	0	0	0
	FY 2000	6	1	0	0	7

\*Numbers of violations are based on enforcement action tracking system (EATS) data that may be subject to minor changes following verification. The number of Severity Level I, II, III listed refers to the number of Severity Level I, II, III violations or problems. The monthly totals generally lag by 30 days due to inspection report and enforcement development.

\*\* Violation totals for Region II reflect a shift from a 6 week inspection period to a quarterly inspection period.

### **Description of Significant Actions taken in October 2000**

#### **Tennessee Valley Authority (Browns Ferry Nuclear Plant)**

On October 27, 2000, a Notice of Violation was issued for a Severity Level III violation involving the failure to perform required evaluations for out-of-tolerance measuring and test equipment (M&TE). Site procedures require that upon being informed that M&TE was out-of-tolerance, the M&TE program administrator was required to issue and/or disposition non-conformance evaluations for those plant components tested or inspected using the out-of-tolerance M&TE. The purpose of the non-conformance is to initiate a site review to ensure that plant components have not been adversely affected. It was determined that approximately 500 non-conformance evaluations were not properly issued and/or dispositioned from June 1997 to June 1999.

### **VIII. Power Reactor Security Regulations**

Based on direction given by the Commission in Staff Requirements Memoranda dated June 29, 1999, November 22, 1999, and April 12, 2000, the staff has been involved in a project to re-evaluate and revise its regulations pertaining to security at power reactor facilities. This project is an outgrowth of the staff's recommendation in May 1999, to institute a requirement for licensees to conduct periodic exercises to test the capability of their security organizations to protect against the design basis threat (SECY-99-024, "Recommendations of the Safeguards Performance Assessment Task Force," January 22, 1999). Following this paper, the staff recommended that a comprehensive review of the power reactor security regulations

(10 CFR 73.55) be undertaken, including a new requirement for exercising the capability of security organizations to protect against the design basis threat (SECY-99-241, "Rulemaking Plan, Physical Security Requirements for Exercising Power Reactor Licensees' Capability to Respond to Safeguards Contingency Events," October 5, 1999). The Commission approved these recommendations and directed the staff to undertake the project.

The staff conducted a series of public meetings to ensure that external stakeholders had an opportunity to provide input to the process. The staff developed several position papers while drafting a proposed rule, including one which defined the approach the staff intended to take in the rulemaking. This approach included the use of performance criteria and critical safety functions as the basis for the rule (SECY-00-0063, "Staff Re-Evaluation of Power Reactor Physical Protection Regulations and Position on a Definition of Radiological Sabotage," March 9, 2000). This approach was approved by the Commission and the staff was directed to publish SECY-00-0063 in the Federal Register and invite public comment. The staff has completed its evaluation of the public comments and incorporated issues raised in these comments into the proposed performance objectives for the exercise rule. The staff's proposal is discussed in an information paper for the Commission that outlines the status of several significant safeguards initiatives. The paper is currently undergoing management review. The final performance criteria will be submitted to the Commission for approval in the proposed rulemaking by May 2001.

In addition to the above effort, considerable attention has been paid to related issues surrounding the conduct of the Operational Safeguards Response Evaluation (OSRE) program. The OSRE program is NRC's current program for performance exercises conducted at nuclear power plants. The industry has developed a Safeguards Performance Assessment (SPA) pilot program to test concepts for the exercise portion of the new 10 CFR 73.55. The staff has interacted extensively with stakeholders on this program and expects to pilot the SPA program while the rulemaking, including the exercise requirement, is being processed. Lessons learned from the SPA will be incorporated into the final rulemaking. To date, four public meetings have been held to discuss the SPA program, including a meeting on December 13, 2000, at which the final SPA guidance document and details regarding the proposed pilot program were discussed.

The staff has also forwarded its recommendations to the Commission concerning an interim revision to the Physical Protection Significance Determination Process (PPSDP) addressing issues associated with application of the existing PPSPD. In the new reactor oversight program the significance determination process is used to determine significance of findings and the appropriate regulatory response. The staff plans to formally revise the PPSPD in a process involving all stakeholders upon Commission approval.

With respect to the conduct of OSREs, on August 29, 2000, the staff issued an attachment to Inspection Procedures 71130.03 and 81110 which provided details on the adversary characteristics that would be used in OSRE exercises. The attachment is sensitive unclassified Safeguards Information and therefore not publicly available, but was made available to cleared security managers at nuclear power plants to be used in the evaluation of the security force response capability.

On November 17, 2000, the staff issued a memorandum to all regional offices concerning the agenda, conduct, and rules of engagement for OSREs. The purpose of the memorandum was to provide guidance on critical issues in the scheduling and conduct of OSREs. Sections of the guidance dealt with selection of sites; inspection procedure to be used; NRR and contractor support; role of the contractor; adversary characteristics (referring to the August 29, 2000, attachments noted above); conduct of a pre-OSRE meeting; entrance and exit meetings; target sets; credit for operator actions; control of exercise artificialities; success criteria; and changes to the significance determination process. The agency has received positive feedback from the industry representatives with respect to the recent initiatives that have stabilized the OSRE program and clarified the agency's expectations.