Omaha Public Power District

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October 6, 1980

Mr. Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Reference: Docket No. 50-285

Dear Mr. Eisenhut:

The enclosed report provides a complete status report of Omaha Public Power District's progress toward implementing NUREG-0578 Category B tasks. Also included is a summary of the District's position regarding the additional requirements of the TMI-2 Task Action Plan NUREG-0660 and the Commission's clarification letters of May 7, 1980, and September 5, 1980.

The Category B recommendations have an assigned implementation date of January 1, 1981. The District has aggressively pursued a program to meet this date; however, it cannot be met for all of the tasks. The reasons for delays have included: (1) longer than expected delivery times on components, (2) significant research and development leading to frequent redesign, (3) changes in criteria through discussions with the Commission or with publication of NUREG-0660 and followup clarification, and (4) inability to find qualified vendors for new state-of-the-art equipment. The actions pursued by the District and problems encountered are detailed in the enclosure.

One problem encountered that impacts on the schedule of several of the tasks deserves special attention. Many of the tasks require additional instrumentation panel space in the control room. Available space in the control room is very limited. The District is designing panels for the safety grade auxiliary feedwater automatic initiation and intends to use these panels for the other tasks. However, to meet the human engineering criteria and coordinate the many demands for panel space, the District still requires further engineering evaluation on panel layout and location in the control room. This evaluation is impacting several tasks' schedules.

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As detailed in the enclosure, the January 1, 1981, schedule for NUREG-0578 Category B tasks cannot be met in most cases. However, the Category B tasks have been incorporated into the Task Action Plan (TAP) and the proposed schedule for the TAP items in the Commission's letter dated September 5, 1980, has revised the schedule for most of the Category B items. The District can meet the proposed schedule in the September 5, 1980, letter with the exception of the installation of

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safety grade auxiliary feedwater (AFW) initiation, installation of containment water level, and providing fully operational emergency response facilities. The District would also propose to defer one task, the installation of wide range containment pressure monitor for the reasons discussed in the enclosure. Except for these four exceptions cited, the District can meet the schedule proposed in the September 5, 1980, letter if all tasks requiring outages are deferred until the scheduled September, 1981, refueling outage. Therefore, the District is requesting the Commission's approval of our proposal to defer all TMI-2 related tasks requiring outages until the September, 1981, refueling. All tasks not requiring outages will be done as soon as all equipment is received. The District is also requesting the Commission provide us with a response to this request by October 17, 1980, to allow us to schedule our outages accordingly. The District would welcome the opportunity to discuss our plans and efforts with the Commission.

Sincerely,

W. C. Jones
Division Manager
Production Operations

WCJ/KJM/TLP:jmm

Enclosure

cc: LeBoeuf, Lamb, Leiby & MacRae
1333 New Hampshire Avenue, N.W.
Washington, D.C. 20036

Status Summary
NUREG-0578 Category B Tasks

NUREG-0578 Section No./ Task Action Plan No.	9-5-80 Ltr. Due Date	Description	Status
2.1.2/II.D.1*	7-1-81 7-1-82	Valve Testing	Owners Group participating in EPRI program. 0660 - new requirement.
2.1.3.b/II.F.2*	1-1-82	Instrumentation for Inadequate Core Cooling	Evaluation in progress by Owners Group. Need for instrumentation to be determined.
2.1.5.a/II.E.4.1*	6-30-81	Install Dedicated H_2 Penetrations	Finalizing design. Should meet 6-30-81 schedule.
2.1.6.b/II.B.2*	1-1-82	Plant Shielding Modification	Final design under review. Should make 1-1-82 installation.
2.1.7.a/II.E.1.2*	1-1-81	Auto Initiation of AFW-Safety Grade	Design being finalized. Panels on order. Earliest possible installation 7-31-81.
2.1.8.a/II.B.3*	1-1-82	Post Accident Sampling Modifications	Design complete. Should meet 1-1-82 installation.
2.1.8.b/II.F.1.3*	10-1-81	Containment High Range Monitor	On order. Should meet 10-1-81 installation.
2.1.9/II.B.1*	1-1-82	RCS Vent	Owners Group providing design. Should meet 1-1-82 installation.
2.1.9/II.F.1.4*	1-1-81	Containment Pressure Monitor	On order. Earliest possible implementation date 9-30-81.
2.1.9/II.F.1.5*	1-1-81	Containment Water Level	Qualified vendor located. Earliest possible installation date 7-31-81.
2.1.9/II.F.1.6*	10-1-81	Install H_2 Monitor	On schedule. Will meet 10-1-81 due date.
2.1.9/II.F.1.1	10-1-81	Noble Gas Monitor	On schedule. Will meet 10-1-81 due date.
2.1.9/II.F.1.2	10-1-81	Iodine Monitor	On schedule. Will meet 10-1-81 due date.
2.2.1.a/I.A.1.1	1-1-81	Shift Technical Advisor	STA training complete by 1-1-81.
2.2.2.b/III.A.1.2*	4-1-82	Technical Support	Construction of building complete by 1-1-81. Fully operational by 12-31-82.

*Additional comments attached.

NUREG-0660 Short Term Requirements

Task Action Plan No.	Description	Status/Comments
I.A.1.1	Upgrade STA Training	Evaluating new criteria.
I.C.1*	Reanalyze Inadequate Core Cooling and Transients and Accidents	Owners Group evaluating requirements.
I.C.5	Feedback of Operating Experience	Will meet January 1, 1981, implementation.
I.C.6*	Verify Correct Performance of Operational Activities	See comments.
II.B.4	Training for Mitigating Core Damage	Implemented.
II.E.1.1	AFW Evaluation	Evaluating criteria.
II.E.4.2	Isolation Dependability	Evaluating new criteria.
II.K.3.1	Auto PORV Isolation	Dependent upon findings of II.K.3.2.
II.K.3.2	Evaluate Methods to Reduce PORV Failures	Owners Group conducting evaluation.
II.K.3.3	Report PORV/SV Failures and Challenges	Will initiate annual report by January 1, 1981.
II.K.3.5	Auto Trip of RCP's	Owners Group evaluating.
II.K.3.17	ECCS Outages Report	Report to be prepared.
II.K.3.30	Small Break LOCA Methods	Owners Group to evaluate.
III.A.1.1	Emergency Preparedness Upgrade Plan	Plan revised to NUREG-0654 criteria. In-house review in progress.
III.A.1.2**	Emergency Response Facilities	District submitted comments in letter to Commission on NUREG-0696.
III.D.3.3	In Plant Radiation Monitoring	Evaluating new criteria.
III.D.3.4*	Control Room Habitability Review	Review in progress by NSSS vendor.

*Additional comments attached.
**Comments on NUREG-0696 in District's letter to the Commission dated October 2, 1980.

Task 2.1.2/II.D.1
Valve Testing Program

Actions to Date

12-31-79 Submitted plan to Commission for participation in EPRI test program.

Status

The staff has been updated periodically on the status of the EPRI valve testing program. It is on schedule and the July 1, 1981, due date for completion of the program should be met.

The Commission's letter of September 5, 1980, has added a requirement for block valve testing. If this requirement is finalized, block valve testing will be incorporated into the EPRI program. The suggested completion date for block valve testing of July 1, 1982, can be met.

Task 2.1.3.b/II.F.2.1
Subcooled Margin Monitor

Actions to Date

- Monitor was installed during 1980 refueling outage.

4-7-80 Committed to the Commission to increase range of monitor during 1981 refueling outage.

9-3-80 Quote from vendor on dual-output transmitter.

9-29-80 Sent request for quote to possible dual-element RTD vendors.

Present Status

The District is evaluating three possible solutions to expand range and of the subcooling monitor.

1. Use dual-output transmitters.
2. Use dual-element RTD's.
3. Use some type of qualified thermocouple that is connected with long term requirement modification to supply signal to monitor also.

Summary

The third option provides the most accurate indication of core status. The third option does not impact on the RPS system, where the first two do. Therefore, the District views the use of qualified thermocouples as its preferred design.

Expected Completion

Options 1 and 2 can be completed during the 1981 refueling outage, as committed to during the Category A verification inspection. However, option 3 is the preferred system and its schedule is the same as that for the inadequate core cooling modifications.

Compensatory Measures

As an interim measure, the existing core thermocouples can be used to indicate subcooling margin over wide range of core temperatures. This would be accomplished by using the plant computer to calculate the approach to saturation.

Task 2.1.3.b/II.F.2.2
Instrumentation for Inadequate Core Cooling

Omaha Public Power District and several other utilities, all members of the CE Owners Group, are working with Combustion Engineering on continued assessment of inadequate core cooling instrumentation and design of a reactor water level system. Details of this work were presented at a May 29, 1980, meeting with members of the Nuclear Regulatory Commission staff, including Larry Phillips, Gary Holahan and Les Rubenstein. The Combustion Engineering report on the capabilities of existing instrumentation and new instrumentation will be available to the utilities in January, 1981. In addition, the CE Owners Group continues to sponsor the development of a heated junction thermocouple device to measure reactor vessel water level. Prototype testing of this device is scheduled to be completed by March 31, 1981. The scope of the license submittal requested in the Commission's September 5, 1980, letter is above and beyond the scope of the current work and requires work which must be initiated. Until the present work is completed, we will be unable to supply a report until July 1, 1981. The report will address the need for additional instrumentation and the schedule for installation, if required.

Task 2.1.5.a/II.E.4.1
Dedicated Hydrogen Penetrations

Actions to Date

12-31-79 In submittal to Commission on Category A items, indicated no modifications required.

3-7-80 Inspection by Commission on completion of Category A items identified need for modifications.

10-1-80 Preliminary design complete.

Status

Preliminary design consists of two options for implementing the requirements. One option is to use remotely actuated valves, which is expected to result in delivery delays. The second option is to install reach rods for manually actuating the valves, but for this case interference with existing safety grade cables must be resolved. An evaluation of the two options is in progress.

Expected Completion

10-31-80 Complete evaluation of two options. Commence final design. Order materials.

5-1-81 Expected completion, if option 2 is selected, assuming 3 month delivery time on equipment.

1-1-82 Expected completion for option 1. Delivery time on actuators is 8 to 14 months. Additionally, much more extensive analysis of pipe structure and support systems is required.

Summary

The response of the District to NUREG-0578, Item 2.1.6.b, Category A, defined the pipe penetration area (Room #59) as a non-vital area. Following a site visit by the NRC on March 7, 1980, this area was redefined as a vital area for post-accident operation of containment hydrogen purge system. As a result of this new definition, a study initiated at that time and completed in July, 1980, showed dose rates higher than allowed by GDC-19 in Room #59 for post-accident occupancy. The District concluded that some modification would have to be performed to rectify the situation for post-accident operation. The preliminary design of this system was completed October 1, 1980. The District anticipates completing this modification during the 1981 refueling outage currently scheduled to begin in September 1981.

Task 2.1.6.b/II.B.2
Plant Shielding Modification

Action to Date

12-31-79 Developed preliminary design for modifications.

Commenced radiation dose and structural analysis.

August, 1980 Structural and dose analysis completed.

8-20-80 Separate bids were requested for supply of hemitite aggregate (long delivery item) for high density shield wall concrete to avoid any construction delay.

8-26-80 Contract for shielding wall construction was released for public bids. The construction was expected to finish on December 31, 1980, as required by NUREG-0578.

8-27-80 Requests for bids were put out for level transmitters to monitor safety injection pump leakage. The District received no bids on the due date of September 19, 1980. Following are the limitations for obtaining such instrumentation:

(i) Plant shielding design review yielded high integrated dose in the safety injection pump rooms.

(ii) The QA requirements of Regulatory Guide 1.97.

Status

After an extensive vendor search, the District has located one supplier that can supply the required instrumentation, but with a 15 month delivery time. The District intends to issue another request for bids in the immediate future to obtain the required instrumentation.

Expected Completion

As required by NUREG-0578 the initial analysis for shielding included 100% of noble gases inventory in the depressurized, diluted primary coolant in the containment sump. The clarification letter of September 5, 1980, defines the staff's new position that for recirculated, depressurized cooling water the noble gases inventory need not be included in the source term. The District finds the following areas of concern to meet the schedule:

(i) The preliminary dose rate analysis with no noble gases in the containment spray recirculation pipes indicate that the dose rates in the vital areas may be reduced to levels below GDC-19 criteria by using ordinary concrete (145 lb/ft^3) for the shield walls, instead of high density concrete (235 lb/ft^3). The use of ordinary concrete would give substantial relief to

Expected Completion (Continued)

the existing walls and floor slabs which indicate near structural saturation locally, if high density shield wall is installed. In addition, the vertical pumping of high density concrete is difficult while maintaining the slump. As a result, voids may be formed or sagging of the aggregate during erection of the shield wall. Therefore, the radiation analysis and structural analysis have to be re-done to ensure the best modification approaches be selected.

The letter of clarification, September 5, 1980, requires the safety equipment as referenced in IE Bulletin 79-01B have to be qualified for post-accident radiation level. In addition, the vital areas and equipment have to be reanalyzed by assuming no noble gases in the depressurized water. In essence, a new radiation dose analysis has to be performed for the entire plant. The scope and time needed for this work are listed as follows:

Item	Time Duration
i) Dose Rate Analysis/ Shielding Design	6 months
ii) Structural Analysis	2 months
iii) Construction Contract/ Erection of Shield Walls, if needed	4 months
TOTAL	12 months

Based upon the above schedule, the District expects to comply with the proposed implementation date of January 1, 1982, as defined in the "Preliminary Clarification of TMI Action Plan Requirements", dated September 5, 1980.

Task 2.1.7.a/II.E.1.2
AFW Initiation - Safety Grade

Actions to Date

12-31-79 Submitted preliminary design to the Commission.

Detailed design and specifications started.

8-7-80 Purchase Order (PO) submitted to Foxboro for four instrument racks and power supplies to reserve production line time.

Detailed design identified need for additional class 1E panel space in the control room and water column height of steam generator wide range level transmitters for 1E specification.

Present Status

1. Evaluating new panel locations.

2. Awaiting water column height from Combustion Engineering.

3. Specifications for instrument logic in formal in-house review.

4. Detailed design in progress.

Expected Completion Dates

10-3-80 Specification and request for quote to Foxboro on instrumentation to complete logic.

10-15-80 Quote back from Foxboro.

New panel location approved.

Combustion Engineering water column height received.

Start detailed design and specification for new panels.

10-31-80 Submit PO to Foxboro for instrumentation. Expected delivery is February-March, 1981.

Submit PO to Foxboro on new transmitters. Expected delivery is April-May, 1981.

12-31-80 Design for new 1E panels complete. PO issued in January, 1981, with delivery in May, 1981, at the earliest.

Environmental qualification of Foxboro transmitters expected to be complete.

May 31, 1981 All materials received. This is anticipated to require a six to eight week outage which would extend into the peak demand period. Electric generation from the Fort Calhoun Station is vital during the summer months of 1981, and the District and its customers have great need that the outage be postponed to the scheduled September, 1981, refueling outage.

Task 2.1.7.a/II.E.1.2
AFW Initiation - Safety Grade
(Continued)

Summary

Significant problems encountered in meeting task due date were the unavailability of qualified vendors (transmitters for wide range level indication still undergoing qualification tests) and identification of the need for new panels in the control room late in the design process requiring redesign effort.

Proposed Compensatory Measures

The control grade system is installed and provides automatic AFW initiation using the same parameters and same logic as the safety grade system. However, the control grade system does not provide automatic isolation in the event of a steam generator rupture. Manual isolation is available. Therefore, the District believes the incremental gain in plant safety does not warrant immediate shutdown for installation upon receipt of materials, since the plant refueling outage will commence three months after receipt of all materials.

Task 2.1.8.a/II.B.3
Post Accident Sampling Modifications

Actions to Date

12-31-79 Conceptual design completed.

7-25-80 PO issued for isotopic analysis equipment from Canberra Ind.

8-1-80 Completed final design.

8-11-80 PO issued to Autoclave Engineers for recirculation pump. Expected delivery is November 1, 1980.

9-2-80 PO issued to Dionex, Inc. for ion chromatograph. Expected delivery date is November 28, 1980.

9-22-80 PO issued to Metal Bellows Corp. for gas sample pump. Expected delivery date is February 25, 1981.

Status

Completion of the final design was August, 1980. Awaiting receipt of equipment.

Expected Completion

The original deadline will not be met as there are equipment delivery delays in important and key items which affect the operation of the system. These delays stretch into the end of February, 1981, at which time installation could proceed. The majority of the system can be installed without an outage; however, an outage is required to make it operational. It is requested that the installation schedule be extended until the September 1981 refueling outage, which will assure installation in accordance with the proposed January 1, 1982, date contained in your September 5, 1980, letter.

Compensatory Measures

The District has implemented interim procedures for obtaining and analyzing reactor coolant and containment atmosphere samples with the existing equipment. The procedures include provisions for keeping occupational exposures as low as reasonably achievable.

Task 2.1.8.b/II.F.1.3
Containment High Range Monitor

Actions to Date

7-1-80 Design completed.

8-20-80 PO issued to Victoreen, Inc. for high range containment monitor and noble gas effluent monitors. Expected delivery date October 11, 1980.

Status

The steamline radiation monitors were sent out for quotes on July 25, 1980. The only responding vendor, Victoreen, Inc., expressed an interest in quoting except that they felt the placement of the monitors on the main steamline headers directly outside the penetration would increase the background radiation due to gamma streaming, rendering the equipment inoperable. The District has taken this into consideration and revised the design. The date we have received from Victoreen on their quote was September 26, 1980. If this remains true, a delivery of December 1, 1980, can be realized as Victoreen is redesigning their housing and mounting criteria.

The containment radiation area monitors have been ordered as of August 20, 1980. A delivery of October 11, 1980, can be realized. There is some question, however, as to what type of cabling (RG-58U) is right and what type will be used. This problem will be resolved by October 31, 1980. This installation will require an outage of ten working days.

The high range noble gas effluent monitors ventilation discharge duct will be delivered October 11, 1980, also. The radioiodine and particulate sampler has already been delivered.

Expected Completion

All items can be completed by January 1, 1981. However, the containment high range radiation monitor requires a plant outage of ten days, which the District believes should be coordinated with other modifications requiring plant outages. The minimal safety benefit from this modification does not justify a ten day outage; therefore, the District supports the October 1, 1981, proposed schedule in the September 5, 1980, NRC letter.

Task 2.1.9/II.B.1
Reactor Coolant System Vent

Actions to Date

October, 1979 Committed to CE Owners Group to establish generic design.

Status

The major difficulties on designing the system are the ways to support the vent system. Some supports have to be drilled into the reactor cavity liner, where leakage requirements are very stringent. Maintenance and refueling outage interferences due to this system have taken many designer manhours to resolve. Materials were ordered through Combustion Engineering. All major components have been ordered and are expected to be onsite by November, 1980.

The provision to test for operability of the reactor coolant gas vent system as required in the clarification letter of September 5, 1980, will be provided. It is noted that the testing can be achieved during cold shutdown only.

Expected Completion

The final design package for the reactor coolant gas vent system is scheduled to be submitted to the District by our consultant, Combustion Engineering, Inc., on November 20, 1980. Final engineering has to be completed in-house. Panel space will be required for mounting controls; therefore, this task will be incorporated with the other tasks requiring panel space. The earliest date in which construction could begin on the reactor coolant vent gas system would be July, 1981. However, since this is our peak demand period, it is necessary to defer this to our scheduled fall refueling outage, thereby meeting the January 1, 1982, proposed schedule.

Task 2.1.9/II.F.1.4
Containment Pressure Monitor

Actions to Date

9-8-80 Purchase Order (PO) submitted to Foxboro for instrument transmitters.

Design in progress. Shows need for more panel space (will use same panels as for AFW modifications 2.1.7.a and same schedule).

Present Status

1. Preparing specification for recorders.

2. Looking at impact of Commission's September 5, 1980, letter.

Expected Completion

10-31-80 Order recorder. Delivery June-July, 1981.

11-30-80 Order additional instrumentation if requirements stated in September 5, 1980, letter are official. Delivery August, 1981.

Summer, 1981 Materials received. Outage installation can proceed.

Comments

Delays in ordering instrumentation have occurred due to difficulties in identifying qualified vendor and, in fact, qualification testing is still in progress. Preliminary review of the Commission's September 5, 1980, letter of clarification on TMI-2 Action Plan indicates possible need for additional instrumentation. Optimistically, the earliest expected completion date in that case is September, 1981, which coincides with the scheduled refueling outage.

Compensatory Measures

Narrow range containment pressure indication is presently displayed in the control room. Any abnormal pressures in containment would be detailed by this instrumentation and existing procedures assure quick response to non-normal pressure levels.

Task 2.1.9/II.F.1.5
Containment Water Level

Actions to Date

1-1-80 Design started.

Contacted Delaval Turbine, Inc., Gems Sensors Division, as possible source.

6-6-80 Requested Quality Assurance (QA) Manual from Gems.

9-2 -80 Received QA Manual.

Present Status

1. Working on design. Requires additional control panel space.

2. Final preparation of order to Gems.

Expected Completion Dates

10-3-80 Submit Purchase Order (PO) to Gems, with expected delivery of May-June, 1981.

10-31-80 PO to Foxboro for recorders.

12-31-80 Panel constrained to AFW initiation schedule.

May-June, 1981 Sensor delivery.

June-July, 1981 Recorder delivered. Installation can start. However, this is during the peak demand period. Therefore, deferral to our scheduled fall refueling outage is requested. The marginal safety benefits are not commensurate with the cost and loss of power production of an outage during peak demand.

Summary

Problems in locating qualified vendor have delayed this task significantly. An almost four month delay resulted from the time required to verify qualification of the vendor.

Compensatory Measures

The District presently has a non-safety grade indication of containment water level that can provide level indication in the interim.

Task 2.1.9/II.F.1.6
Install Hydrogen Monitor

Actions to Date

April, 1980 Commenced evaluation of existing system.

June 13, 1980 Issued PO to Comsip-Delphi, Inc. for hydrogen analyzers. Expected delivery is October 1, 1980.

September 25, 1980 Received quotations for safety related valves.

Status

During the Commission's visit of March 7, 1980, there was some question as to the existing hydrogen monitoring system's ability to meet the redundancy requirement in NUREG-0578. Accordingly, the District engaged a consultant to evaluate the existing hydrogen monitoring system. This evaluation is near completion and has recently identified the need for several additional safety related containment isolation valves. The quotes were received in the last week of September, 1980. The quotes indicated a lead time of seven months is needed to receive these orders. The installation of hydrogen monitor system requires plant outage of three days for the containment isolation valves.

Expected Completion

The clarification letter of September 5, 1980, requires more than one sample station be provided. Thus, the District has to review and redesign the hydrogen system. New valves and piping may have to be ordered if the review identifies the need for it. As with other tasks, additional control room panel space is required and this will be coordinated with other tasks. However, the District anticipates no problems meeting the October 1, 1981, date proposed in the Commission's letter.

Task 2.2.2.b/III.A.1.2
Technical Support Center

Actions to Date

May, 1980 Commenced building construction.

June, 1980 Completed instrumentation design. Ordered much of the required instrumentation.

Status

The Technical Support Center is in construction at present. The building, which is located in close proximity to the control room, should be completed before November 1, 1980. Interior construction and installation of equipment will continue through December, 1980. The following is a list of major components and their approximate delivery time:

Equipment	Manufacturer	Delivery Date
UPS	Exide Manchester, Mo.	12-01-80
Diesel Generator	Anderson Equipment Co. Omaha, Ne.	11-15-80
Batteries	Exide Manchester, Mo.	11-15-80
Charcoal Filter	Mine Safety Appliances Evans City, Pa.	11-24-80
Radiation Monitors	undetermined	01-01-81
Record Retrieval Equip.	Addressograph-Multigraph Omaha, Ne.	01-15-81

Expected Completion

We anticipate that the facility will be operational by the end of 1982.

Comments

To meet the requirements of 0696, the District will have to buy a new computer with a lead time of at least one year. We will start planning after the requirements of 0696 are finalized. To meet the requirements of 0578, we will need to connect additional inputs into the existing computer. Later, to meet the requirements of 0696, we would have to repeat this job. The space in the control room is very limited and and we believe that disturbing existing safety related equipment twice is undesirable.

Task Action Plan No. I.C.1
Accident and Procedures Review

Omaha Public Power District and several other utilities, all members of the CE Owners Group, are working with Combustion Engineering to provide plant emergency procedures. This includes an extensive analytical effort which includes sequence of events analysis, assessment of system availability, corrective or alternative actions, consideration of multiple failures, defense of a multiple failure cut-off criteria, operator errors of omission, consideration of long term cooldown, and simulation of transients. A procedure development task is using the analytical results and other studies to produce a set of trial emergency procedure guidelines. This task includes assessment of procedure types and alternate approaches and development of improved systems for presenting operational information.

Preliminary work on this task was authorized in the summer of 1979. The task was fully authorized in December, 1979. Work was partially suspended on the task in March, 1980, because of uncertainty in regulatory requirements and uncertainty in required scope of the task. Authorization to proceed with the full scope of the work was given in May of this year. The present status and schedule of remaining work supports an April 1, 1981, or May 1, 1981, submittal depending upon required review time.

Task Action Plan No. I.C.6
Verification of Operational Activities

The Commission's letter of clarification on the TMI-2 Action Plan, dated September 5, 1980, has established new criteria for Item I.C.6 which the District believes is too expansive in nature. The District presently follows a practice of double verification of safety related systems on startup as required by the nature of the outage. The TMI-2 Action Plan in many cases implies this verification program must encompass the entire balance of the plant. Additionally, the Commission specifies that the "qualified person" for performing required verifications be a licensed operator. Such a requirement would greatly increase the burden of Fort Calhoun's operators, requiring additional overtime or additional licensed operators of which there is a shortage within the industry.

It is the District's recommendation that the Commission review the criteria of Item I.C.6 of the Action Plan and be more specific on the requirements. As interpreted by the District, the requirements as now detailed in the Commission's September 5, 1980, letter would greatly impact Fort Calhoun operations.

Task Action Plan No. III.D.3.4
Control Room Habitability

The District has initiated the study as per the requirements set forth in NUREG-0660, Item III.D.3.4. The Post-Accident Control Room Habitability Study will indicate any potential problems in post-accident control room occupancy.

The District intends to comply with the response date of January 1, 1981.