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

CHAIRMAN

January 25, 1988

The Honorable John C. Stennis, Chairman
Committee on Appropriations
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

I am enclosing a summary of actions taken by the United States Nuclear Regulatory Commission (NRC) in response to recommendations concerning the NRC which were in reports issued by the Comptroller General. It includes significant actions taken on recommendations in reports issued in 1987 and in prior years. This summary is required by Section 236 of Public Law 91-510, the "Legislative Reorganization Act of 1970."

Sincerely,

Lando W. Zech, Jr.

Enclosure:
Summary of NRC Actions

cc: Sen. Mark O. Hatfield

PDR

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

CHAIRMAN

January 25, 1988

The Honorable Jamie L. Whitten, Chairman
Committee on Appropriations
United States House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I am enclosing a summary of actions taken by the United States Nuclear Regulatory Commission (NRC) in response to recommendations concerning the NRC which were in reports issued by the Comptroller General. It includes significant actions taken on recommendations in reports issued in 1987 and in prior years. This summary is required by Section 236 of Public Law 91-510, the "Legislative Reorganization Act of 1970."

Sincerely,

Lando W. Zech, Jr.

Enclosure:
Summary of NRC Actions

cc: Rep. Silvio Conte

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

CHAIRMAN

January 25, 1988

The Honorable John Glenn, Chairman
Committee on Governmental Affairs
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

I am enclosing a summary of actions taken by the United States Nuclear Regulatory Commission (NRC) in response to recommendations concerning the NRC which were in reports issued by the Comptroller General. It includes significant actions taken on recommendations in reports issued in 1987 and in prior years. This summary is required by Section 236 of Public Law 91-510, the "Legislative Reorganization Act of 1970."

Sincerely,

Lando W. Zech Jr.

Lando W. Zech, Jr.

Enclosure:
Summary of NRC Actions

cc: Sen. William V. Roth, Jr.

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

CHAIRMAN

January 25, 1988

The Honorable Jack Brooks, Chairman
Committee on Government Operations
United States House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I am enclosing a summary of actions taken by the United States Nuclear Regulatory Commission (NRC) in response to recommendations concerning the NRC which were in reports issued by the Comptroller General. It includes significant actions taken on recommendations in reports issued in 1987 and in prior years. This summary is required by Section 236 of Public Law 91-510, the "Legislative Reorganization Act of 1970."

Sincerely,

Lando W. Zech, Jr.

Enclosure:
Summary of NRC Actions

cc: Rep. Frank Horton

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

CHAIRMAN

January 25, 1988

The Honorable John Breaux, Chairman
Subcommittee on Nuclear Regulation
Committee on Environment and Public Works
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

I am enclosing a summary of actions taken by the United States Nuclear Regulatory Commission (NRC) in response to recommendations concerning the NRC which were in reports issued by the Comptroller General. It includes significant actions taken on recommendations in reports issued in 1987 and in prior years. This summary is required by Section 236 of Public Law 91-510, the "Legislative Reorganization Act of 1970."

Sincerely,

Lando W. Zech, Jr.

Enclosure:
Summary of NRC Actions

cc: Sen. Alan Simpson

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

CHAIRMAN

January 25, 1988

The Honorable Morris K. Udall, Chairman
Subcommittee on Energy and the Environment
Committee on Interior and Insular Affairs
United States House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I am enclosing a summary of actions taken by the United States Nuclear Regulatory Commission (NRC) in response to recommendations concerning the NRC which were in reports issued by the Comptroller General. It includes significant actions taken on recommendations in reports issued in 1987 and in prior years. This summary is required by Section 236 of Public Law 91-510, the "Legislative Reorganization Act of 1970."

Sincerely,

Lando W. Zech Jr.

Lando W. Zech, Jr.

Enclosure:
Summary of NRC Actions

cc: Rep. Manuel Lujan

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

CHAIRMAN

January 25, 1988

The Honorable Philip Sharp, Chairman
Subcommittee on Energy and Power
Committee on Energy and Commerce
United States House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I am enclosing a summary of actions taken by the United States Nuclear Regulatory Commission (NRC) in response to recommendations concerning the NRC which were in reports issued by the Comptroller General. It includes significant actions taken on recommendations in reports issued in 1987 and in prior years. This summary is required by Section 236 of Public Law 91-510, the "Legislative Reorganization Act of 1970."

Sincerely,

Lando W. Zech Jr.

Lando W. Zech, Jr.

Enclosure:
Summary of NRC Actions

cc: Rep. Carlos Moorhead

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

CHAIRMAN

January 25, 1988

The Honorable Charles A. Bowsher
Comptroller of the United States
General Accounting Office
Washington, D. C. 20548

Dear Mr. Bowsher

I am enclosing a summary of actions taken by the United States Nuclear Regulatory Commission (NRC) in response to recommendations concerning the NRC which were in reports issued by the Comptroller General. It includes significant actions taken on recommendations in reports issued in 1987 and in prior years. This summary is required by Section 236 of Public Law 91-510, the "Legislative Reorganization Act of 1970."

Sincerely,

Lando W. Zech, Jr.

Enclosure:
Summary of NRC Actions

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

CHAIRMAN

January 25, 1988

The Honorable James C. Miller, III
Director
Office of Management and Budget
Washington, D. C. 20503

Dear Mr. Miller:

I am enclosing a summary of actions taken by the United States Nuclear Regulatory Commission (NRC) in response to recommendations concerning the NRC which were in reports issued by the Comptroller General. It includes significant actions taken on recommendations in reports issued in 1987 and in prior years. This summary is required by Section 236 of Public Law 91-510, the "Legislative Reorganization Act of 1970."

Sincerely,

Lando W. Zech, Jr.

Enclosure:
Summary of NRC Actions

SUMMARY OF NRC ACTIONS

RESPONSE TO GAO REPORTS

NRC ACTIONS IN CY 1987

IN RESPONSE TO COMPTROLLER GENERAL RECOMMENDATIONS

Report - August 13, 1987
(GAO/RCED-87-141)

Efforts To Ensure Nuclear Power Plant Safety Can Be Strengthened

Recommendation No. 1 (Chapter 3)

The GAO stated that, although it agreed with the NRC that the ultimate decision to shut a plant down should be made on a case-by-case basis, there should be a mechanism to alert the industry that plants would be shut down when safety or management problems approach a specific threshold.

The GAO report recommended that "the Chairman, NRC, develop guidelines to use as a framework in deciding the types and/or degree of safety problems that constitute undue risk such that NRC would consider shutting a plant down."

NRC Response:

Prior to issuing an operating license for a nuclear power plant, the NRC reviews the design features of the plant and makes an assessment of the credible design basis accident scenarios and the systems and conditions necessary to prevent or mitigate those accidents such that regulated exposure limits will not be exceeded. The results of this review are documented in formal reports issued by the NRC prior to licensing and are reflected in the plant's technical specifications issued as a part of the operating license. The plant's technical specifications clearly identify operating conditions requiring the plant to be shut down and time limits for achieving shutdown conditions. Compliance with these technical specifications by the licensee is mandatory; failure to do so can result in criminal or civil penalties and suspension or revocation of the operating license. As noted in the GAO report, NRC has a number of enforcement options, ranging from violation notices to binding orders, that can be employed when operation of a plant is found to be in violation of the license, regulations, or licensee commitments.

The NRC staff recognizes the continuing need to evaluate the safety performance of its licensees and has developed a number of formal procedures to this end. Since 1980, the NRC has conducted a formal, periodic assessment of each utility holding a construction permit or operating license. These assessments, called Systematic Assessment of Licensee Performance (SALP) reviews, perform a very important function in the NRC's determination of the adequacy of a licensee's performance and the allocation of the NRC's inspection resources. Each plant is reviewed every 12 to 18 months in 10 to 12 management and operation areas, including the number and severity level of violations. Although not specifically mentioned in the GAO report, the NRC had identified management problems at the five plants discussed in the report through the SALP process and had taken specific actions to improve management performance at those facilities. (It should be noted, however, that a SALP rating involves 3 categories of acceptable licensee performance; they are not passing or failing grades on which a shutdown decision would be made.) More

recently, the NRC has also initiated a formal system for tracking various plant performance indicators to supplement the information yielded by the SALP process. On a semiannual basis, senior NRC headquarters managers (Office Directors) and the five NRC Regional Administrators meet to discuss plant performance and corrective actions using all available sources of information including the SALP process, recent inspection results, and performance indicators. A decision to shut a plant down because licensee performance had deteriorated to an unacceptable safety level would logically result from one of these meetings.

In summary, the Commission considers that an adequate framework presently exists to render a decision to shut a plant down should it constitute an undue risk to the public health and safety. The conditions requiring shutdown in most cases has been made in advance as reflected in the technical specifications and license conditions unique to each plant. In those cases, the licensee is expected to recognize a situation requiring plant shutdown and is obligated by NRC regulations to shut down the plant and notify the NRC . In addition, the NRC has resident inspectors at each plant site to monitor the safety of operations and compliance with the regulations and operating license. In the more subtle cases involving cumulative minor violations or other indicators of declining licensee management performance, the NRC has a formal and deliberative process for making a decision that a plant shutdown is the appropriate corrective action as discussed above. In the extremely rare situation where a major safety violation has occurred and the licensee has not recognized that a plant shutdown is appropriate, the Commission feels confident that adequate measures presently exist to enable the NRC to recognize the situation and rapidly order the plant shut down.

Recommendation No. 2 (Chapter 4)

The GAO report stated that each year the NRC finds thousands of violations of safety standards. It also noted that a system exists whereby the NRC relies on its regional offices and resident inspectors to track the violations to ensure that utilities take corrective action, but NRC headquarters does not routinely consolidate this information.

The GAO report recommended that the "Chairman, NRC, annually develop consolidated information for all operating plants showing the status of corrective actions planned or taken by the utilities."

NRC Response

In response to this recommendation, the Commission has reexamined the information management systems currently in place, procedures presently being used by the staff to assess the adequacy and status of corrective actions, and the need for an annual consolidation of this information. The results of this reexamination are discussed below.

There are three information management systems used by the NRC staff to track enforcement-related issues on a plant-by-plant basis.

1. An Open Item Tracking System (OITS) is maintained by each Regional Administrator to track the status of corrective actions and licensee commitments at each plant in that region resulting from various inspection activities, including violations and deviations. Reports from this system are also used by the NRC Project Managers for each plant at NRC headquarters to maintain an awareness of plant-related issues.

2. The Enforcement Action Tracking System (EATS) is maintained by NRC headquarters (specifically, by the Office of Enforcement) to track enforcement actions at all plants. In the past, this system has tracked only Level I, II, and III violations, but it is being expanded to also track cases involving the less severe Levels IV and V violations. As recommended in a 1985 report by the Advisory Committee for Review of the Enforcement Policy, the NRC is also expanding this system to improve its ability to monitor enforcement actions at the national level. This enhancement should allow review of violation trends (number, regional distribution, facility distribution and function areas) and repetitive violations of a generic nature. The EATS does not, however, track corrective actions resulting from violations because this would duplicate the OITS discussed above.

3. The "766" system is maintained by NRC headquarters to tabulate status of inspection activities including individual violations found by inspection. Reports from this system are used in developing inspection strategies. The "766" system is currently being revamped to increase its usefulness in managing the NRC's overall inspection program.

The GAO report recommended an annual consolidated report showing the status of corrective actions taken or planned by utilities. As discussed above, tracking of enforcement actions is presently performed by the EATS, but tracking of corrective actions is the responsibility of each regional office using OITS with the information available to headquarters personnel, including the Project Managers. It is important to realize that not all violations result in corrective actions of an ongoing nature. In a large number of cases the corrective action is taken at the time of the inspections, or shortly thereafter, and needs only to be documented in NRC inspection reports. In general, corrective action associated with violations is verified by NRC inspectors and documented in NRC inspection reports.

There are a number of occasions when the NRC reviews a plant's history regarding violations and corrective actions. For example, the periodic SALP review includes the number and severity of violations during the assessment period. The SALP process also assesses management involvement and responsiveness in resolving technical safety issues. A second example is that each time an NRC inspection is performed, a review of the current status of corrective actions in the area of concern is performed by the inspector. In addition, significant outstanding corrective actions are discussed with licensee executives during periodic meetings with NRC management.

In light of the NRC activities already in place, the NRC does not consider that initiating an annual consolidation of corrective action information would serve to enhance the NRC's ability to ensure the continued protection of public health and safety.

Commissioner Bernthal sees no reason why this GAO recommendation should not be implemented.

NRC ACTIONS IN CY 1987

IN RESPONSE TO COMPTROLLER GENERAL RECOMMENDATIONS

Report - September 19, 1984
(GAO/RCED-84-149)

Management Weaknesses Affect Nuclear Regulatory Commission Efforts To Address Safety Issues Common To Nuclear Power Plants

Recommendation

The GAO report recommended the development and implementation of a management system that would:

(1) individually track generic issues through completion of all work, including implementing changes at affected plants

(2) provide information on resource needs, expenditures and milestones

(3) retain summary information on the disposition of resolved issues, and

(4) ensure that the most important safety-related plant modifications resulting from the resolution of generic issues receive priority attention.

NRC Response

The NRC generally agreed with GAO's recommendations and, in an effort to track more effectively safety issues common (generic) to more than one nuclear plant, adopted the Safety Issues Management System (SIMS). The Safety Issues Management System is presently being used by management and staff to plan, track, and otherwise manage the progress of each generic safety issue from its inception until any requirements are implemented and verified, as necessary, at each affected facility.

SIMS has been loaded with data for nuclear reactor related regulations, regulating policies and guidance, Unresolved Safety Issues (USIs), and Generic Issues. Although not addressed in the GAO report, data for plant specific issues (plant unique) also has been loaded into SIMS. In 1988, data for all Generic Letters and Bulletins will be loaded into SIMS. SIMS data is considered to be reasonably accurate since cognizant NRC staff has reviewed and loaded the data into SIMS. Furthermore, plant data has been reviewed by the staff with licensee participation. In 1988, a contractor will audit SIMS data to confirm its accuracy. As a result of NRC's major reorganization in 1987, Agency-wide and office procedures for SIMS cognizance and responsibilities, operation, maintenance, and documentation are being modified and developed.

SIMS currently is being used and is making a significant contribution to the management process. Its uses to date include:

(1) the genesis for several special reports used by the Chairman during Senior Management Meetings held quarterly to evaluate licensee performance

(2) provision of input to reporting for Congress and the public concerning the status of generic matters

(3) input into the reassessment of the safety of all B&W reactors

(4) enabling individual Project Managers and Resident Inspectors to track imposition and implementation of requirements at their plants

(5) provision for the means for summarizing the content of generic proposals to CRGR and developing a long range agenda, and

(6) providing input to daily management and staff vigilance of plant safety status.

The implementation of the SIMS is one of the NRC's highest priorities. SIMS is intended as a dynamic model, subject to alteration when required. SIMS is significantly enhancing the tracking and the managerial and staff effectiveness and efficiency associated with addressing safety issues.

We consider these items completed.

NRC ACTIONS IN CY 1987

IN RESPONSE TO COMPTROLLER GENERAL RECOMMENDATIONS

Report - December 15, 1982
(GAO/RCED-83-4)

Problems And Delays Overshadow NRC's Initial Success In Improving Reactor Operator's Capabilities

Recommendation

Review all revised training programs developed by the utilities, correct any deficiencies before approving the programs for implementation, and audit the implementation of these programs within one year from the date of implementation to ensure that they are providing effective training to key personnel.

NRC Response

The Commission Policy Statement on Training and Qualification of Nuclear Power Plant Personnel (50 FR 11147, March 20, 1985) endorsed the INPO accreditation program because that program encompassed the elements of effective performance-based training, and the industry committed to having ten training programs for key personnel at each nuclear power plant site ready for accreditation by the end of 1986. In the Policy Statement, NRC described its role of monitoring and evaluating the INPO program. This role included observing INPO site visits and accrediting board meetings, conducting performance-based inspections, including a training element in Systematic Assessment of Licensee Performance reports, conducting operator licensing examinations, and conducting post-accreditation audits at selected sites. This approach was chosen as a means of expediting the implementation of performance-based training and the review process. SECY-87-121, dated April 21, 1987, describes a two-year evaluation of the Policy Statement and the INPO accreditation process and states that NRC should continue to endorse the INPO program while maintaining a monitoring posture.

Recommendation

Develop a specific agreement for coordinating NRC and INPO activities related to operator training and qualification which will permit NRC to keep abreast of the direction, quality, and progress of INPO's work while recognizing the sensitive relationship between the NRC and INPO.

NRC Response

In July of 1985, the NRC and INPO signed and added to their basic Memorandum of Understanding Appendix No. 4 - Coordination Plan for NRC/INPO Training-Related Activities, which included two attachments on Job and Task Analysis and Accreditation. This plan clearly and definitively stated the respective roles and responsibilities of the two organizations, including NRC's activities related to the monitoring of INPO efforts. This agreement paralleled the

publication of the Commission Policy Statement on Training and Qualification of Nuclear Power Plant Personnel (50 FR 11147, March 20, 1985). In that Policy Statement, NRC endorsed the INPO Accreditation Program and set forth NRC's monitoring process. In April 1987, the staff described the results of a 2-year evaluation process and stated that the Commission should continue to endorse the INPO program while maintaining its monitoring posture. Further, revisions to 10 CFR 55 - Operators' Licenses (52 FR 9453, March 25, 1987) and Regulatory Guide 1.8 - Qualification and Training of Personnel for Nuclear Power Plants (52 FR 16007, May 1, 1987) were published and set forth requirements for operator training which further endorsed the INPO accreditation process as a means to provide acceptable training programs in the industry.

We consider these items completed.

NRC ACTIONS IN CY 1987

IN RESPONSE TO COMPTROLLER GENERAL RECOMMENDATIONS

Report - August 26, 1981
(EMD-81-106)

Greater Commitment Needed To Solve Continuing Problems At Three Mile Island

Recommendation

Because another nuclear accident at an underinsured utility company could seriously affect public health and safety, GAO recommends that NRC closely follow the current efforts of the insurance and utility industries to increase insurance coverage to what it determines to be an acceptable level. GAO further recommends that no later than December 31, 1981, NRC assess the progress being made. This assessment should include an evaluation of the insurance available in the private sector and a determination as to whether a mandated insurance coverage program is necessary.

To mitigate future regulatory constraints on nuclear accident cleanup activities, GAO recommends that NRC establish a set of guidelines that would facilitate the development of recovery procedures by utility companies in the event of other nuclear reactor accidents.

NRC Response

All of the issues raised in this report for NRC response have long since been resolved, save one. That one was finalized in 1987.

At the time of the preparation of the report there were very real concerns that funding would not be available for the cleanup of TMI-2 and even concern that the parent company, General Public Utilities (GPU), might become insolvent. Since that time a major portion of the cleanup has been funded and there is high assurance that the remaining funding requirements will be met.

NRC, through the TMI Program Office, closely monitored the development of the cleanup finding plans and periodically made status reports to the Commission. Monitoring is continuing, as noted above, but at a much lower level due to high assurance for further funding.

Funding problems for the TMI-2 cleanup were resolved by the development and implementation of a plan which called for cleanup funding from a number of sources including (1) contributions from several electric utilities, (2) the States of Pennsylvania and New Jersey, (3) the Department of Energy, (4) certain foreign governments, and (5) GPU. Financial problems of GPU and the operating companies were further eased by bringing TMI-1 back on line. This also eased the generating capacity problems mentioned in the Comptroller's report.

The concern about inadequate property insurance coverage for nuclear power plants was resolved in 1987 by the NRC issuance of a final property insurance rule. This requires each nuclear reactor site to maintain $1.06 billion in property insurance. The regulation contains a decontamination priority, which sets stabilization, decontamination, and cleanup as higher priorities than the recovery of the licensee's asset. The enactment of this rule obviates the pursuit of other options urged in the Comptroller's report, including federally-sponsored property insurance.

With the enactment of the property insurance rule, these actions are completed.

NRC ACTIONS IN CY 1987

IN RESPONSE TO COMPTROLLER GENERAL RECOMMENDATIONS

Report - September 8, 1978
(EMD-78-80)

The Nuclear Regulatory Commission Needs To Aggressively Monitor And Independently Evaluate Nuclear Power Plant Construction

Recommendations

GAO recommends that the Commission improve its basis for vendor inspection by:

Developing a method to identify and statistically select vendors for inspection.

Increasing the inspections of vendors that manufacture electrical components and instruments that control critical operations in the plant.

Seeking approval to hire more inspectors for the vendor inspection program.

Being more aggressive in its inspection activities and paying more attention to inspection and reporting details.

Improving its documentation and reported practices. (See pp. 29 and 30.)

NRC Response

The current method for selecting and prioritizing inspections of vendors involves reviewing plant events, Part 21 defect reports, 50.55e construction deficiency reports, and allegations. Although this is not a statistically based method of selecting vendors, it does result in biasing the sample of vendors inspected towards those whose products are not performing satisfactorily.

The NRC's inspection of electrical and instrumentation and control manufacturers has increased significantly since the GAO audit. During 1987, approximately 40% of all vendor inspections involved electrical equipment or instrumentation vendors.

The present Vendor Inspection Branch staffing level is 16 inspectors and an additional inspector position is allocated in the FY 1988 staffing plan.

Since the GAO audit, the vendor inspection focus has been shifted from the programmatic approach towards a reactive inspection approach which is much more product oriented. Product oriented inspections require a detailed description of the deficiency or operational problem which triggered the

inspection as well as a complete discussion of the corrective actions to be performed by the vendor or by the product user. Additionally, enforcement actions, when appropriate, are now being taken against the vendor or the product user (licensee) or both to assure correction of the specific deficiency as well as consideration of any generic concerns.
The vendor inspection reporting system was completely revised in 1980 to include as a part of the permanent inspection record a precise definition of the inspection scope and to identify all documents reviewed during the course of the inspection so as to fully support the report findings and to provide and auditable record of the inspection.

We consider these items completed.

NRC ACTIONS IN CY 1987

IN RESPONSE TO COMPTROLLER GENERAL RECOMMENDATIONS

Report - April 27, 1978
(EMD-78-29)

Nuclear Powerplant Licensing: Need For Additional Improvements

Recommendation No. 3

Establish a management information system to identify and document the degree to which the results of each research project benefit the licensing process.

NRC Response

The NRC Office of Nuclear Regulatory Research (RES) requires formal printed reports concerning the status and results of research at appropriate stages in its programs. These reports are distributed to the cognizant offices within NRC in addition to the PDR and are made available to the National Technical Information Service for public sale all at the same time as the Office of Nuclear Regulatory Research receives them. Thus, there is no delay in making the research information available.

NRC maintains routine cognizance of the progress of applicable research through quick-look reports. periodic progress reports, and topical reports. Office of Nuclear Reactor Regulation (NRR) representatives also participate in Research Review Group (RRG) meetings, technical meetings, staff discussions, and program review meetings on RES-sponsored research. The reports mentioned above are available for review by NRR Research Review Group participants who, as appropriate, can take prompt action related to the use of the interim research results or provide recommendations for redirection of the work. In addition, on RES recognition that particular research program results require immediate licensing actions, RES management would notify NRR and the other related program offices, who would then initiate the necessary actions.

In addition to the procedures in effect to transfer research results, a formal procedure for documenting the transfer of the research information to user offices was established jointly by the NRC program offices. It provides for the formal transmittal of research results upon completion of a substantial, coherent, and reasonably complete body of experimental or analytical research by RES. The Research Information Letter (RIL) system sometimes is combined for several related projects on a generic subject. In other cases, results are published on individual projects. Generally, a RIL is prepared whenever substantial results are available and they have some applicability to a licensing need. This generally is left to RES to decide.

From the viewpoint of the receiving program office, NRR handles research information, not so much because it is a recipient of research submitted to

it, but because its line management and staff participate in the formulation and conduct of the research program. The licensing offices not only participate in the formulation and conduct of the research program, but, under established Commission procedures, may initiate and sponsor research projects to be funded and carried out by RES. RES holds periodic briefings and topical meetings on research results for the management and staff of user groups.

Finally, NRC has institutionalized an agency-wide Safety Issues Management System (SIMS). SIMS is presently being used by management and staff to plan, track, and otherwise manage the progress of each generic safety issue from its inception until any requirements are implemented and verified, as necessary, at each affected facility.

In general, SIMS provides a means for:

(1) individually tracking generic issues through completion of all work, including implementing changes (if any) at affected plants

(2) providing information on resource needs

(3) retaining summary information on the disposition of resolved issues, and

(4) ensuring that safety-related plant modifications resulting from the resolution of generic issues receive attention commensurate with their safety significance.

SIMS has been loaded with data for nuclear reactor-related regulations, regulatory policies and guidance, Unresolved Safety Issues (USIs), and Generic Issues. Although not addressed in the GAO report, data for plant-specific issues (plant unique) also has been loaded into SIMS. In 1988, data for all Generic Letters and Bulletins will be loaded into SIMS. SIMS data is considered to be reasonably accurate since cognizant NRC staff have reviewed and loaded the data into SIMS. Furthermore, plant data has been reviewed by the staff with licensee participation. In 1988, a contractor will audit SIMS data to confirm its accuracy. As a result of NRC's major reorganization in 1987, agency-wide and office procedures for SIMS cognizance, operation, maintenance, and documentation are being modified and developed.

SIMS currently is being used and is making a significant contribution to the management process. Its uses to date include:

(1) the genesis for several special reports used by the Chairman during Senior Management Meetings held quarterly to evaluate licensee performance

(2) provision of input to reporting for Congress and the public concerning the status of generic matters

(3) input into the reassessment of the safety of all B&W reactors

(4) enabling individual Project Managers and Resident Inspectors to track imposition and implementation of requirements at their plants

(5) provision for the means for summarizing the content of generic proposals to CRGR and developing a long range agenda, and

(6) providing input to daily management and staff vigilance of plant safety status.

The implementation of the SIMS is one of the NRC's highest priorities. SIMS is intended as a dynamic model, subject to alteration when required. SIMS is significantly enhancing the tracking and managerial staff effectiveness and efficiency associated with addressing safety issues.

We believe these actions provide a balanced and timely approach to disseminating research information and for assuring that the licensing staff and management are informed quickly and consistently of meaningful research results.

Recommendation No. 5

That the Chairman, Nuclear Regulatory Commission, increase the use of probabilistic risk assessment and insure that technical reviewers receive a general knowledge and that at least one or two reviewers in each licensing review branch are well trained in using risk assessment techniques.

NRC Response

As indicated in our previous response, the Commission intended to expand the application of PRA techniques in licensing applications. This has occurred with risk assessment methodology being applied in such major programs as the Integrated Safety Assessment Program (ISAP) and Severe Accident Policy development as well as in numerous assessments performed to address plant backfit proposals and generic issue resolution.

Due to resource limitations, we have not been able to achieve a level of one or two experienced PRA reviewers in each licensing review branch. Following a recent Agency reorganization, personnel with risk assessment expertise have largely been concentrated within specialized branches in both RES and NRR. These groups will have the primary responsibility for application of probabilistic risk assessment methods. Projects currently or soon to be underway that make extensive use of risk assessment methods include: Individual Plant Examinations (IPE), Severe Accident Certification for future advanced LWR designs, Mark I containment performance assessments, and technical specification improvements.

While the technical review branches in NRR do not contain a large number of staff with broad PRA experience, they do have some individuals with PRA-related background. A wider exposure of PRA fundamentals to NRR staff is also still being encouraged through participation at PRA courses offered by the Office of Research.

Recommendation No. 6

That the Chairman, Nuclear Regulatory Commission, identify and meet the training needs of technical reviewers with special emphasis on (1) updating technical skills, (2) providing guidance on implementing the Standard Review Plan (SRP), and (3) providing an overall orientation of the licensing process and how each review section relates to an overall program to protect the public health and safety.

NRC Response

Approximately half of the SRP was revised in 1978, prior to the TMI-2 event. The TMI-2 event delayed the revision of the SRP, which was subsequently completed in July of 1981. In the process of preparing the July 1981 revision, training sessions and workshop-type meetings were conducted. The July 1981 SRP revision was a total revision of the SRP, and included sections of the SRP revised in 1978 so that changes resulting from the TMI-2 event could be incorporated.

The NRC has implemented an in-house training course entitled "The Regulatory Process" which is available to all employees and which describes the regulatory processes, legal requirements, inspection/enforcement and NRC's role as an independent regulatory agency. The NRC also offers specialized technical training through the Technical Training Center in Chattanooga, Tennessee.

We consider these items completed.