UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

6/21/90

MEMORANDUM FOR: Thomas Murley, Director, NRR
Stewart D. Ebneter, Regional Administrator, RII
Edward L. Jordan, Director, AEOD
Eric S. Beckjord, Director, RES

FROM: James M. Taylor
Executive Director for Operations

SUBJECT: STAFF ACTIONS RESULTING FROM THE INVESTIGATION OF THE MARCH 20, 1990 INCIDENT AT VOGTLE UNIT 1 (NUREG-1410)

An advance copy of the subject report was transmitted to you by memorandum dated May 31, 1990 from the Vogtle IIT team leader, Alfred Chaffee. The report documents the Team's efforts in identifying the circumstances and causes of the March 20, 1990 incident, together with findings and conclusions which form the bases for followup actions.

The purpose of this memorandum is to identify and assign responsibility for generic and plant-specific actions resulting from the investigation of the Vogtle incident as documented in NUREG-1410. In this regard, you are requested to review the enclosure which specifies staff actions resulting from the investigation of the Vogtle incident. You are requested to determine the actions necessary to resolve each of the issues in your area of responsibility and, where appropriate, identify additional staff actions or revisions as our review and understanding of this event are refined.

I intend to monitor the resolution of each action item. By July 13, 1990, please provide a written summary of the plans, schedule, status, and point of contact for each item within your responsibility listed in the enclosure. In addition, I request that you prepare a written status report on the disposition of your items (and anticipated actions for uncompleted items) within six months.

The resolution of the plant-specific actions are to be documented in a single report and each generic action item will be individually tracked via the EDO's work item tracking system (WITS). Overall lead responsibility for the preparation of the staff's single report on plant-specific actions rests with Region II. Other offices involved in plant-specific actions are to coordinate their efforts with Region II. The Director, AEOD, will prepare a closeout report which identifies the resolution or disposition of each IIT finding and conclusion. Thus, the Director, AEOD, should also be kept informed as to

① Written summary of plans, schedule, status & point of contact by 7/13/90
② Written status report on disposition of each item & anticipated actions by 12/21/90
③ Plant specific actions - document in single report through Region II
④ Generic action items - track individually in WITS

7/13

the resolution or disposition of each action item assigned. In accordance with the revised NRC Manual Chapter 0513, "Incident Investigation Program," the resolution of each IIT finding and conclusion is subject to independent assessment as to its adequacy and completeness and further action may be taken at a later date. If it is believed that a significant policy question may be involved in the resolution of an action item, it is requested that I be notified so that the need for review by the Commission may be evaluated. Additionally, you should determine whether any corrective action deemed necessary or appropriate will result in plant-specific or generic backfitting and, if so, ensure that the procedures in NRC Manual Chapter 0514 and the CRGR Charter are followed.

The enclosure is based on the Vogtle IIT's findings and conclusions contained in NUREG-1410. Accordingly, it does not include all licensee actions, nor does it cover NRC staff activities associated with normal, event follow-up such as facility inspections or possible enforcement actions. These items are expected to be defined and implemented in a routine manner.

James M. Taylor
Executive Director for Operations

Enclosure:
As Stated

cc w/enclosure:

H. Thompson, OEDO
J. Blaha, OEDO
C. Kammerer, GPA
J. Fouchard, GPA
R. Hauber, GPA
T. Martin, RI
A. Davis, RIII
R. Martin, RIV
J. Martin, RV
A. Chaffee, RV
W. Lazarus, RI
W. Jones, AEOD
R. Kendall, NRR
W. Lyon, NRR
E. Trager, AEOD
G. West, NRR
P. Dietz, INPO
M. Jones, CP&L
H. Wyckoff, EPRI

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the resolution or disposition of each action item assigned. In accordance with the revised NRC Manual Chapter 0513, "Incident Investigation Program," the resolution of each IIT finding and conclusion is subject to independent assessment as to its adequacy and completeness and further action may be taken at a later date. If it is believed that a significant policy question may be involved in the resolution of an action item, it is requested that I be notified so that the need for review by the Commission may be evaluated. Additionally, you should determine whether any corrective action deemed necessary or appropriate will result in plant-specific or generic backfitting and, if so, ensure that the procedures in NRC Manual Chapter 0514 and the CRGR Charter are followed.

The enclosure is based on the Vogtle IIT's findings and conclusions contained in NUREG-1410. Accordingly, it does not include all licensee actions, nor does it cover NRC staff activities associated with normal, event follow-up such as facility inspections or possible enforcement actions. These items are expected to be defined and implemented in a routine manner.

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NAME	:SDRubin	:GGZech	:ELJordan	:JMTaylor	:	:	:
DATE	:06/ /90	:06/ /90	:06/ /90	:06/ /90	:	:	:

OFFICIAL RECORD COPY

STAFF ACTIONS RESULTING FROM THE INVESTIGATION
OF MARCH 20, 1990 INCIDENT AT VOGTLE, UNIT 1
(Reference: NUREG-1410)

1. Issue: Adequacy of Shutdown Risk Management
(References: Sections 3, 7, 8 and 9
Findings 10.1, 10.3, 10.5 and 10.8,
and Appendices F, G and K))

During plant shutdown, maintenance and surveillance activities can result in opening of the primary and/or containment systems, stoppage of the shutdown cooling system, disabling electrical systems and movement of heavy equipment within the plant. Hundreds of plant workers, including contractors, are generally involved. Since, there is an economic incentive for the utility to complete the outage work in an expeditious manner, many tasks are performed simultaneously. There is also a need to comply with applicable license conditions, including technical specifications. All of these activities may be referred to as the outage activities. There is limited NRC guidance on allowable plant configurations other than the license conditions and technical specification requirements.

Based on Vogtle and other recent events, there appears to be a need to develop further regulatory guidance to ensure adequate risk management during shutdown conditions. This regulatory concept recognizes the need to operate from time to time during shutdown with less than the usual barriers and safety systems. However, with proper licensee planning, it is believed that the outage should strive to conduct the otherwise more risk significant activities (e.g., mid-loop) at a time when more barriers and systems are in place or operable. Such shutdown risk management does not currently appear to be practiced. While licensees should be responsible for shutdown risk management programs and their implementation, the NRC should develop some generally applicable safety principles.

	ACTION	RESPONSIBLE OFFICE	CATEGORY
a.	Review existing regulatory guidance related to shutdown risk control and issue such new guidance as may be needed. Include in the assessment of shutdown risk management: normal and standby electrical systems and sources; normal and alternate cooling systems; special alternate plans for loss of forced circulation; fission product barriers including primary and containment systems and special activities such as movement of heavy loads or construction activities.	NRR (RES support as needed)	Generic

	ACTION	RESPONSIBLE OFFICE	CATEGORY
b.	Review shutdown risk analysis methodology and effectiveness of alternate cooling methods for loss of forced circulation. Issue new guidance as appropriate.	RES	Generic
c.	Review the present plant technical specification requirements for shutdown conditions and revise as needed, based on the results for Action (a) above. Ensure revisions to plant technical specifications as necessary.	NRR	Generic

2. Issue: Adequacy of Control Over Switchyard Activities
(References: Section 5.3 and Finding 10.2)

Switchyard maintenance activities require movement of equipment into and through the switchyard. In some cases, these activities may require storage of equipment in the switchyard. At Vogtle, equipment requiring servicing was stored in the switchyard. A fuel and lubricant truck servicing this equipment initiated the Vogtle incident. Administrative control of activities in the switchyard was not adequate to prevent the Vogtle incident. Based on operating events, some industry guidance has been issued regarding events caused by lack of control of activities in switchyards.

Movement of the truck through the switchyard presented an additional hazard because some of the truck's contents were flammable. The Vogtle event potentially could have been more severe had an explosion of the flammable material on the truck occurred. Such an explosion could have caused a loss of nonsafety power further complicating event recovery.

	ACTION	RESPONSIBLE OFFICE	CATEGORY
a.	Evaluate the adequacy of existing regulatory guidance and requirements for the control of activities and hazardous materials in switchyards and protected areas. Issue new guidance as necessary.	NRR	Generic
b.	Evaluate the corrective actions taken at Vogtle to ensure adequate control of activities and hazardous materials in the switchyard.	Region II	Plant-specific

3. Issue: Adequacy of Diesel Generator Instrumentation and Control Systems (References: Section 5.1 and Finding 10.4)

Diesel generator operation depends on proper functioning of a number of components and on adequate coordination between these components. The Vogtle event clearly demonstrates the importance of proper operation of various control and protective devices like sensors, sequencers, annunicator panels, and data printouts. At Vogtle, foreign material (i.e., pipe thread sealant compound and metal shavings) prevented jacket water temperature sensor operation causing the unexpectec diesel generator trips. The Vogtle design did not include provisions for recording diesel generator trip alarms. Additionally, numerous nuisance alarms were received contributing to operator confusion in identifying the cause of the trips. The training program and existing procedures did not provide adequate information to the operators to cope with the abnormal situation that occurred.

	ACTION	RESPONSIBLE OFFICE	CATEGORY
a.	Evaluate the need for reexamination of emergency diesel generator annunciators and control panels including provisions for alarm printout. Consider the need for reexamination of local sequencer panels.	NRR	Generic
b.	Evaluate the need for additional guidance and increased emphasis on procedures and training for emergency diesel and local sequencers including response to malfunctions.	NRR	Generic
c.	Evaluate Vogtle's procedures and training for emergency diesel generators and local sequencer panel operations including response to malfunctions.	RII	Plant-specific

4. Issue: Adequacy of Emergency Preparedness
(References: Section 4 and Finding 10.6)

NUREG 0654 does not provide specific classification guidance for certain events when in cold shutdown operations. The resultant classification determinations may not convey the seriousness of the situation and the licensee, state and local, and NRC responses may not be sufficient for the risk involved. In addition, a sampling of 12 other sites showed that the classification of a similar event could range from "no classification" to a Site Area Emergency. Also, it is not clear that NUREG 0654 guidance for evacuation and accountability of people onsite recognizes that significant numbers of maintenance people would be directed to continue to work in response to the emergency, before going to the operations support center for purpose of personnel accountability where they would be accounted for. During the Vogtle event, the licensee did not meet the 15-minute notification requirement to offsite authorities due to the lack of power to the emergency notification network in the control room and due to training and procedural weaknesses. In addition, the Vogtle ENS phone circuit experienced a repeat of an earlier problem that has not been localized or corrected.

	ACTION	RESPONSIBLE OFFICE	CATEGORY
a.	Evaluate and revise, if necessary, the guidance contained in NUREG 0654 to classify events that could occur in cold shutdown and loss of electrical power events. Evaluate the policy and guidance to NRC managers for determining when the NRC will enter the standby mode. Initiate followup actions, as appropriate.	AEOD (NRR support as needed)	Generic
	Identify and correct Vogtle's recent ENS problem.	AEOD	Plant-Specific
b.	Subsequent to resolution of NUREG 0654 classification guidance issue in Action a. above, evaluate the NRC guidance to licensee on classification procedures, revise the guidance as appropriate. Evalute the	NRR	Generic

ACTION	RESPONSIBLE OFFICE	CATEGORY
guidance to licensees for personnel accountability during outages. Revise and followup as appropriate. Evaluate guidance to licensees regarding the availability of notification systems (and alternates) during a loss of power event and with the priorities and requirements for notifications to offsite authorities. Followup as appropriate.	NRR	Generic

5. Issue: Adequacy of Operating Experience Feedback (References: Section 6 and Findings 10.7 and Appendices I and J)

The findings of the Vogtle IIT indicated that there were shortcomings in the operating experience feedback program at Vogtle and raised questions about the adequacy of the industry-wide programs. The team indicated that there was a large number of precursor events that were fedback to licensees through various generic and other communications, but they did not fucus specifically on the need for an adequate number of electric power sources for emergency busses during shutdown operations. They also found that a number of appare t problems with the Calcon sensors were not reported to the NPRDS. The am suggested that adequate information was available to Vogtle that if i has been considered and acted upon properly, might have eliminated the potential for this event.

This issue addresses the adequacy of Operating Experience Feedback systems including generic communications and other operating experience reports issued by the NRC. It also covers the ability of the NPRDS to capture and feedback component failure information to licensees and vendors.

ACTION	RESPONSIBLE OFFICE	CATEGORY
a. Evaluate the procedures and practices for events analysis and feedback of lessons to industry and recommend appropriate improvements. Consideration should be given to (a) past NRC reports not the subject of "generic communications," and (b) the development of the proper scope of the generic action based on the individual events Also, address the need for feedback regarding the Calcon sensor failures and calibration issues arising from the Vogtle event.	NRR	Generic
b. Review the industry's NPRDS program regarding (1) the need for improvements in reporting guidance or practices for diesel generator components and	AEOD	Generic

ACTION	RESPONSIBLE OFFICE	CATEGORY
(2) industry practice in providing NPRDS reported component failures to vendors or the level of vendor use of NPRDS. Interface with INPO as appropriate for action on this and the staff's overall evaluation of NPRDS to stimulate improvements.	AEOD	Generic

1) Copy to Bob, Tom, Me
2) Cy File Vogtle IIT

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

JUN 2 1 1990

MEMORANDUM FOR: Thomas Murley, Director, NRR
Stewart D. Ebneter, Regional Administrator, RII
Edward L. Jordan, Director, AEOD
Eric S. Beckjord, Director, RES

FROM: James M. Taylor
Executive Director for Operations

SUBJECT: STAFF ACTIONS RESULTING FROM THE INVESTIGATION OF THE MARCH 20, 1990 INCIDENT AT VOGTLE UNIT 1 (NUREG-1410)

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Original Signed By:
James M. Taylor
James M. Taylor
Executive Director
for Operations

Enclosure:
As Stated

cc w/enclosure:
J. H. Sniezek, OEDO
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J. Clifford, OEDO
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Distribution:

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EJordan	SRubin	DCS	AEOD R/F	
DRoss	TNovak	PDR	DOA R/F	

OFC	:C:DEIIB:AEOD	:D:DOA:AEOD	:D:AEOD	:RV	:EDO	:	:
NAME	:SDRubin	:GGZech	:ELJordan	:AChaffee	:JMTaylor	:	:
DATE	:06/ /90	:06/ /90	:06/ /90	:06/ /90	:06/ /90	:	:

STAFF ACTIONS RESULTING FROM THE INVESTIGATION
OF MARCH 20, 1990 INCIDENT AT VOGTLE, UNIT 1
(Reference: NUREG-1410)

1. Issue: Adequacy of Shutdown Risk Management
(References: Sections 3, 7, 8 and 9
Findings 10.1, 10.3, 10.5 and 10.8,
and Appendices F, G and K))

During plant shutdown, maintenance and surveillance activities can result in opening of the primary and/or containment systems, stoppage of the shutdown cooling system, disabling electrical systems and movement of heavy equipment within the plant. Hundreds of plant workers, including contractors, are generally involved. Since, there is an economic incentive for the utility to complete the outage work in an expeditious manner, many tasks are performed simultaneously. There is also a need to comply with applicable license conditions, including technical specifications. All of these activities may be referred to as the outage activities. There is limited NRC guidance on allowable plant configurations other than the license conditions and technical specification requirements.

Based on Vogtle and other recent events, there appears to be a need to develop further regulatory guidance to ensure adequate risk management during shutdown conditions. This regulatory concept recognizes the need to operate from time to time during shutdown with less than the usual barriers and safety systems. However, with proper licensee planning, it is believed that the outage should strive to conduct the otherwise more risk significant activities (e.g., mid-loop) at a time when more barriers and systems are in place or operable. Such shutdown risk management does not currently appear to be practiced. While licensees should be responsible for shutdown risk management programs and their implementation, the NRC should develop some generally applicable safety principles.

	ACTION	RESPONSIBLE OFFICE	CATEGORY
a.	Review existing regulatory guidance related to shutdown risk control and issue such new guidance as may be needed. Include in the assessment of shutdown risk management: normal and standby electrical systems and sources, including switchyard equipment; normal and alternate cooling systems; special alternate plans for loss of forced circulation; fission product barriers including primary and containment systems and special activities such as movement of heavy loads or construction activities.	NRR (RES support as needed)	Generic

	ACTION (continued)	RESPONSIBLE OFFICE	CATEGORY
b.	Continue to develop shutdown risk analysis methodology and review the effectiveness of alternate cooling methods for loss of forced circulation. Issue new guidance as appropriate.	RES	Generic
c.	Review the present regulatory requirements such as standard technical specifications for shutdown conditions and revise as needed, based on the results for Action (a) above. Develop guidance regarding revision of documents such as EOPs, accident management procedures and plant technical specifications as necessary.	NRR	Generic

2. Issue: Adequacy of Control Over Switchyard Activities
(References: Section 5.3 and Finding 10.2)

Switchyard maintenance activities require movement of equipment into and through the switchyard. In some cases, these activities may require storage of equipment in the switchyard. At Vogtle, equipment requiring servicing was stored in the switchyard. A fuel and lubricant truck servicing this equipment initiated the Vogtle incident. Administrative control of activities in the switchyard was not adequate to prevent the Vogtle incident. Based on operating events, some industry guidance has been issued regarding events caused by lack of control of activities in switchyards.

Movement of the truck through the switchyard presented an additional hazard because some of the truck's contents were flammable. The Vogtle event potentially could have been more severe had an explosion of the flammable material on the truck occurred. Such an explosion could have caused a loss of nonsafety power further complicating event recovery.

	ACTION	RESPONSIBLE OFFICE	CATEGORY
a.	Evaluate the adequacy of existing regulatory guidance and requirements for the control of activities and hazardous materials in switchyards and protected areas. Issue new guidance as necessary.	NRR (RES support as needed)	Generic
b.	Evaluate the corrective actions taken at Vogtle to ensure adequate control of activities and hazardous materials in the switchyard.	Region II	Plant-specific

3. Issue: Adequacy of Diesel Generator Instrumentation and Control Systems (References: Section 5.1 and Finding 10.4)

Diesel generator operation depends on proper functioning of a number of components and on adequate coordination between these components. The Vogtle event clearly demonstrates the importance of proper operation of various control and protective devices like sensors, sequencers, annunicator panels, and data printouts. At Vogtle, foreign material (i.e., pipe thread sealant compound and metal shavings) apparently prevented jacket water temperature sensor operation causing the unexpected diesel generator trips. The Vogtle design did not include provisions for recording diesel generator trip alarms. Additionally, numerous nuisance alarms were received contributing to operator confusion in identifying the cause of the trips. The training program and existing procedures did not provide adequate information to the operators to cope with the abnormal situation that occurred.

	ACTION	RESPONSIBLE OFFICE	CATEGORY
a.	Evaluate the need for reexamination of emergency diesel generator annunciators and control panels including provisions for alarm printout. Consider the need for reexamination of local sequencer panels.	NRR	Generic
b.	Evaluate the need for additional guidance and increased emphasis on procedures and training for emergency diesel and local sequencers including response to malfunctions.	NRR	Generic
c.	Evaluate Vogtle's procedures and training for emergency diesel generators and local sequencer panel operations including response to malfunctions.	RII	Plant-specific

4. Issue: Adequacy of Emergency Preparedness
(References: Section 4 and Finding 10.6)

NUREG 0654 does not provide specific classification guidance for certain events when in cold shutdown operations. The resultant classification determinations may not convey the seriousness of the situation and the licensee, state and local, and NRC responses may not be sufficient for the risk involved. In addition, a sampling of 12 other sites showed that the classification of a similar event could range from "no classification" to a Site Area Emergency. Also, it is not clear that NUREG 0654 guidance for evacuation and accountability of onsite personnel recognizes that significant numbers of maintenance personnel would be directed to continue to work in response to the emergency, before going to the operations support center for purposes of personnel accountability. During the Vogtle event, the licensee did not meet the 15-minute notification requirement to offsite authorities due to the lack of power to the emergency notification network in the control room and due to training and procedural weaknesses. In addition, the Vogtle ENS phone circuit experienced a repeat of an earlier problem that has not been localized or corrected.

	ACTION	RESPONSIBLE OFFICE	CATEGORY
a.	Evaluate and revise, as necessary, the guidance contained in NUREG 0654 to classify events that could occur in cold shutdown and loss of electrical power events. Evaluate the NRC guidance to licensees on classification procedures and revise as appropriate. Evaluate the guidance to licensees for personnel accountability during outages. Revise and followup as appropriate. Evaluate guidance to licensees regarding the availability of notification systems (and alternates) during a loss of power event. Consider the priorities and requirements for notifications to offsite authorities. Followup as appropriate.	NRR (AEOD support as needed)	Generic

	ACTION (continued)	RESPONSIBLE OFFICE	CATEGORY
b.	Evaluate the policy and guidance to NRC managers for determining when the NRC will enter the standby mode. Initiate followup actions, as appropriate.	AEOD	Generic
	Identify and correct Vogtle's recent ENS problem.	AEOD	Plant-Specific

5. Issue: Adequacy of Operating Experience Feedback (References: Section 6, Finding 10.7 and Appendices I and J)

The findings of the Vogtle IIT indicated that there were shortcomings in the operating experience feedback program at Vogtle and raised questions about the adequacy of the industry-wide programs. The team indicated that there was a large number of precursor events that were fedback to licensees through various generic and other communications, but they did not focus specifically on the need for an adequate number of electric power sources for emergency busses during shutdown operations. They also found that a number of apparent problems with the Calcon sensors were not reported to the NPRDS. The team suggested that adequate information was available to Vogtle and if it had been considered and acted upon properly, might have eliminated the potential for this event.

This issue addresses the adequacy of Operating Experience Feedback systems including generic communications and other operating experience reports issued by the NRC. It also covers the ability of the NPRDS to capture and feedback component failure information to licensees and vendors.

	ACTION	RESPONSIBLE OFFICE	CATEGORY
a.	Evaluate the procedures and practices for events analysis and feedback of lessons to industry and recommend appropriate improvements. Consideration should be given to: (a) past NRC reports not the subject of "generic communications," and (b) the development of the proper scope of the generic action based on the individual events Also, address the need for feedback regarding the Calcon sensor failures and calibration issues arising from the Vogtle event.	NRR	Generic
b.	Review the industry's NPRDS program regarding: (1) the need for improvements in reporting guidance or practices for diesel generator components and	AEOD	Generic

ACTION (continued)	RESPONSIBLE OFFICE	CATEGORY
(2) industry practice in providing NPRDS reported component failures to vendors or the level of vendor use of NPRDS. Interface with INPO as appropriate for action on this and the staff's overall evaluation of NPRDS to stimulate improvements.	AEOD	Generic

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON D.C. 20555

OFFICE OF THE
SECRETARY

IN RESPONSE, PLEASE
REFER TO: M900608A

June 28, 1990

MEMORANDUM FOR: James M. Taylor
Executive Director for Operations

FROM: Samuel J. Chilk, Secretary

SUBJECT: STAFF REQUIREMENTS - BRIEFING ON IIT REPORT ON VOGTLE EVENT, 10:00 A.M., FRIDAY, JUNE 8, 1990, COMMISSIONERS' CONFERENCE ROOM, ONE WHITE FLINT NORTH, ROCKVILLE, MARYLAND (OPEN TO PUBLIC ATTENDANCE)

The Commission* was briefed by the NRC staff on the Incident Investigation Team Report on the Vogtle event involving a loss of off-site power and subsequent loss of residual heat removal capability.

The staff should ensure formal tracking and follow-up of issues relating to this event. Consult with the Commission on the specific follow-up action plans and the schedule for completion.

~~EDO~~) AEOD (SECY Suspense: 8/3/90)

The Commission requested feedback on the following specific items.

1. Report the status of ongoing and/or anticipated research into the sequence of events during the loss of residual heat removal and the thermohydraulic processes involved.

~~EDO~~) RES (SECY Suspense: 8/31/90)

2. Does the current NRC effort in the development of risk-based technical specifications include provisions covering shutdown and refueling modes?

~~EDO~~) NRR/RES (SECY Suspense: 7/27/90)

3. How are shutdown risks being addressed in the advanced and evolutionary designs?

~~EDO~~) NRR/RES (SECY Suspense: 8/31/90)

* Commissioner Roberts was not present.

A15

4. Report the total man-hour effort required to conduct the IIT. On June 14, 1990, the EDO provided a preliminary estimate of resources expended for the Vogtle IIT. When all data is available, provide a final report.
~~(EDO)~~ AEOD (SECY Suspense: 8/31/90)

Commissioner Remick expressed an interest in following staff's activities in addressing the procedural and training weaknesses that were uncovered and requested feedback on the following specific items.

1. Review NTSB's prearranged procedures for calling upon technical experts and assess if there is any element in that program which may be useful in our future activities.
(~~EDO~~) AEOD (SECY Suspense: 9/28/90)

2. Review the ACRS letters of September 14, 1988, Proposed Resolution of Generic Issue 99, "Improved Reliability of RHR Capability in PWRs," and February 16, 1989, Further ACRS Comment on Proposed Resolution of Generic Issue 99, "Improved Reliability of RHR Capability in PWRs" in which the ACRS addressed closure of equipment hatches. Summarize the conclusions (related to equipment hatches) from the inspection program conducted to review licensee's responses to the recommendations outlined in Generic Letter 88-17, and address the ACRS comments in their letter of February 16, 1989.
(~~EDO~~) NRR (SECY Suspense: 8/31/90)

cc: Chairman Carr
Commissioner Roberts
Commissioner Rogers
Commissioner Curtiss
Commissioner Remick
OGC
GPA
ACRS
PDR - Advance
DCS - P1-24