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Reactor Oversight Process (ROP)	Based on its assessment of stakeholder feedback and the results and lessons learned from annual self-assessments, the staff has developed a much greater level of confidence that the ROP has met the Commission's direction to develop an oversight process that is more objective, risk-informed, understandable, and predictable. The most recent self-assessment concluded that the risk-informed ROP helps the industry and the NRC to focus resources on areas of the most safety significance. The staff has identified areas for improvement of performance indicators and of the significance determination process (SDP) and has developed plans to accomplish those improvements. The SDP task group has made recommendations that would address concerns associated with various aspects of the SDP, including the phase 2 evaluation process. These recommendations are being implemented. Enhanced guidance on the use of the reactor safety phase 2 SDP has been issued and associated inspector training has been completed. New guidance for the conduct of safety and environmental review panels (SERPs) has also been implemented. Additionally, important changes are being incorporated into the containment, shutdown, and fire protection SDPs to provide inspectors with a simpler methodology to assess findings.
Special Treatment Requirements	The Commission issued an SRM on March 28, 2003 directing the staff to publish a proposed rule for comment. The proposed rule 10 CFR 50.69 was subsequently published with a 75-day comment period. As part of the proposed rule, a draft regulatory guide (DG-1121), providing staff comments on and clarifications of the industry-proposed implementation guidance contained in draft Revision C of NEI 00-04, was published in June 2003 with a 60-day comment period.
10 CFR 50.44	The staff has completed a detailed technical review that provides the basis for proposed risk-informed changes to the rule. The improved realism supports the agency's decision to eliminate requirements for equipment that is not important to safety. On August 2, 2002, the proposed rulemaking was published in the <i>Federal Register</i> (67 FR 50374.) Many letters were received during the public comment period that closed on October 16, 2002. The staff has evaluated the comments and is preparing the final rule.
PRA Quality	The staff has been working closely with ASME, ANS, NFPA, and NEI to develop standards for PRA quality and PRA review. Since the July 2002 version of the RIRIP, staff has prepared a draft regulatory guide, DG-1122, to provide guidance to licensees on the quality needed for PRA information used in risk-informed applications. This guide also addresses the staff's positions on the ASME PRA Standard and the industry's guidance on PRA peer reviews. The draft guide has been issued for public comment. An associated draft standard review plan chapter has also been prepared for public comment.
10 CFR 50.46	The staff has continued to meet with stakeholders about potential risk-informed revisions to ECCS and LOCA requirements. For instance, the staff has met with the Boiling Water Reactor Owners Group on the group's proposal for a topical report as a pilot exemption from the coincident loss-of-offsite power assumption for larger break LOCAs. Further, after the issuance of the March 31, 2003, SRM, the staff held a public meeting with stakeholders to discuss issues needing resolution to proceed with rulemaking.

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Risk-Informed Technical Specifications	The staff continues to work on the risk-informed technical specification initiatives. The safety evaluations of the CEOG and BWROG topical reports for Initiative 1, Technical Specification Actions End State Modifications, have been completed. On January 23, 2003, the CEOG submitted proposed changes to the CE Standard Technical Specifications (STS), with some deviations from the approved SE. The staff is evaluating the submittal to determine if the deviations are acceptable. Initiative 3, Modification of Mode Restraint Requirements, was completed via the Consolidated Line Item Improvement Process (CLIIP). An April 4, 2003, <i>Federal Register</i> notice announced the availability of the proposed STS changes. On June 4, 2003, an SE was completed for the CEOG submittal for Initiative 6, Modification of LCO 3.0.3, Actions and Completion Times.
RG 1.174/SRP Chapter 19	Since the July 2002 version of the RIRIP, RG 1.174 and SRP Chapter 19 were completed and issued. These were the first revisions of these documents since their initial publication in July 1998. The revisions included the following changes: 1. Risk-related information may now be requested if new, unforeseen hazards emerge or the likelihood of known hazards increases substantially. 2. The revisions mention ongoing staff discussions of the potential effect of increases in fuel burn-up and the use of mixed-oxide fuel on risk metrics such as large early release frequency. 3. Additional examples of risk insights in the decisionmaking process are provided.
Pressurized Thermal Shock	In December 2002, the staff issued a draft NUREG report, "Technical Basis for Revision of the Pressurized Thermal Shock (PTS) Screening Criteria in the PTS Rule (10 CFR 50.61)". This report documents the results of a multiyear study re-evaluating the technical basis of 10 CFR 50.61. The staff is currently updating that report to include a more detailed description of methods and results. The updated report will be peer-reviewed and then published as a final NUREG report containing RES' suggested rulemaking options and recommendations.
Steam Generator Performance During Severe Accidents	The staff is incorporating the results from recent materials and thermal-hydraulic studies into a risk-informed framework to enable quantification of the frequency of containment bypass events due to steam generator (SG) tube failures during severe accidents. Results from analyses of tube failures are now being incorporated; results for other materials that could fail before the SG tubes, thereby preventing tube failures and the resulting containment bypass, will be incorporated when they become available.
Probabilistic Risk Assessment of a Dry Cask Storage System	The staff completed a revised draft pilot PRA (February 2003) with integrated risk results. The study is under peer review and will be updated, and additional studies will be performed as appropriate to help risk-inform NRC's inspection programs and other regulatory activities for dry cask storage.
Identification of Regulatory Activities Amenable to Increased Use of Risk-Information	Between January and April 2002, the Risk Task Group, in consultation with the NMSS divisions, used the NMSS screening considerations to systematically identify NMSS regulatory activities that are amenable to being risk-informed. This identification of activities will serve as the NMSS road map to comprehensively risk-informing its regulatory activities. Actual implementation of the activities will be planned, prioritized and budgeted through the PBPM process.
NMSS Risk Training Program	NMSS has instituted training courses to advance the use of risk assessment and risk management in its day-to-day operations. TTC regularly offers overview training courses on risk assessment. A quantitative frequency analyses course is offered through TTC. A course on byproduct materials system risk analysis and evaluation has been developed and six instructor-led sessions (two in HQ and one in each Region) were conducted. A course on human reliability assessment for materials and waste regulatory applications has been developed. A pilot was offered in the second quarter of FY2003. Staff feedback is being evaluated to improve the course before it is officially offered to the NMSS staff in FY2004.

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NMSS Risk Communication plan	In April 2002, NMSS revised the "Communication Plan for Risk Informing Materials and Waste Regulations." The Communication Plan describes NMSS' plan for communicating risk information to internal and external stakeholders. The purpose of the plan is to (1) inform external stakeholders of the major points of the program to risk inform materials and waste regulations in order to increase public confidence, and (2) inform the internal stakeholders of NMSS' activities in order to increase understanding and acceptance of NMSS' risk-informing efforts and to assist NMSS staff in communicating risk-related information to external stakeholders. The Risk Communication Plan was updated in April 2003 to reflect the current risk communication efforts by NMSS/RTG.
Medical Use of Byproduct Material	The final rule amending the regulations for the medical use of byproduct material (10 CFR Part 35) became effective on October 24, 2002. The final rule is one element of the Commission's program for revising its medical use regulatory framework to focus the regulations on high-risk medical procedures and to make its regulations more risk-informed and more performance-based. In addition, the staff completed other elements of the program, including the revision of NUREG-1556, Volume 9, "Program-Specific Guidance About Medical Use Licenses," and the revision of four medical inspection procedures to reflect final rule changes to 10 CFR Part 35. Training was conducted for licensing and inspection staff and was made available to staff in Agreement States.
Risk-informed, Performance-based Inspection Procedures for Use of Byproduct Material	The inspection procedures were revised to incorporate risk-informed focus elements from the Phase II byproduct review and the new 10 CFR Part 35 changes.
Multiphase Review of the Byproduct Materials Program (Implementation of Phase I and II Recommendations)	The staff evaluated 13 recommendations to improve the effectiveness and efficiency. Action was completed for four of the recommendations (i.e., promoting the use of the NUREG-1556 series by licensees, providing guidance to staff for TAR process, revising the event evaluation policy (P&P letter 1-57), and promoting broader use of flexiplace by the staff). Further actions were not needed for three of the recommendations (i.e., delegation of Severity Level III cases to the regional offices, revision of allegation referral procedures for the States and licensees, and periodic counterpart meetings for regional and IMNS staff). Six recommendations are currently being tested under Temporary Instruction 2800/033, Revised Materials Inspection Program.
Fuel Cycle Oversight Revision Project	In March 2002, the staff gave the Commission a status report on the fuel cycle oversight revision project. This project was closed at the end of FY 2002, after the staff completed near-term revisions of the Licensee Performance Review process and the guidance for the fuel cycle facility inspection program. Beginning in FY 2003, risk-informed revisions to the fuel cycle oversight program's inspection procedures are made during normal updates of the inspection program, as the Part 70 revisions are implemented. With this approach, the fuel cycle facility oversight process will evolve in a more risk-informed direction over the next several years.
High-level Waste Program	The staff completed and sent to the Commission a draft report describing the high-level waste risk insights baseline. The final report will be completed in October 2003. The staff also compiled and sent to the Commission a rating of the NRC-DOE pre-licensing agreements based on risk significance, anticipated staff effort, and anticipated technical difficulty.
Decommissioning Guidance Consolidation	The Decommissioning Guidance Consolidation Project is completing its review and consolidation of existing decommissioning guidance and is updating and risk-informing the guidance, as appropriate, in the process. The staff published Volume 1 (decommissioning process) in September 2002. The staff issued Volume 2 (characterization, survey, and determination of radiological criteria) for comment in September 2002 and Volume 3 (financial assurance, record keeping, and timeliness) for comment in January 2003. Volumes 2 and 3 will be issued as final guidance documents in September 2003.

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Revised Decommissioning Reactor Oversight	In 2002, the staff implemented a change in staff regulatory oversight of decommissioning commercial nuclear reactor plants. The responsibility of project management was transferred from NRR to NMSS earlier in the decommissioning process to take advantage of NMSS' regulatory expertise in overseeing decommissioning and waste storage facilities. This resulted in a more efficient and effective approach that maintains safety while increasing public confidence and reducing unnecessary regulatory burden on reactor licensees. To assist this effort, the staff risk-ranked the requirements of the decommissioning inspection program and revised IMC 2561 to better align the reactor core inspection requirements with the risks associated with decommissioning power reactors.
Determination of Probability Distributions for Human Failure Events	The staff completed the development of a formalized expert elicitation process for determining probability distributions for human failure events. This improved quantification technique has the unique feature (among the current HRA methods) of allowing an explicit treatment of uncertainties. It can be used in conjunction with any HRA method and in particular with ATHEANA (A Technique for Human Event Analysis). The staff has also finished developing lessons learned from using ATHEANA in performing HRA as part of the PTS PRA.
Fuel Cycle Oversight Program	As part of the effort to make the fuel cycle oversight program more risk-informed and performance-based, the staff completed the revision of Inspection Manual Chapter 2600, "Fuel Cycle Facility Operational Safety and Safeguards Inspection Program."