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MEMORANDUM FOR: Roger Mattson, Director  
Division of Safety Technology  
Office Of Nuclear Reactor Regulation

FROM: Richard C. DeYoung, Deputy Director  
Office of Inspection and Enforcement

SUBJECT: SAFETY RATIONALE FOR TMI ACTION PLAN

Enclosed is the IE input requested by William J. Dircks' memo of July 11, 1980.

\*Original Signed By  
R. C. DeYoung\*

Richard C. DeYoung, Deputy Director  
Office of Inspection and Enforcement

Enclosure:  
As stated

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## ACTION PLAN SAFETY BASES

Item No. I.A.2 item 4

Title: NRR Participation in inspector training

Description: As part of the IE Inspector Training Program, operator licensing and human factors personnel in NRR will provide instruction on the role and licensing of reactor operations staff, including the types of feedback of field observations needed by NRR staff.

### Bases for Action

1. Operator training requirements are being increased and attention is being focused on human factors in control room design and operation. Since the resident inspector will frequently monitor both the training and the actions of licensed operators, inspectors need an understanding of actions being taken by NRR to reach the objectives of improved training and control room human factors.
2. The intent of the action is to provide background information to inspectors and a method of providing feedback to NRR.
3. The amount of training would be 1-3 hours during the 7 to 8 weeks of inspector training. The lecturers, at least initially, would be provided by NRR. This amount of training should be sufficient to accomplish the objectives.
4. IE instructors could provide the training after interacting with NRR. Initially should be done by NRR with a view to IE Training Staff doing in the future.
5. Other actions would be expanded IE inspector training at Chattanooga and the training required of utility operators.

## I.B.1.2 EVALUATION OF ORGANIZATION AND MANAGEMENT IMPROVEMENTS OF NTOL APPLICANTS

### Description of Action

The NRC will evaluate the organization and management capabilities of NTOL applicants preceding license issuance. NRR will provide draft criteria to be used by an interoffice review team at each NTOL site. IE will manage an interoffice team to inspect NTOL sites from February 1980 to May 1981. The findings of the team will be an input into the SER for the NTOL facility. The licensee organization will be required to comply with the findings and requirements generated in the interoffice NRC review.

### Bases for Action

#### 1. (Safety Significance)

The licensee must have an organization capable of managing the safe operation of the plant during normal and abnormal conditions and must have the capability to respond to accident situations. The onsite and offsite organizations shall be of sufficient size and depth of technical competence to support all aspects of operation and accident response. Programs must exist to assure management awareness of and attention to safety matters.

#### 2. (Intent or Purpose)

To evaluate the licensee's organization and management capability prior to granting an operating license. This assures that the utility has in place an organization capable of managing the facility's operation and responding to accident situations.

#### 3. (How Accomplish the Intent; Why It Is Sufficient)

This action includes an evaluation of both onsite and offsite organizations and is made shortly before an operating license would be issued. It includes a review of administrative procedures and interviews with key licensee

personnel to determine their understanding of organizational relationships and responsibilities. The evaluation includes an assessment of management competence and training. The evaluation also emphasizes recently added organizational elements and functions such as the onsite safety engineering group, the operating experience evaluation capability, and the shift technical advisor.

This action is a comprehensive examination of the licensee's management just before licensing. It allows determination of his capabilities prior to his commencing significant operations that involve nuclear material.

4. (Alternatives and Why This Action is Preferred)

Alternatives include reliance on licensee submittals and document reviews. Examination of onsite and corporate documents and the conduct of interviews allow a direct and first-hand assessment of licensee functions and individual capabilities. The use of an interoffice team increases the breadth of NRC capabilities employed to evaluate the licensee.

5. (Other Related Actions)

The following TAP items are related:

<u>TAP No.</u>	<u>Title</u>
I.A.1.1	Shift Technical Advisor
I.A.1.2	Shift Supervisor Administrative Duties
I.A.1.3	Shift Manning
I.B.1.1	Organization & Management of Long-Term Improvements
I.C.2	Shift Relief & Turnover Procedures
I.C.3	Shift Supervisor Responsibilities
I.C.4	Control Room Access

<u>TAP No.</u>	<u>Title</u>
I.C.5	Procedures for Feedback of Operating Experience to Plant Staff
III.C.1	Upgrade Emergency Preparedness

## I.B.2.1 REVISE IE INSPECTION PROGRAM

### Description of Action

The NRC will revise the inspection program to provide for more direct observation and independent verification of licensee activities and reduction of inspection documentation. For operating reactors these inspections include:

- Verifying adequacy of management controls over day-to-day activities
- Independent verification of system alignment.
- Verifying proper plant and system restoration after maintenance
- Observing surveillance tests
- Verifying technical specification compliance during daily observations
- Observing maintenance activities
- Inspecting jumper and tag controls

The inspection program will increase emphasis on reactive efforts in response to operating events. It also includes Performance Appraisal Team inspections and intensified inspection at facilities undergoing startup testing.

### Bases for Action

#### 1. (Safety Significance)

The revision to the IE inspection program will provide an increased regulatory presence at reactor facilities, *with more independent verification of licensee safety activities,* and increase the efficiency of the IE staff.

This should increase licensee attention to regulatory requirements and increase NRC awareness of licensee compliance. The improvements in the reactive program provide the NRC with a significant capability to respond promptly to incidents, events or allegations. A prompt NRC response may also serve to mitigate the consequences of an event and enhance public awareness.

2. (Intent or Purpose)

To redirect the focus of IE activities towards more association with licensee day-to-day activities <sup>and independent verification of these activities,</sup> and reduce time spent devoted to documentation. This will increase NRC awareness of his activities and provide a stimulus to the licensee in being more attentive to safety. This revision to the IE program will assure prompt and effect NRC response to incidents, operating events, and allegations.

3. (How Accomplish the Intent; Why It Is Sufficient)

The revision to the inspection program is to be accomplished via a review and revision of inspection program requirements, by changes in IE policy promulgated by IE Headquarters, by changes to the IE Manual, and by training of IE personnel.

These changes build upon the existing program and qualifications of the IE staff. It is believed that these changes will provide an improvement in licensee performance and NRC awareness at a minimal cost.

4. (Alternatives and Why This Action Preferred)

The existing inspection program with its reliance on sampling licensee activities has been demonstrated to be <sup>a</sup> proven audit technique. Other audit techniques, such as complete inspection of every aspect of a licensee's activity are costly and provide little additional return.

The existing program is believed to be fundamentally sound (based upon independent analyses such as the IE Study and consultant reviews) and can be improved with the changes envisioned by this action. This revision has less impact on IE personnel, budgets, and the licensees than changes that <sup>a</sup> expend the depth of IE audit program.

5. (Other Related Actions)

The following TAP items are related:

<u>TAP No.</u>	<u>Title</u>
I.B.2.2	Resident Inspector at Operating Reactors
I.B.2.3	Regional Evaluations
I.B.2.4	Overview of Licensee Performance



## I.B.2.2 RESIDENT INSPECTOR AT OPERATING REACTORS

### Description of Action

IE will implement the approved resident inspector program by recruiting, training, and assigning the resident inspectors to provide a minimum of two resident inspectors at each site (where there are one or two reactors) and an additional resident inspector for each additional reactor. IE will make the necessary organization changes to support this effort.

### Bases for Action

#### 1. (Safety Significance)

The resident program provides an increased onsite NRC presence which will improve the safety of licensee operations and provide the capability for immediate NRC onsite response to operational events. This increased onsite presence will contribute to an improvement in licensee attention to regulatory requirements, <sup>independent verification of his actions,</sup> and increase the agency's awareness of licensee compliance.

#### 2. (Intent or Purpose)

The intent of this action is to increase the safety of licensee operations by increasing NRC inspection of his activities. This action is also intended to provide the agency with more information regarding licensee operations. The presence of resident inspectors provide the public with an increased assurance that licensee operations are being conducted safely and in conformance with regulatory requirements.

#### 3. (How Accomplish the Intent; Why It Is Sufficient)

The resident inspector has a daily contact with the licensee's activities and becomes intimately familiar with many aspects of ~~the~~ plant operations. He is capable of a comprehensive and an in-depth evaluation of the safety significance of many licensee activities. The presence of the resident inspector

(who is frequently observing licensee tests, maintenance, etc., and independently verifying compliance with regulatory requirements, system alignments, etc.) provides an incentive to the licensee to strive for safer operations.

Resident inspectors provide for increased information flow and communications. The resident can be directly responsive to members of the public in the vicinity of the facility and can provide direct authoritative information concerning the licensee's operations. The resident provides the agency assurance that <sup>it</sup>~~is~~ is fully informed concerning licensee activities without depending solely upon the licensee for information.

4. (Alternatives and Why This Action Preferred)

Alternatives include continuing the level of onsite presence maintained by region based inspectors or the addition of more resident inspectors to provide 24-hour coverage of licensee activities. The region based inspection program cannot assure the detailed familiarity with licensee day-to-day operations that a resident program provides. Also, the addition of more region based inspectors would add significantly to the agency's travel costs. The planned resident program, based on a sampling of licensee activities and random, unannounced inspections at any time of the day, provide sufficient improvements in safety without large increases in agency manpower costs.

5. (Other Related Actions)

The following TAP items are related:

<u>TAP No.</u>	<u>Title</u>
I.B.2.1	Revise IE Inspection Program
I.B.2.3	Regional Evaluations
I.B.2.4	Overview of Licensee Performance

### I.B.2.3 - Regional Evaluations of Licensee Performance

This program has been the subject of several Commission papers, SECY 78-554 and 80-83 and Commission briefings. Basically, we believe that this action will lead to a systematic upgrading of licensee performance in the interest of the public health and safety. This approach was selected because it is a logical extension of the inspection program. This program, as presently conceived, is a composite of several approaches to the problem as indicated in our previous presentations to the Commission. The scope of the program will eventually encompass all major licensees. The timing is based on as rapid implementation as possible with the program already in motion.

### I.B.2.4 - Overview of Licensee Performance

The safety contribution of this task is again the upgrading of licensee performance of a systematic basis. The comments on approach, scope and timing included for I.B.2.2 above apply for this item. Development of the charter for a Headquarters (SALP) Overview Committee is well underway.

### II.J.1.4 - Assign Resident Inspectors to Reactor Vendors and Architect-Engineers

Current safety experience, Part 21 reporting at B&W and Westinghouse, piping design problems, GE scram system problems, etc. underscore the need for more direct technical contact with these establishments. Other alternatives were

considered and this one was selected by the RCI staff for inclusion in the FY 81 budget request. The scope is limited to a trial program in the beginning. The timing is considered to be appropriate when program development and staffing requirements are considered.

#### II.J.2.1 - Reorient Construction Inspection Program

The key safety impact of this action is concentrate the inspection program on proper licensee quality assurance program implementation which, in turn, should result in improved construction quality. The direct impact of this action would be an increase in public safety assurance. There does not appear to be a viable alternative to this action. Scope and timing do not appear to be problems at this time.

#### II.J.2.2 - Increase Emphasis on Independent Measurements

The key safety implication of this action is to increase public safety assurance through independent measurements. There does not appear to be a reasonable alternative. Scope and timing do not appear to be problems at this time.

#### II.J.1.1 - Priority System for Vendor Inspection

The intent of this action is to provide a systematic approach to vendor inspection priority designations. This action was also taken in response to a

GAO recommendation in 1978. The method emphasizes generic safety considerations and fits well with present agency perceptions of the importance of reactor system performance and experience review. There does not appear to be an alternative to development of a truly integrated system. A contract has recently been let for development of such a system. The scope of the system will be broad and the present schedule is considered to be reasonable.

#### II.J.1.2 - Modify Existing Vendor Program

A great portion of the total effort (at least 50%) is done in the shops of vendors. The key impact would be to improve the quality of products and thus improve public safety assurance. Our present program is quality assurance oriented while recent experience has shown that more attention should be given to the technical/design aspects and to reporting of safety matters as related to 10 CFR Part 21. The remaining alternatives are less direct in terms of potential for resolution of the problem. The scope of the proposed actions encompasses all major vendors. Timing has been extended into the next several planning years.

#### II.J.1.3 - Increase Regulatory Control Over Nonlicensees

In the case of vendors it is difficult to enforce our quality assurance criteria directly because the vendors are not licensees. Here again, the key impact is improvement of public safety assurance through improved vendor quality. Therefore, the full arsenal of NRC enforcement tools are not available for resolving problems at vendors. This action would call for development

of the alternatives; viz. licensing of vendors, registration of vendors, etc. The scope of the action is wide ranging. Timing for completion of action is indefinite.

#### II.J.2.3 - Assign Resident Inspectors to All Construction Sites

This action will focus more direct NRC attention on quality assurance programs in the field, resulting in improved quality assurance program performance and improved construction quality. The end result will be upgraded public safety assurance. We do not see a reasonable alternative. Timing and scope appear to be appropriate.

#### II.J.4 - Revise Deficiency Reporting Requirements

This action will result in the Commission being better informed regarding construction deficiencies so that appropriate response actions and proper notifications can be made. TMI experience indicates that operating experience must be reviewed and analyzed. It is logical to extend this reasoning to construction. No reasonable alternatives exist in our view. Scope and timing are appropriate in our view.

Item No. III.A.3.2

Title: Improve Operations Centers

Description of Action

The NRC Headquarters Operations Center ~~HOC~~ in Bethesda, Maryland, will be upgraded to improve the NRC response to incidents. The expansion of the physical facilities for the <sup>Operations Center</sup> ~~HOC~~ will also be affected by the communications and information systems to be developed under items III.A.3.3 and III.A.3.4, respectively. Regional Operations Centers ~~HOCs~~ will be upgraded commensurately and concurrently.

Bases for action

The existing <sup>Operations Center</sup> ~~HOC~~ consists of <sup>several</sup> ~~two~~ rooms with a total floor area of approximately <sup>1,500</sup> ~~900~~ square feet. <sup>Besides the two main room (EMT and Communications), there are</sup> Three small adjoining rooms contain files, telephone frames, and other support equipment. During the incident at Three Mile Island the <sup>Operations C.</sup> ~~HOC~~ was so overcrowded and noisy as to impede the flow and exchange of reliable information in the Center. Equipment and personnel being added to improve the NRC response posture can be expected to further strain the facility.

This requirement to upgrade the operations centers is intended to provide adequate space to accommodate new communications, data, display, and file equipment; personnel to use the equipment; and arrangement of both equipment and personnel for the most efficient and reliable information flow. <sup>Regional Operations Centers</sup> ~~HOCs~~ are included in the requirement because they are also integral to the NRC response system.



While equipment improvements have been underway for several months, the schedule for acquiring more space is uncertain because of larger questions about agency moves to a different location. In the meantime, other alternatives are being employed at the ~~HOC~~ <sup>Headquarters</sup> Operations Center :

- . Response personnel have been further organized into teams with designated functions and leaders so that not everyone needs to be physically in the Center to contribute to the response. This is now a permanent procedure.
- . Office space on the periphery of the Center is commandeered during an incident. This is only a temporary procedure, pending availability of a larger Center, because it increases the difficulty of communicating among Headquarters response personnel.

<sup>Operations Center</sup>  
The ~~HOC~~ needs more space and other improvements which have been specifically designed for the primary purpose of the Center; i.e., for the integration of a wide spectrum of response functions and tasks into a unified and effective NRC response.

The probable transfer of authority to on-site officials in a future incident has no significant impact on ~~HOC and ROC~~ <sup>Headquarters and Regional Operations Center</sup> requirements. For example, the need to assure that the total NRC response is capable and coordinated even before on-site authority can be established sets certain minimum requirements on the centers. Later, Headquarters and Regional Office support of an on-site authority should be coordinated through the respective operations centers. As noted above, however, both size and design requirements will be affected by the



communications and information systems improvements described in items  
III.A.3.3 and III.A.3.4.

Item No. III.A.3.3

Title: Improve communications for incident response

Description of action

The accident at Three Mile Island highlighted the need to provide several improved communications capabilities, among them:

- . Earlier notification and continuous communication with personnel at operating reactor sites;
- . Radio communication among NRC field personnel;
- . Communications which allow the NRC to make use of the resources of certain other Federal organizations; and
- . Back-up communications among NRC Headquarters, Regional Offices, and the site.

Dedicated "hot lines" have been installed to each operating power reactor and to selected fuel facilities. Criteria have been published (in NUREG 0654) to guide licensees in use of the hot lines to notify the NRC immediately of any potentially serious incident. After notification, the link is kept open for continuous voice communication to the Headquarters Operations Center ~~(B8)~~ to enable the latter to monitor plant status. A second hot line to each facility provides a dedicated and independent link for continuous flow of health physics and environmental information.

A dedicated short-range radio communication system will be obtained for the use of NRC field personnel during emergencies. Specifications have been developed, a supplier obtained, and a request made to the Controller for money to procure the equipment.

NRR has funded a pilot program with Lawrence Livermore Laboratory for use of the Atmospheric Release Advisory Capability (ARAC) in the NRC Operations Center. Future use of ARAC will be evaluated upon completion of the pilot program. Preparations are being made to coordinate the acquisition of meteorological data from various sources, of hydrological information, of terrain data, and of demographic data. The most reliable way to transfer other-agency data is through a computer-to-computer link. Specific needs for such links are being analyzed.

Bases for action

Exchange of operating and radiological data in a timely manner is crucial to NRC's ability to evaluate and understand the situation during an incident. Because of the importance of this requirement and the lack of reliability under certain accident situations, e.g. seismic events, sabotage, hurricanes, etc., redundant and backup systems are required so that the possibility of stopping the flow of crucial data is extremely small. Consequently, the action plan requests several diverse methods of keeping ~~X~~ contact between the licensee, the Regional response team, NRC Operations Center, offsite authorities and other participants.

Item No. III.A.3.4

Title: Nuclear Data Link

Description of Action

This is a program to obtain a system for the NRC Operations Center which will remotely acquire facility data, transmit the data to the Operations Center and display that information for use of the technical staff in analyzing the plant situation.

Bases for Action

NRC has the clear responsibility for monitoring and evaluating the actions of licensees and making recommendations to offsite authorities regarding the need for implementing protective actions. Particularly, in the early stages of an accident, the NRC Operations Center will be required to obtain sufficient timely data to understand the situation at a plant site and evaluate that information to assess licensee strategy in mitigating the consequences of the accident and project possible consequences of the accident. The present situation of obtaining data from the site *by* a single voice line is archaic. Large amounts of data are needed for an adequate understanding of the situation, both with regard to the affected systems and those systems which are acting normally. Experience has demonstrated that misleading, incorrect and untimely data is provided in such a manner that the staff is unable at times to perform its functions. A nuclear data link could provide a continuous stream of pertinent data, including pre-event information, store the data and display it in a manageable and helpful form.

Item No. III.A.3.5

Title: Training, Drills, and Tests

Description of Action:

Headquarters and regional drills and exercises presently conducted will continue. The scope of the exercises will be expanded to include joint exercises with licensees, State and local agencies, and Federal response capabilities. A schedule for the frequency of drills and exercises involving various levels of participation by these parties will be developed and training of staff of NRC and other agencies concerning the NRC incident response program will be continued.

Bases for Action:

The primary purpose for the establishment of drills and exercises <sup>is</sup> ~~is~~ the evaluation and upgrading of established notification procedures, evaluation of team interaction and analysis <sup>is of</sup> ~~is~~ the accuracy and flow of information between the incident response teams.

In addition, the drills and exercises involving other Federal agencies, State and local agencies and/or licensees provide a means by which we can evaluate our communications system and communications procedures and implement changes, when indicated.

At present, we plan to implement a drill or exercise about every two months. This time frame allows sufficient time to plan each drill and evaluate the results of the drill. The drills are varied in scope (transportation drills, operating plant drills, fuel facility drills, telephone drills, etc.) and in timing (ranging from 1 to 3 hours). This variation in scope and time allows for a broad test of the

Incident Response Center procedures, team structure, equipment and resources (reference material, calculators, etc.).

Other than a real incident, there is no other way to achieve a broad check of the readiness of the Incident Response ~~Center~~ <sup>Program</sup> to respond to a nuclear incident.

The continuing upgrade of the Operations Center and the future implementation of the NDL will allow for the availability of improved resources and a better flow of information from external and internal sources.

Item No. III.D.2.4

Title: Offsite Dose Measurements (TLD Program)

Description of Action

NRC will establish a TLD-Direct Radiation Monitoring Network. It will be implemented around all operating reactors by August, 1980. The monitoring program must be installed around a new reactor before it can receive a full-power operating License~~s~~.

Bases for Action

1. In responding to the TMI accident, IE was required to measure the radiation levels in the environs of the site to determine the population exposure and assess and evaluate the radiological consequences of the accident. The role placed upon IE was a significant departure from our past involvement in such situations. We were not equipped to make those measurements and had to depend upon licensee's data. IE realized the need and benefit for its own independent measurements of known high quality measurements and of sufficient numbers to provide the expected response. Therefore, we initiated this NRC TLD-Direct Radiation Monitoring Network at all operating plants.
2. The purpose of the network is to provide independent and high quality measurement of uniform nature to enable IE to assess the radiological impact of a facility under routine and emergency situations.

3. This program design fulfills the stated objectives as it was intended.
4. An alternative means to achieve the objectives is to contract the TLD monitoring program to the States. Although this approach would provide independent measurements, they wouldn't necessarily provide uniform results with the same degree of consistency and quality as our own program.
5. The NRC-TLD-Direct Radiation Monitoring Network is a part of a larger Independent Measurement Program in the IE Inspection Program (see III D.26).



Item No. III.D.2.6

Title: Independent Radiological Measurements

Description of Action

The capability of the NRC's Regional Offices to perform independent radiological measurement during routine inspections and emergency response operations will be upgraded. The inspection program will be revised to reflect new requirements for independent measurement.

Bases for Action

1. We realized even before the TMI accident occurred that we can improve the effectiveness of our inspection program by making independent measurements. Independent measurements is an important diagnostic tool in evaluating the capability and performance of the licensee. It provides direct hard evidence of the licensee performance, in comparison to the circumstantial evidence obtained by the conventional techniques of records procedures, review and evaluation. Once we have upgraded our capability to routinely make measurements, it will also give us the capability to respond to accidents and other non-routine situations. During the TMI accident we were required to make radiological measurements to assess and evaluate the radiological significance of the accident. This was a new role for IE; a role we were not completely equipped to handle at the time. When we complete this action, we will have the necessary capability.

2. The intent of this action is to improve our measurement capability to enable IE to include independent measurements in the inspection program and enable IE to adequately respond to accidents and other non-routine situations.
3. Upgrading our measurement capability and incorporating independent measurements into our routine inspection will fulfill the intent to give us independent measurements of known high quality to assess licensee's operations or respond to any incident or situation.
4. An alternative means to achieve the object of this program is to use outside contractors. However, this approach will not insure uniform, consistent results needed in this task, nor will it provide the NRC with the prompt response capability required in case of an emergency.

Item No. IV.A.2.

Title: Revise Enforcement Policy

Description of Action

NRC is in the process of revising its enforcement policy and guidance for the imposition of enforcement sanctions.

Bases for Action

On November 1, 1972, the AEC issued its policy for enforcement actions to be taken for noncompliance with Sections 161, 186, and 234 of the Atomic Energy Act and Subpart B of Part 2, 10 CFR. On June 5, 1973, the AEC notified licensees that categories of violation with AEC regulatory requirements had been established. On December 31, 1974, the AEC communicated to licensees modifications to the categories of noncompliance and criteria for the use of these categories. In December 1979, the NRC added criteria for enforcement actions involving the transportation of nuclear materials.

Since the original 1972 enforcement policy statement considerable experience has been gained in the enforcement area. Since that time it has become clear that revision was needed. In 1977, work began to identify weaknesses and to rewrite the Manual Chapter on enforcement procedures. By early 1979, a draft of the New Manual Chapter had been prepared. The TMI accident interrupted the process of review; and action on this item ceased until the revised Manual Chapter could be assessed in light of the many TMI recommendations.

The purpose of revising the Commission's enforcement policy at this date is to articulate the Commission's guidance to the staff, for licensees and the general public, to reflect the many years of experience since it was originally issued in 1972. The major function of any NRC enforcement policy

is that the licensee conducts his activities in a manner to ensure public health and safety; this implies operations in compliance with NRC regulations.

In addition to clarifying criteria for the issuance of orders in the revised policy, the Commission has recently identified certain characteristics of enforcement it desires in the FY 1982-86 "Policy, Planning and Program Guidance (PPPG)." Included in this guidance are directions that the licensee should not benefit from noncompliance. A corner stone of the revised policy is a substantial increase in the dollar values for civil penalties, following the July 1980 granting of statutory authority in the NRC FY80 Authorization Bill.

#### IV.F.1 INCREASED IE SCRUTINY OF THE POWER-ASCENSION TEST PROGRAM

##### Description of Action

This action increases the inspection of the power ascension test program and is an extension of power ascension inspection beyond the program requirements contained in the IE inspection manual. This action includes additional test procedure reviews, witnessing of the conduct of testing on all shifts, and review of test results data.

##### Bases for Action

###### 1. (Safety Significance)

Financial pressures on the utility may result in the licensee accelerating power ascension testing in an effort to go into commercial operation sooner.

The increased scrutiny of power ascension testing increases the assurance that the licensee conducts a thorough program that meets regulatory requirements and fully qualifies the plant for power operation.

###### 2. (Intent or Purpose)

The intent of this action is to make certain that the licensee pays full attention to safety during power ascension testing. A thorough power ascension test program provides more assurance that the plant, equipment, and procedures are fully qualified and that operators are fully trained in plant operations.

###### 3. (How Accomplish the Intent; Why It Is Sufficient)

This action will be accomplished by regional and resident inspectors expanding their coverage of power ascension test activities beyond program requirements. Additional tests have been selected by IE for procedure reviews, witnessing, and results evaluation. Licensee activities on all shifts will be observed for adherence to regulatory requirements. This additional inspection of licensee activities will provide him with greater incentives to conduct a comprehensive test program.

4. (Alternatives and Why This Action Preferred)

Alternatives include a greater reliance on licensee submittals, more extensive review of tests results data (without an increase in the scope of test witnessing) or completion of existing the IE program requirements.

Increasing the scope of test witnessing by NRC personnel provides assurance that the licensee will be attentive to safety during power escalation testing and provides the NRC an opportunity to verify by direct observation that test requirements are met.

5. (Other Related Actions)

The following TAP items are related:

<u>TAP No.</u>	<u>Title</u>
IV.F.2	Evaluate the Impacts of Financial Disincentives to the Safety of Nuclear Power Plants