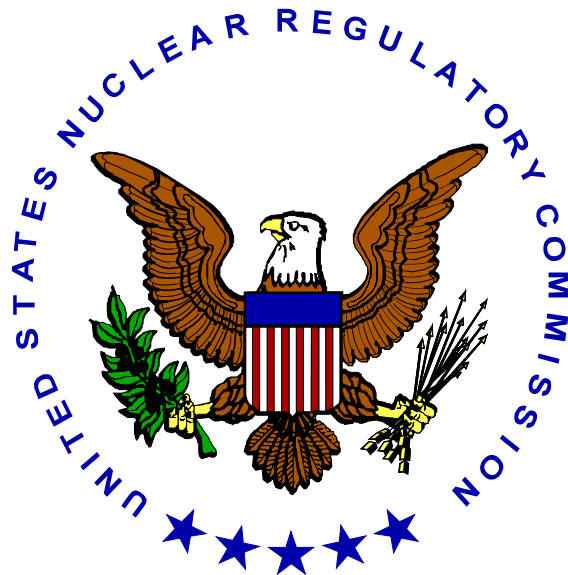


State of Maine Involvement
In The NRC Independent Safety
Assessment of Maine Yankee Atomic Power Station

CASE NO. 97-02S 10/17/97

**OFFICE OF THE INSPECTOR GENERAL
EVENT INQUIRY**



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CHRONOLOGY

<u>Date</u>	<u>Event</u>
5/28/96	NRC Chairman requests independent evaluation of safety performance at Maine Yankee Atomic Power Station (MYAPS)
5/30/96	NRC announces establishment of Independent Safety Assessment Team (ISAT) to evaluate MYAPS
5/31/96	NRC Executive Director for Operations directs ISAT Manager to develop charter and coordinate assessment with State of Maine
6/7/96	ISAT charter provided to NRC Chairman
6/12/96	ISAT Manager and ISAT Leader brief NRC Chairman on ISA initial concept, plan, and organization
6/20/96	ISAT Manager and ISAT Leader brief MYAPS officials
7/8/96	ISAT Manager and ISAT Team Leader brief NRC Chairman on ISAT progress
	Team on ISA initial concept, plan, and organization
7/15/96	ISAT holds public entrance meeting at MYAPS
7/15/96 - 7/26/96	ISAT conducts initial on-site evaluation at MYAPS and at corporate offices of MYAPCo and YAEC
7/29/96 - 8/9/96	ISAT conducts a two-week review of data and compilation of findings at NRC Headquarters
8/7/96	ISAT Manager and ISAT Leader brief NRC Chairman on ISAT progress
8/12/96 - 8/23/96	ISAT conducts second two-week on-site evaluation at MYAPS, MYAPCo, and YAEC.
8/13/96	ISAT Manager and ISAT Leader brief Citizen's Review Team on ISAT progress
8/23/96	NRC holds technical exit briefing at MYAPS

9/3/96 ISAT Manager and ISAT Leader brief NRC Chairman on ISAT progress

10/2/96 ISAT Manager and ISAT Leader brief NRC Chairman on ISAT findings and conclusions

10/3/96 ISAT Manager and ISAT Leader brief Governor and Citizen's Review Team on ISAT findings and conclusions

10/7/96 NRC issues ISAT report

10/10/96 NRC holds public meeting in Wiscasset, Maine to discuss ISAT findings and conclusions

10/18/96 NRC Commission Briefing on ISAT findings and conclusions

EXECUTIVE SUMMARY

The Office of the Inspector General (OIG) initiated this inquiry based on information received from a resident of the State of Maine alleging potential wrongdoing on the part of U.S. Nuclear Regulatory Commission (NRC) staff and State of Maine officials involved with NRC's Independent Safety Assessment (ISA) at Maine Yankee Atomic Power Station (MYAPS) in 1996. The citizen alleged that the Governor of Maine appointed State members to the ISA team (ISAT) to inappropriately influence the assessment and to obtain inside information on NRC's assessment activities for the licensee. In addition, the citizen alleged that the Citizen's Review Team (CRT) appointed by the Governor lacked the expertise to analyze NRC's assessment activities and that the team's membership did not represent the interests of the public-at-large.

The citizen further alleged that NRC failed to adequately inform the public of NRC's assessment findings and conclusions during the public town meeting held in Wiscasset, Maine, on October 10, 1996, shortly after the completion of the ISA. The citizen also questioned the accuracy of numerous public statements made by the Governor of Maine relating to the ISA, and suggested that the NRC staff may have failed to provide the State with accurate information.

OIG found that NRC's cooperation with the State of Maine was consistent with the Commission's policy on cooperation with States at commercial nuclear power plants. OIG found no evidence that State of Maine officials attempted to inappropriately influence ISAT findings or conclusions. Further, there were no indications that State of Maine representatives involved with the ISAT provided MYAPS personnel with information on NRC's planned assessment activities. Additionally, OIG found no evidence that NRC personnel provided State of Maine officials with inaccurate or misleading information relating to the ISA.

OIG found the allegation that the Governor's CRT lacked the technical expertise to analyze NRC's assessment activities to be valid. However, OIG determined that the CRT was not intended to provide the Governor with technical guidance. State officials acknowledged that the CRT's membership did not represent the interests of all State of Maine citizens, as the Governor did not appoint personnel to the CRT who had predisposed views with respect to MYAPS' continued operation.

NRC issued the ISAT report on October 7, 1996, and held a public meeting to discuss the ISAT three days later. OIG concluded that while NRC staff made efforts to advise members of the public of the ISAT findings and conclusions prior to the public meeting, the public was nonetheless afforded insufficient time to review the report prior to the public meeting.

SCOPE

This Office of the Inspector General (OIG) inquiry consisted of a three-part review of the interaction between the U.S. Nuclear Regulatory Commission (NRC) and the State of Maine pertaining to NRC's Independent Safety Assessment (ISA) of Maine Yankee Atomic Power Station (MYAPS). OIG reviewed:

- The State of Maine's involvement in NRC's ISA activities, to include the make-up and conduct of (a) the State's participants in the ISA, (b) the State's process observation team, and (c) the Governor of Maine's Citizen's Review Team.
- NRC activity relating to the public meeting announcing the ISA findings and conclusions held in Wiscasset, Maine, on October 10, 1996.
- The accuracy and timeliness of information NRC staff provided State of Maine officials relating to the conduct of NRC's ISA. Here, OIG focused on reviewing the sufficiency of information NRC personnel provided to State officials relating to NRC's assessment activities. OIG did not review the accuracy of public statements made by State of Maine officials.

The OIG efforts included, but were not limited to, the following:

1. Interviews of Independent Safety Assessment Team (ISAT) Manager, ISAT Leader, and other NRC ISAT members.
2. Interviews of State of Maine representatives assigned to the ISAT, individuals on the State of Maine's ISAT Process Oversight Team, and selected members of the State's Citizen's Review Team.
3. A review of the following documents:
 - The report of the NRC's ISA of Maine Yankee Atomic Power Company, October 1996.
 - Selected press releases from NRC and State of Maine officials pertaining to the NRC ISA and follow-up activity from 1996 to present.
 - NRC Policy Statement on Cooperation with States at Commercial Nuclear Power Plants and Other Nuclear Production or Utilization Facilities (57 F.R. 6462, February 25, 1992).
 - Other NRC documents relevant to the ISA.

BACKGROUND

Anonymous Allegation Causes NRC and OIG Reviews at MYAPS

In December 1995, the Union of Concerned Scientists (UCS) forwarded anonymous allegations pertaining to MYAPS to State of Maine officials. The allegations were that Yankee Atomic Electric Company (YAEC), an engineering firm employed by Maine Yankee Atomic Power Company (MYAPCo), the licensee for MYAPS, knowingly performed inadequate analyses in its development of the computer code RELAP/5YA. MYAPCo used the code to analyze small break loss-of-coolant accident (SBLOCA) events and submitted the results to NRC to support an increase in the rated thermal power at which MYAPS could operate. State of Maine officials forwarded the allegations to NRC.

After performing a technical review, the NRC issued a confirmatory order on January 3, 1996, limiting power operation at MYAPS to the original licensed power level of 2440 megawatts thermal (MWt).

The NRC OIG completed an inquiry into the UCS allegation on May 8, 1996. OIG established that MYAPCo had experienced problems with the RELAP/5YA computer code used for analyzing how the emergency core cooling system would function during an SBLOCA and, in response, had modified that code. OIG also found that these problems with the computer code had not been reported to the NRC, as required, and that because of these problems, MYAPCo's use of the code was not in accordance with NRC requirements. Prior NRC reviews did not uncover these deficiencies. Further, OIG found significant weaknesses in NRC's regulatory oversight at MYAPS.

NRC Initiates Independent Safety Assessment (ISA)

On May 31, 1996, the NRC Chairman directed NRC staff to perform an independent assessment of MYAPCo's safety performance at MYAPS. The overall goals of the ISAT were to:

1. Assess the conformance of MYAPS to its design and licensing bases including appropriate reviews at the site and corporate offices.
2. Assess operational safety performance providing risk perspectives where appropriate.
3. Evaluate the effectiveness of licensee self-assessments, corrective actions, and improvement plans.
4. Determine the root cause(s) of safety-significant findings and draw conclusions on overall performance.

The assessment was performed by a large and multi-disciplined team comprising NRC staff and contractors who were independent of any recent or significant regulatory oversight responsibility

for MYAPS. Additionally, the assessment was coordinated with the State of Maine and included State representatives as participants.

On July 15, 1996, the team began its first two-week evaluation at MYAPS and the MYAPCo corporate office, as well as at YAEC's office located in Bolton, Massachusetts. The assessment team began its second two-week evaluation on August 12, 1996.

NRC Issues Independent Safety Assessment Team (ISAT) Report

On October 7, 1996, the ISAT issued its report on MYAPS. The ISAT concluded that overall performance at MYAPS was considered adequate for operation. However, a number of significant weaknesses and deficiencies were identified that might result in future violations being cited. The ISAT reported that the weaknesses and deficiencies appeared to be related to two root causes: economic pressures to contain costs and poor problem identification as a result of complacency and a lack of a questioning attitude.

On October 7, 1996, the NRC Chairman approved the ISAT report and forwarded a copy of the report to the President and Chief Executive Officer for MYAPCo. The company was requested to provide the Commission with its plans for addressing the root causes of the deficiencies noted by the ISAT. On December 10, 1996, MYAPCo provided NRC with its written response to the ISAT. At a Commission briefing held on February 4, 1997, MYAPCo senior management agreed with the ISAT findings with respect to the root causes for MYAPS' deficiencies and outlined plans the company intended to take to address them.

OIG Receives Allegations Relating to ISAT

The OIG received information from a resident of the State of Maine alleging potential wrongdoing on the part of NRC staff and State of Maine officials involved with NRC's ISA at MYAPS. The citizen alleged that the Governor of Maine appointed State members to the ISAT to obtain inside information on NRC inspection activities and provide that information to the licensee. In addition, the citizen alleged that the Citizen's Review Team (CRT) appointed by the Governor lacked the expertise to analyze NRC's assessment activities and that the team's membership did not represent the interests of the public-at-large.

It was further alleged to OIG that NRC failed to adequately inform the public of NRC's assessment findings and conclusions during the public town meeting held in Wiscasset, Maine, on October 10, 1996, shortly after the completion of the ISA. The citizen also questioned the accuracy of numerous public statements made by the Governor of Maine relating to the ISA and suggested that the NRC staff may have failed to provide the State with accurate information.

As a result of allegations of potential wrongdoing by NRC staff, OIG initiated this inquiry.

DETAILS

I. REVIEW OF INTERACTION BETWEEN NRC STAFF AND STATE OF MAINE OFFICIALS INVOLVED WITH THE ISA

Concerns of the Governor of Maine Prompt Official Participation in NRC's ISA

According to a senior State of Maine official, the allegations from the Union of Concerned Scientists (UCS) regarding MYAPCo's manipulation of the RELAP/5YA computer code troubled the Governor of Maine. The Governor's concerns about the plant's safety were magnified upon reading the March 4, 1996, issue of *TIME* Magazine. The investigative cover story, entitled "Blowing the Whistle on Nuclear Safety," strongly criticized NRC's handling of issues at the nearby Millstone Nuclear Power Station and questioned NRC's ability to effectively regulate nuclear plants. A local newspaper quoted the Governor's response to the magazine article as, "disturbing, for sure."

On May 8, 1996, OIG issued its report identifying NRC's failure to uncover deficiencies with the RELAP/5YA computer code at MYAPS. The RELAP/5YA issue caused the Governor to question whether similar problems at MYAPS existed in other areas at the plant. According to a senior State of Maine official, the Governor received numerous complaints from the public regarding NRC's regulation of MYAPS.

Later in May 1996, the Governor of Maine telephoned the NRC Chairman to voice his concerns relating to MYAPS. The two discussed issues involving the RELAP/5YA computer code and recent operational problems at the facility and the need for a thorough inspection. The Governor also expressed the State's willingness to participate in the inspection. The Governor was quoted in a newspaper article dated June 6, 1996, as stating, "After reading the Inspector General's report I felt I had no choice but to make this request," and he hoped that the inspection would "ensure there have been no other lapses over the years that could compromise the safety of the plant."

As a result of discussions between the Governor of Maine's office and the NRC Chairman's office, the NRC Chairman directed the staff to conduct an Independent Safety Assessment (ISA) at MYAPS. The staff was further directed to coordinate its assessment effort with the State of Maine to facilitate participation by State representatives. The State focused its efforts at three levels:

- Participation on NRC's Independent Safety Assessment Team (ISAT).
- Observation of NRC's assessment activities.
- Advice by Citizen's Review Team (CRT) to the Governor.

In total, NRC's ISAT comprised 25 members: 16 NRC members, 3 State of Maine members, and 6 contractors. The ISAT was organized with five functional area leaders reporting to the

ISAT Leader. The ISAT Leader reported to the ISAT Manager, who reported directly to the NRC Chairman. The ISAT members were independent of NRC Region I office and the NRC Office of Nuclear Reactor Regulation (NRR). The team devoted several weeks to preparation that included team meetings and briefings by the staffs from the following NRC offices: Region I; NRR; the Office for Analysis and Evaluation of Operational Data (AEOD); the Office of Investigations; and OIG.

State of Maine Representatives Join NRC ISAT

In addition to NRC's regulatory oversight of MYAPS, two State officials (the State Nuclear Safety Advisor and the State Nuclear Safety Inspector) serve as advisors to the State of Maine for matters involving MYAPS:

- The State's Nuclear Safety Advisor is primarily responsible for advising the Governor and the State Legislature on matters including nuclear power plant safety and nuclear waste transportation, handling, and storage.
- The State's Nuclear Safety Inspector is primarily responsible for on-sight monitoring, regulatory review, and oversight of operations at MYAPS.

The Governor chose three individuals to participate on the ISAT. He selected his State Nuclear Safety Advisor and State Nuclear Safety Inspector, as well as a contractor experienced in system engineering. Senior NRC personnel determined that the three selectees were sufficiently qualified, and they approved the selectees' appointment to the ISAT.

The three State of Maine ISAT members were each required to sign an NRC Memorandum of Understanding (MOU). The MOUs addressed each member's obligations with respect to communications with the licensee, the releasability of information pertaining to unannounced assessment activity, and communications with the public. Specifically, the MOUs stated that State ISAT members could communicate with the licensee only through NRC representatives, that they would not release information pertaining to unannounced assessment activities, and that under no circumstances would they release inspection results to the public before they were reviewed by NRC and the inspection report was issued. In addition, the MOUs provided that the State ISAT members' participation could be terminated by the NRC if their conduct interfered with a fair and orderly inspection. During the conduct of this inquiry, OIG uncovered no evidence that State ISAT members released information to the licensee in violation of their signed MOUs.

OIG learned that the three State ISAT members were full-time participants in assessment activities, and they performed the same tasks as the NRC ISAT members. They participated in physical inspections, interviewed plant personnel, and contributed to discussions of findings and conclusions. The State ISAT members joined NRC personnel at NRC Headquarters in Rockville, Maryland, during the preparation phase of the assessment and later to assist with the development of the ISAT report.

The ISAT Manager told OIG he believed that the State's participation in the ISAT lent credibility to NRC's effort. Because of criticism NRC received relating to its ability to adequately regulate licensees, State officials told OIG that the presence of non-NRC personnel on the ISAT provided local citizens with some assurance that the assessment would be conducted properly. Further, State personnel were able to provide NRC with timely background information relating to the plant.

Nevertheless, the ISAT Leader provided the ISAT Manager with several "lessons learned" from the assessment. One of the ISAT Leader's comments pertained to the independence of State participants in NRC assessments. He wrote:

If state personnel are to participate in similar assessments, the members should be as independent from plant oversight responsibilities as is reasonably achievable. While some degree of involvement with plant oversight can be expected, state inspectors assigned at the plant are too close to the plant to provide the degree of objectivity necessary for a successful effort.

The ISAT Leader told OIG that while the State Nuclear Inspector's presence on the ISAT opened the assessment to possible criticism, he felt that the Inspector's presence did not adversely affect the ISAT findings. He stated that NRC was careful not to appoint NRC staff who had been involved with regulating MYAPS. He commented that the NRC should have maintained the same standard for State participants.

Many NRC ISAT members told OIG that the State Nuclear Inspector's presence on the team had a positive impact. Several ISAT members said the State Nuclear Inspector knew the history of the plant, and he was aware of repeated problems the licensee experienced in the past. They noted that the State Nuclear Inspector raised both positive and negative viewpoints pertaining to MYAPS' operations. NRC ISAT members stated that they did not perceive any effort by the three State ISAT members to inappropriately influence findings or conclusions.

State of Maine Process Observation Team Oversees NRC's Assessment

Senior State officials explained to OIG that the Governor of Maine questioned NRC's ability to conduct a fair and thorough assessment of MYAPS' operation. They said the Governor worried that the ISAT would not report information which highlighted the NRC's past regulatory failings, or would downplay the significance of MYAPS' problems. He was equally concerned that NRC staff would conduct a "witch hunt" to demonstrate its ability to act as a strong regulator. To address these concerns, the Governor appointed a two-member process observation team to provide him with an ongoing assessment of ISAT activity relative to its fairness, balance, and objectivity. For this team, the Governor selected his Special Projects Director and an outside consultant. The consultant was formerly an NRC Commissioner.

It was alleged to OIG that the Governor of Maine appointed State personnel to the ISAT for the purpose of obtaining inside information relating to NRC's assessment activities for the licensee.

The process observation team was permitted by the ISAT to observe key discussions and licensee briefings as they occurred throughout the assessment process. OIG interviews of personnel involved with the ISAT revealed no indication that the State's process observers released information to the licensee in violation of the MOUs. Likewise, OIG found no evidence that the process observation team attempted to influence or intimidate the ISAT.

The two members of the State's process observation team were required to sign NRC MOUs. However, the MOUs they signed differed slightly from the MOUs signed by the State ISAT members. Like the State ISAT members, the State's process observation team was prohibited from: 1) communicating with the licensee except through NRC representatives; 2) releasing information pertaining to unannounced assessment activities; and 3) releasing inspection results to the public before they were reviewed and issued by NRC. But unlike the State ISAT members, the two process observers were not required to convey their views and conclusions directly to the NRC. The observers were permitted to convey their observations directly to State of Maine officials.

Citizen's Review Team Appointed to Advise State Governor

OIG received an allegation that the Governor's Citizen's Review Team (CRT) lacked the technical expertise to analyze NRC's assessment activities and that the CRT's membership did not represent the interests of State of Maine citizens-at-large. OIG found the allegation to be valid; however, the CRT was not intended to provide the Governor with technical guidance. In addition, OIG found that the Governor did not intend to include personnel on the CRT who possessed predisposed views with respect to MYAPS' continued operation.

According to the Governor's Special Projects Director, the CRT was appointed to assist the Governor in interpreting NRC's assessment activities from different perspectives and to act as the Governor's "eyes and ears." The CRT members told OIG that they received periodic briefings related to NRC's assessment and informally reported their observations to the Governor either directly or through the Special Projects Director. CRT members stated that they were not required to review or endorse the ISAT report or issue their own report. To the contrary, OIG learned the ISAT Manager and ISAT Leader advised the CRT that the NRC did not solicit nor expect the CRT's comments on ISAT findings and that their role was to advise the Governor. The CRT did not participate in ISAT activities, hence, the NRC did not require CRT members to sign MOUs. The ISAT Manager and ISAT Leader told OIG that CRT members did not attempt to influence NRC staff or its assessment activities.

The CRT received formal briefings from the ISAT Manager and ISAT Leader on predetermined dates of July 10, August 13, and October 3, 1996, at the Capitol Building in Augusta, Maine. The Governor was present during the July and October briefings. In addition, the CRT received several briefings at MYAPS from plant personnel and received a tour of the facility. According to the State's Special Projects Director, CRT members did not divulge confidential information to MYAPS personnel or the public. He said CRT personnel did not have information that had not been provided to MYAPS or would have been provided by the end of the workday. A CRT

member noted that the CRT never received confidential or pre-decisional information; nevertheless, the CRT treated all information it received as confidential.

The Governor's Special Projects Director told OIG that CRT members were selected based upon their analysis, policy, and decision-making skills and abilities. Technical expertise was not a prerequisite. State officials told OIG that while the Governor never intended the CRT's membership to be representative of all viewpoints within the State, the CRT's interests mirrored those of the majority of Maine citizens. The Special Projects Director said the CRT members, like all Maine citizens, had a stake in the outcome of the assessment. He added that CRT members were not paid for their service, but were authorized reimbursement for expenses such as meals and mileage.

During the course of this inquiry, it was alleged to OIG that various members of the CRT had financial ties to MYAPS or were otherwise biased. OIG did not review this matter since the selection of personnel for the CRT was made by the Governor of Maine and his staff without the NRC approval or endorsement.

ISAT Interacts with MYAPS Counterpart Group

Members of the public raised the concern that State of Maine representatives involved with the ISAT and individuals appointed to the CRT provided MYAPS personnel with information on NRC's planned assessment activities. It was alleged that this information allowed the licensee to resolve deficiencies before they were identified by NRC's assessment effort.

State of Maine officials involved with the ISAT and members of the CRT interviewed by OIG denied releasing confidential information to MYAPS personnel. The ISAT Manager told OIG that he did not sense that State of Maine officials were signaling to the licensee what NRC planned to review, and, even if such information was released, it would have changed very little. The ISAT Manager explained that the systems and procedures that the ISAT assessed at MYAPS were sufficiently complex that the licensee could not have resolved every issue even had it known beforehand exactly what the ISAT would assess. As previously noted, CRT personnel did not have information that was not already provided to MYAPS or would have been provided by the end of the workday.

The ISAT Leader stated to OIG that MYAPS personnel received daily updates on ISAT activities from NRC inspectors. The ISAT Leader explained that in order to facilitate the exchange of information between the ISAT and MYAPS, the licensee formed a counterpart team to interface with the ISAT. He stated that the presence of MYAPS' counterpart team helped ensure that problems, once identified by the ISAT, were promptly addressed by the licensee. Representatives from the ISAT met daily with their licensee counterparts. NRC discussed ISAT findings and made requests for documents and/or information during these daily debriefs. However, ISAT conclusions were not provided to MYAPCo prior to issuance of the ISAT report on October 7, 1996.

According to the ISAT Leader, NRC provided MYAPS personnel with its overall assessment plan prior to initiating onsite assessment activities. Further, he explained that ISAT members routinely requested documents from MYAPS staff throughout the assessment. The ISAT Leader acknowledged that MYAPS personnel may have been able to deduce where NRC's assessment efforts would be focussed, but he said that MYAPS staff could not have stayed ahead of the ISAT even if they had tried. He said that the complexity of the systems and analyses examined by the NRC made it impossible for MYAPS to resolve deficiencies before the NRC reviewed them.

Several ISAT members told OIG that NRC expects licensees to self-identify issues, and it is standard practice for licensees to try and do so. They said that it is in the NRC's interest, as well as the licensees' interest, to identify and resolve matters before NRC identifies them. They told OIG that the goals of an NRC inspection are to identify problems and to ensure that they are resolved. It makes little difference who identifies problems so long as they are addressed. The ISAT Leader stated that NRC can, in some cases, better utilize its limited assets by telling a licensee what NRC's areas of concern are and having the licensee conduct the inspection (with NRC then conducting a random sampling of the licensee's findings). Some ISAT members noted that while a licensee may receive credit for self-identification of problems, the issue of self-identification is closely scrutinized during NRC's enforcement process.

NRC Policy Encourages Cooperation with the State of Maine

As per the NRC Chairman's instruction, the assessment was coordinated with State of Maine officials. NRC's cooperation with the State of Maine was consistent with established policy.

The ISAT charter dated June 7, 1996, incorporated the Chairman's mandate and expressly provided:

In order to keep the State of Maine informed of the progress of the ISAT, briefings of the Governor will be offered through the State Representatives. The first briefing will be offered prior to the first onsite period, which begins with an entrance meeting that is open to the public, and will address the overall plan and approach of the ISAT. The second briefing will be offered prior to the public exit meeting and will address the team's findings and conclusions.

The level and form of State participation in the ISAT were the result of numerous discussions between senior State and NRC officials. According to the ISAT Leader, all State members were sufficiently qualified to participate in the ISAT in their respective capacities.

The ISAT report dated October 7, 1996, noted that the State of Maine's participation in the ISAT was consistent with the Commission's policy on cooperation with States at commercial nuclear power plants (57 F.R. 6462, February 25, 1992). That policy provides that representatives from a State in which the NRC-licensed facility is located will be able to observe and, in some cases, participate in inspection activities at nuclear power plants.

NRC Management Directive 5.2 (MD 5.2), “Memoranda of Understanding With States,” provides implementing guidance on the Commission’s policy statement on cooperation with States. MD 5.2 establishes protocols for coordinating State participation in NRC inspection activities, State observation of NRC inspection activities, and the exchange of information between the State and NRC. As previously noted, the three State ISAT members and two State process observers were each required to sign an MOU that addressed each member’s obligations with respect to the releasability of information pertaining to unannounced assessment activity, communications with the licensee, and communications with the public.

NRC and State of Maine Provide Comment on their Cooperation During the ISAT

The ISAT Leader expressed his view to OIG that NRC should become more involved with state governments, particularly where plants with troubled operations exist. In Maine, the Governor and the public were additionally concerned about NRC’s ability to regulate MYAPS. The best way, he said, to convince the State of NRC’s effectiveness in terms of regulating nuclear power is to allow it to closely observe NRC efforts. A senior State of Maine official told OIG that the State developed a good working relationship with NRC through the ISAT and that the Governor expressed his confidence that the Chairman and NRC staff will appropriately handle follow-up activities at MYAPS.

II. NRC STAFF ACTION RELATING TO A PUBLIC MEETING HELD IN WISCASSET, MAINE, ON OCTOBER 10, 1996

The ISAT report was approved by the NRC Chairman on October 7, 1996, and a copy of the report was forwarded to the President of MYAPCo. NRC held a public meeting to discuss the ISAT’s findings and conclusions three days later at Wiscasset Middle School in Wiscasset, Maine. NRC representatives at the public meeting included the ISAT Manager, ISAT Leader, and the NRC Region I Administrator.

The public meeting was divided into two parts. First, NRC staff briefed MYAPCo officials on the overall findings and conclusions of the ISAT. This portion of the meeting was open to public observation; however, public participation was not permitted. At the conclusion of this session, the public was offered an opportunity to pose questions to NRC on matters pertaining to the ISAT. During this second portion of the public meeting, the three NRC staff members were joined by Maine’s Special Projects Director.

Members of the public complained to OIG that NRC failed to provide them with sufficient time to review the ISAT report prior to holding the public meeting, thus limiting the time to research and prepare detailed questions.

ISAT Cite NRC Chairman’s Travel as Reason for ISAT Report Delay

On May 31, 1996, the NRC Chairman directed NRC to conduct the ISA at MYAPS, and by June 7, 1996, the staff provided the Chairman with its ISAT plan. The ISAT plan included a “principal activities schedule” and committed to provide the Chairman with the ISAT’s final report by September 27, 1996.

The ISAT schedule was modified during the subsequent weeks as briefing dates were established. By July 12, 1996, the schedule was firm. The ISAT remained committed to providing the Chairman its report by September 27, 1996. In addition, the schedule then stated that during the week of September 30, 1996, the ISAT would brief the Chairman, the Governor of Maine, and issue the final ISAT report. Also, the July 12, 1996, schedule noted the ISAT’s intention to conduct a public exit meeting with MYAPS on October 10, 1996.

The ISAT Leader told OIG that the report was provided to the NRC Chairman’s office on Friday, September 27, 1996, as originally planned, and that the NRC Chairman was required to approve the ISAT report before it could be issued. He said the ISAT schedule allowed the team one week to resolve any comments or concerns of the Chairman and still meet the scheduled issue date. The ISAT Leader stated that because the Chairman was traveling outside the United States until Tuesday, October 1, 1996, the staff was unable to brief her until October 2, 1996. He stated that the Chairman and her staff had a number of comments and questions regarding the ISAT report that required follow up with the ISAT. By Monday, October 7, 1996, the Chairman’s concerns were resolved and the ISAT report was approved. The public exit meeting was not rescheduled and was held three days later on Thursday, October 10, 1996.

OIG Reviews NRC Chairman’s Travel Schedule

NRC travel orders dated August 27, 1996, authorized the NRC Chairman’s overseas travel from September 9, 1996 to October 1, 1996. The Chairman departed NRC on Monday, September 9, 1996 for Paris, France. From there she traveled to Austria, Spain, and South Africa. She ultimately returned to NRC on Tuesday, October 1, 1996. As noted above, the Chairman received a briefing on the ISAT on October 2, 1996, and reviewed and approved the ISAT report within five calendar days.

NRC Decides Not to Postpone Public Meeting

The ISAT Manager and ISAT Leader contemplated postponing the scheduled public meeting because of the shortened review period provided to both the licensee and the public. However, they concluded that the public would have been more disappointed had the public meeting been postponed. The ISAT Leader told OIG that the public meeting scheduled for October 10, 1996, had been well advertised. If the meeting had been postponed at the last moment, NRC was concerned that many local residents would not have been notified in time and would have gone to the meeting site. Thus, the decision was made to proceed with the public meeting as originally scheduled. The staff reasoned that additional public meetings, if necessary, could be arranged at

a later date. However, no additional public meetings on the ISAT were held in the State of Maine.

NRC Makes Effort to Inform the Public

The ISAT Manager and ISAT Leader acknowledged that the public should have had more time to review the ISAT report before the public meeting. However, both individuals told OIG that several actions were taken to compensate for the short time period between the report issue date and the scheduled public meeting. The ISAT Leader stated that on the afternoon of October 7, 1996, he express-mailed a copy of the report to the local public document room (LPDR) in Wiscasset, Maine, and had the report placed on the NRC Internet site. In addition, the ISAT Leader arranged to have 250 copies of the report's Executive Summary and copies of the briefing slides available at the public meeting.

III. REVIEW OF ISAT INFORMATION NRC STAFF PROVIDED TO STATE OF MAINE OFFICIALS

OIG received concerns from citizens of Maine regarding the accuracy of numerous public statements made by the Governor of Maine relating to the ISAT. OIG was provided a copy of a news article appearing in the *Bangor Daily News* dated June 1-2, 1996, citing a May 31, 1996, interview with the Governor during which he characterized the assessment as "a nuts and bolts review from top to bottom of the plant itself." Further, a citizen of Maine alleged that following the Governor's briefing by NRC on October 3, 1996, the Governor publicly characterized the ISAT as "the most thorough, comprehensive ever done at any nuclear plant in the world."

The concerns raised by citizens of Maine suggested that NRC may not have provided the Governor with accurate information regarding the scope and nature of the assessment. In response to those concerns, OIG reviewed the various channels of information NRC used to keep State of Maine officials apprised of ISAT activity.

NRC Briefs Governor of Maine and His Staff on Scope and Nature of ISAT

Immediately following the NRC Chairman's late-May 1996 telephone conversation with the Governor of Maine relating to the initiation of an independent assessment at MYAPS, the Chairman directed her Executive Assistant to coordinate NRC's assessment with State officials. The Executive Assistant told OIG that on or about May 30, 1996, she spoke with the Governor's Chief of Staff about NRC's policy on cooperation with states during inspections and the general scope of NRC's planned assessment at MYAPS. She recalled telling the Governor's Chief of Staff that NRC's assessment would be comprehensive and would involve onsite, physical inspections. However, she stated that she never indicated to State officials that NRC planned to

conduct a 100% inspection at the plant. The Chairman's Executive Assistant pointed out that the specific scope of the ISAT was not developed until days later by the ISAT Manager, and it was not formalized until June 7, 1996.

As previously noted, the Governor and his CRT received a formal briefing from NRC in July 1996. At that time, the Governor was informed of the overall goals of the ISAT. He was specifically advised by the ISAT Manager and ISAT Leader that the assessment would comprise vertical and horizontal slice reviews of various MYAPS systems and analytical codes, and that only selected systems would be evaluated in detail. The Governor and the CRT received a final formal briefing on October 3, 1996. During this briefing, NRC provided the Governor with numerous details about the assessment effort. For example, the NRC explained that the assessment included extensive control room observations, vertical slice reviews of four different plant systems, and analytic code reviews. The Governor was informed that the assessment included over 100 interviews and a review of over 100 linear-feet of licensee documents responding to ISAT questions. The Governor was also provided details of the ISAT's findings with respect to MYAPS' conformance with design and licensing basis, its use of analytical codes, and findings related to operability and safety issues.

According to the ISAT Manager and ISAT Leader, both briefings with the Governor included meaningful, detailed discussions of NRC's assessment activities. The ISAT Leader characterized the ISA as "an unprecedented assessment," as it was the largest diagnostic evaluation team level assessment ever performed by NRC and the only diagnostic level assessment to include participation by the State. He pointed out to OIG, however, that NRC was fully aware that the ISA was not the largest inspection ever conducted by NRC (as NRC had just completed a much larger inspection effort at Millstone Nuclear Power Station). The ISAT Manager and ISAT Leader denied telling the Governor that the ISA was NRC's largest inspection ever conducted.

OIG reviewed the NRC briefing slides for each of the State briefings. The slides indicated that very detailed information was provided to the State about the ISAT's activities. While the slides did not specifically address the scope of the ISAT, they addressed which systems and processes were reviewed by the ISAT, the manner in which those systems and processes were reviewed, and the findings and results of those reviews.

Governor of Maine Receives ISAT Information from State Sources

The Governor received ISAT information from numerous sources other than NRC:

- Insights from State ISAT members. The three State ISAT members participated in the day-to-day activities of the assessment and were fully aware of the scope and nature of the ISAT throughout the process.
- Periodic updates from State process observers. The two process observers were tasked to observe key ISAT discussions and licensee briefings throughout the assessment process and to provide the State with an assessment of the ISAT

activities relative to its fairness, balance, and objectivity. The State's Special Projects Director, who acted as one of the two ISAT process observers, regularly briefed the Governor.

- CRT observations. CRT members were specifically appointed by the Governor to observe the NRC's assessment and report their observations to him, either directly or through the Special Projects Director.

NRC coordinated with State personnel in these capacities to ensure that the State was fully aware of NRC's assessment activities. The State's Special Projects Director (a member of the State's process observation team for the ISA), as well as State ISAT and CRT members, told OIG that the Governor remained well informed as to the scope and nature of the ISAT's activities.

State Officials Respond to Governor's Public Statements

The State's Special Projects Director commented to OIG on the Governor's May 31, 1996, statement that the assessment would be "a nuts and bolts review from top to bottom of the plant itself." He told OIG that the statement, made the day following NRC's announcement of the safety assessment at MYAPS, was not intended to mean that NRC would assess 100 percent of MYAPS' systems. Instead, the official told OIG the comment meant that selected systems at various levels would receive a physical inspection, as opposed to receiving merely a documentary review. The official did not believe NRC provided inaccurate or misleading information to the State with respect to the intended scope of the ISA.

With respect to the Governor's alleged public statement made on October 3, 1996, the State's Special Projects Director told OIG that the Governor's public comments on the ISAT were based upon the general information known to him. The official believed NRC's safety assessment was unprecedented and was greater than any other inspection effort previously conducted at MYAPS. The official told OIG that the Governor was fully aware that the ISAT would not assess every system in the plant.

The State Nuclear Safety Inspector, who was a State ISAT member, provided OIG with similar observations. He told OIG that he thought the Governor's statements about the scope of the ISAT were his attempt to provide a layman's version of what took place, considering the total man-hours expended in such a brief time period. He believed that the Governor understood the scope and nature of the ISAT following NRC's October 3, 1996, briefing.

SUMMARY OF FINDINGS

1. OIG found no evidence that the ISAT findings or conclusions were inappropriately influenced by State of Maine ISAT members. In addition, OIG found no evidence that NRC staff was influenced or intimidated by the State's process observation team.
2. OIG found that the Governor's Citizen's Review Team (CRT) lacked the technical expertise to analyze NRC's assessment. However, OIG determined that the CRT was not intended to provide the Governor with technical guidance. The CRT was appointed to assist the Governor in interpreting NRC's assessment activities from different perspectives and to act as the Governor's "eyes and ears." CRT members were selected based upon their analysis, policy, and decision-making skills and abilities.
3. OIG found no evidence that information on NRC's planned assessment activities was provided to MYAPS by State of Maine representatives involved with the ISAT.
4. NRC's cooperation with the State of Maine was consistent with the Commission's established policy on cooperation with States at commercial nuclear power plants (57 F.R. 6462, February 25, 1992) and its implementing guidance in NRC Management Directive 5.2 (MD 5.2), "Memoranda of Understanding With States."
5. OIG concluded that NRC staff provided the public with insufficient time to review the ISAT report prior to holding the October 10, 1996, public meeting, thus limiting their opportunity to review the report and ask detailed questions related to it. Since the NRC Chairman's travel orders were issued on August 27, 1996, for her travel between September 9 and October 1, 1996, the ISAT managers should have anticipated as early as August 1996 that the scheduled date of issuance of the ISAT report was in doubt. With the report date in question, the date of the public meeting also could have been reviewed and/or revised in late August 1996.
6. OIG found no evidence that NRC personnel provided State of Maine officials with inaccurate or misleading information relating to the intended scope of the ISAT.

LIST OF ACRONYMS

AEOD	Analysis and Evaluation of Operational Data
CFR	Code of Federal Regulations
CRT	Citizen's Review Team
ECCS	Emergency Core Cooling System
EDO	Executive Director for Operations
INEL	Idaho National Engineering Laboratory
ISA	Independent Safety Assessment
ISAT	Independent Safety Assessment Team
LOCA	Loss-of-Coolant Accident
LPDR	Local Public Document Room
MD	Management Directive
MOU	Memoranda of Understanding
MYAPS	Maine Yankee Atomic Power Station
MYAPCo	Maine Yankee Atomic Power Company
MWt	Mega-Watt Thermal power
NRC	U.S. Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
OIG	Office of the Inspector General
PWR	Pressurized-Water Reactor
SBLOCA	Small Break Loss-of-Coolant Accident
TMI	Three Mile Island
YAEC	Yankee Atomic Electric Company

GLOSSARY OF TECHNICAL TERMS

Emergency Core Cooling System - a safety system that prevents the fuel in a nuclear reactor from melting should a sudden loss of normal coolant occur.

Light Water Reactor - the most widely used reactor type in the world in which ordinary water is the moderator and coolant.

Limiting Transient - the limiting transient for the loss of coolant accidents analyzed with an evaluation model is the accident sequence, which combines break size, location, and single failure assumption, such that the worst consequences or highest peak cladding temperature result.

Loss-of-Coolant Accident - a reactor accident that results in a loss of the primary coolant, usually water, from the core.

Megawatt (t) - a standard measure of electrical capacity: one megawatt equals one million watts or a thousand kilowatts. The (t) stands for thermal heat.

Pressurized Water Reactor - a light water reactor in which the water used as a moderator is kept under pressure, preventing it from boiling at normal temperatures.

RELAP/5YA - is a computer program developed by Yankee Atomic Electric Company for analyses of thermal-hydraulic responses of the light-water reactor system of transient events and accidents, such as a loss of coolant accident.

Small Break Loss-of-Coolant Accident - a small break loss-of-coolant (LOCA) is a class of LOCA with smaller break sizes, normally less than one square foot, where there are no clearly distinguishable phases of blowdown, refill, and reflood like that experienced in a large break LOCA.

TMI Accident - a reference to Three Mile Island or TMI usually means the accident that occurred on March 28, 1979, at Metropolitan Edison Company's Unit Two located on an island in the middle of the Susquehanna River near Harrisburg, Pennsylvania. TMI was the most serious nuclear accident to occur in the history of the U.S. civilian nuclear reactor program and it had an impact on virtually every NRC action since it occurred.