



ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649-0001

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April 12, 1990

Mr. William T. Russell
Regional Administrator
U. S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406


Subject: Inspection Report 50-244/89-80
Notice of Violation
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Russell:

This letter is in response to the February 2, 1990, letter from Robert M. Gallo, Chief, Operations Branch, Division of Reactor Safety, to Robert C. Mecredy, Division Manager, Nuclear Production, which transmitted Inspection Report Number 50-244/89-80. In the report, various weaknesses relating to the Emergency Operating Procedures were identified.

The attachment to this letter provides responses to all comments and weaknesses identified in the inspection report.

Yours truly,


Robert C. Mecredy
Division Manager
Nuclear Production

TW/map

attachment

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Document Control Desk
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C. Marschall,
Ginna Resident Inspector

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NRC CONCERN:

50-244/ 2.2a Development of a Ginna procedure in accordance
89-80-01 with the WOG ERG for Natural Circulation
Cooldown With Steam Void In Vessel (without
RVLIS).

RGE RESPONSE:

Procedure ES-0.3 has been modified to provide guidance for rapid cooldown and depressurization with and without RVLIS available. The title has been changed to NATURAL CIRCULATION COOLDOWN WITH STEAM VOID IN VESSEL. This approach will minimize operator confusion as to which procedure should be employed. This procedure has been independently evaluated and compared with the two corresponding WOG guidelines to ensure that sufficient guidance is included to control voiding in the vessel with or without RVLIS. The procedure was verified and validated on the simulator using appropriate scenarios and was found to provide adequate guidance to allow the operator to safely control the expeditious cool-down/depressurization.

This approach is allowed by the WOG background information as discussed in the excerpt from the ES-0.2 background document (Page 1) below:

Each utility should use the natural circulation cooldown guidance provided by ES-0.2, 0.3, and 0.4 in a manner that is most appropriate. Some utilities may find it advantageous to combine the guidelines into one procedure, while others may use only one, two, or all three separately in their emergency operating procedures set.



NRC CONCERN:

50-244/ 4.2.a Resolution of concern with respect to the
89-80-02 CI/CVI Bright-is-Right panel. Several CI/CVI
valves are not on the panel.

RGE RESPONSE:

Studies will be conducted to determine if grouping all CI valves together would expedite verification and eliminate confusion. As an interim measure, all CI/CVI bright/dim status lights located outside the main grouping of status lights will be highlighted using color coding to indicate that they are CI/CVI valves. This interim measure will be complete by 5/1/90.

NRC CONCERN:

50-244/ 4.2.b Evaluation of accessibility of valves required
89-80-03 to be manipulated during implementation of the emergency procedures and installation of improvements as required.

RGE RESPONSE:

All local operator actions required for EOP/AP/ER implementation will be re-evaluated for accessibility of components. Where concerns arise, either different components will be used or recommendations will be made to improve accessibility. This review will be completed by 12/31/90 and non-hardware improvement will be done by 12/31/90. Required hardware changes will be evaluated and a plan of action will be developed.

NRC CONCERN:

50-244/ 4.2.c Resolution of concern that the Main Steam
89-80-04 Line radiation monitors (R-31/32) do not function until an alarm condition is reached.

RGE RESPONSE:

An EWR (#5161) has been submitted to request a modification which will provide continuous direct indication for R-31 and R-32 with an alarm function. This would provide the operator with adequate indication to make expeditious evaluations of steamline radiation conditions. This item will be prioritized in accordance with the safety significance of this issue as it relates to other required modifications.



NRC CONCERN:

50-244/ 4.3 Resolution of generic weaknesses (Paragraph
89-80-05 4.3) and specific weaknesses (Attachment 2)
related to the emergency procedures.

RGE RESPONSES FOR EOP CONCERNS:

General Weaknesses

Comment a) The level of detail was not consistent between the attachments to the EOPs and the EOPs themselves. The EOPs normally contained valve numbers, as required by the Writers Guide, while the attachments did not. The EOPs normally gave annunciator locations, while the attachment did not. In addition, during the walkdowns, most operators stated that the noun name of the valve along with the valve number would assist in locating the component.

Response: All attachments were reviewed in detail to ensure that valve numbers were added where necessary, that valve and equipment nomenclature were appropriate, and that valve and equipment locations were added if required. The use of annunciators in attachments was also reviewed and changes made where necessary to ensure consistency with the EOPs. After the attachments were modified to correct these generic weaknesses and other specific concerns, they were sent out for verification. The list of NRC concerns was sent with each verification package and reviewers were requested to verify comment resolution as part of the process. This has resulted in a significant increase in detail of the series of EOP attachments. This item is complete.

Comment b) When a special key is required for performance of a task, the EOPs and the attachments do not specify the need for the key; e.g., to enter the hydrogen monitor cabinet.

Response: A review of the procedures and attachments was performed to identify actions requiring a special key. For each instance located, the description of the key (including key number, if appropriate) was inserted in the action statement. This item is complete.



NRC CONCERN

50-244/ 4.3

89-80-05 (Cont'd)

Comment c) The deficiencies associated with the labeling of components were observed to be minor and are divided into two categories: (1) a few components had no label, such as the DC power panels in the auxiliary building; and (2) there was a mismatch between what the procedure called a component and what the component was actually labeled. In most cases, this was considered a problem with the procedure because the facility has an adequate labeling program in progress. Most of the discrepancies observed were outside the Control Room and associated with the attachments to the procedures. The Control Room has been almost completely relabeled and color coded.

Response: The Ginna labelling program is still in progress. Local actions, especially on attachments, were reviewed to ensure that the action statement wording was consistent with local valve and equipment labels. Several specific label requests have been submitted as a direct result of this audit to eliminate confusion. Those labels which have been identified as confusing or misleading labels will be done by 6/1/90. This item is ongoing.

Comment d) The word "normal" is used in the EOPs to determine if plant conditions require operator actions; however, the "normal" conditions that the operator should expect are not clearly defined. Different answers were obtained from several operators when asked what normal meant.

Response: The EOPs and APs were searched to determine how and where the term NORMAL is used in these procedures. There were many instances of its use throughout the procedure sets. Each occurrence was reviewed to determine whether NORMAL needed to be defined for the specific application.

NRC CONCERN:

50-244/ 4.3
89-80-05 (Cont'd)

In the EOPs, the vast majority of instances where NORMAL was used required no further definition since it appeared as an adjective associated with equipment or actions (i.e., normal spray, normal power available, RHR normal cooling, NORMAL SHUTDOWN TO HOT SHUTDOWN, etc.). These usages are instances of common operator terminology.

The next most common usage of NORMAL is associated with checks of the radiation monitoring system (i.e., check secondary radiation levels - NORMAL) where the operator is expected to compare a current RMS reading with the normal expected value. This is a common operational activity and is done frequently. Operators are trained to check the RMS charts for trend and to compare current values with the RMS daily plots if they do not remember the normal value. Since this is common operator knowledge and a routine activity, defining normal in these instances is not warranted. Because the RMS channels are routinely checked, the operator should recognize significant increases in RMS indications.

There were two unique uses of NORMAL; E-0, Step 38, and FR-Z.2, Step 1, which have been defined by insertion of acceptable values for the parameters being checked.

In the APs, each instance of the use of the term NORMAL was evaluated. Uses of the term were modified to ensure a more clear definition of the specific requirements. All occurrences were reviewed by the EPC for approval of disposition.

Comment e)

Most of the valves on the control boards indicate a mid-position by both lights lit, but there are a few valves that indicate mid-position by both lights extinguished. There is no indication on the boards as to which method is used for the various valves.

Response:

This item will be researched and, if warranted, a proposal will be submitted to identify those valves which do not conform to the normal indication. Since this item may require extensive research, it will be completed by 12/31/90.

NRC CONCERN
50-244/ 4.3
89-80-05 (Cont'd)

E-0 Reactor Trip or Safety Injection

- Comment 1) Step 7, Pg. 6
The RNO column does not check the Sodium Hydroxide flow to verify containment spray flow.
- Response: There is only one NaOH flow indicator which has a dual scale to indicate water flow for testing or NaOH flow in an actual spray situation. This indicator is not Class 1E; therefore, our approach is not to use it in decision-making. This procedure requires the operator to check CS pumps on, discharge valves open, and NaOH tank outlet valves open. If these conditions are appropriately verified, CNMT spray is aligned and operating and spray flow should exist. There is nothing else the operator can do from the Control Room to initiate flow if flow were not indicated. This item is complete.
- Comment 2) Attachment: D/G Stop, Step 5
Step does not tell operator to hold voltage shutdown button in until voltage decreases to zero or some acceptable low level. If the button is released too soon, the diesel will restart.
- Response: Attachment D/G Stop was changed to include the statement "depress voltage shutdown button until voltage decays to 0 volts."
- Comment 3) Attachment: Letdown, Step B.9 and C.5
These steps have the operator adjust charging speed "as necessary" without direction as to what the step is trying to accomplish. (This attachment not in E-0.)
- Response: These steps will be changed to indicate "adjust charging pump speed as necessary to stabilize PRZR level." This item will be complete by 6/30/90.
- Comment 4) Attachment: RCP Start, Step B.7.c
Step does not tell operator how to determine if RCP No. 1 seal parameters are normal prior to starting of the pump. (This attachment not in E-0.)
- Response: The parameters have been specified, and values have been inserted to indicate normal RCP seal operation.

NRC CONCERN

50-244/ 4.3

89-80-05 (Cont'd)

Comment 5) Attachment: DC Loads, Step B.4
The step cites switch No. 7, actual switch is No. 1. (This attachment not in E-0.)

Response: This error has been corrected. The appropriate switch number is now indicated.

Comment 6) Attachment: CI/CVI, Pg. 2
SOV-5A and its associated isolation valve, V-1084A, are identified as being in the Sample Hood, actual location is the Intermediate Building basement, clean side.

Response: This location has been corrected and the entire attachment was reviewed to ensure that all other locations were correct.

E-1, Loss of Reactor Or Secondary Coolant

Comment 1) Step 9.c, Pg. 7
Step is not specific as to whether the service air compressor is included in the verification.

Response: The intent is that any compressor (IA or service air) is acceptable. This was emphasized in training. The intent of the step is to ensure IA pressure greater than 60 psig, and one IA and the service air compressor will provide this.

E-2 Faulted Steam Generator Isolation

Comment 1) Step 4.d, Pg. 4
The procedure uses valve numbers of HCV-xxx, but the actual valves are labeled as FCV-xxx.

Response: The HCV is the correct designator and is used on the MCB label. The local valve labelling will be corrected by 6/1/90. A drawing change request will be submitted to correct the P&ID.

Comment 2) Step 4.e, Pg. 4
The procedure does not include the valve numbers; and the valves locally do not include the valve name. In this case, potential exists for the AO to operate the wrong valve; example: the valve associated with the B MFW pump is the lower numbered valve.

Response: The valve numbers have been inserted in the step for proper identification.



NRC CONCERN

50-244/ 4.3

89-80-05 (Cont'd)

- Comment 3) Step 5, 3rd open-bullet, Pg. 5
- If the valve must be closed locally, consider allowing the use of the "knocker" valve vice requiring local closure of the AOV.
 - AOV-5737 still has the old valve designator on it (CV-71).

Response: The RNO was altered to "dispatch AO to isolate flowpaths as necessary." This gives the AO the option of using any manual valve in the line instead of failing the AOV. Also, the local valve labelling will be corrected.

- Comment 4) Step 8.c, Pg. 6
- Expand the step to include placing the mode selector switch to "manual" and putting HCV-484 in "auto."

Response: This step was expanded to include placing the steam dump mode selector to MANUAL. This item is complete.

E-3, Steam Generator Tube Rupture

- Comment 1) Step B.1, Pg. 2
- Several entry conditions list the wrong step of the referenced procedure.

Response: The Emergency Procedures Committee made a decision to delete all step number references from the entry conditions page. With deletion of the step numbers, all entry conditions were reviewed to ensure they were adequately described such that the procedure user would be able to readily locate the entry step if required. Continued inclusion of step numbers could have resulted in excessive and unwarranted changing of referenced procedures if a step was relocated within a given procedure. This approach was discussed at the working exit meeting.



NRC CONCERN

50-244/ 4.3

89-80-05 (Cont'd)

- Comment 2) Step 7, RNO b, Pg. 9
The ERG step directs the operator back to Step 1 of this procedure, but this procedure directs the operator to transfer to another procedure, ECA-3.1, SGTR WITH LOSS OF REACTOR COOLANT - SUBCOOLED RECOVERY DESIRED.
- Response: Transition to ECA-3.1 with no intact S/Gs is consistent with the intent of the ERG. Since Ginna is a 2-loop plant, indication of a SGTR in the second S/G meets this criteria for transition. The step difference document discussion regarding this deviation has been modified to make it more clear.
- Comment 3) Step 9.a, Pg. 10
The nomenclature is inconsistent between the step, which refers to the "CI reset key switch," the tag on the key which states "C.V. Isolation Reset," and the label on the locked switch which states "CNMT Isolation Reset."
- Response: The CI reset key tag has been changed to reflect the wording used in the EOP. The tag and the terminology used in the EOPs are now consistent. This item is complete.
- Comment 4) Step 22, RNO, Pg. 22
The ERG states to "Close PORV Block Valves" as the first step of the RNO, it was left out of this procedure. The justification used to delete this step is based on operator training; however, retaining the step in the RNO to close the PORV block valves would be prudent.
- Response: The stated action has been reinserted in the RNO for this step and the step difference document has been changed to indicate that there are no significant differences between the EOP and ERG steps.

NRC CONCERN
 50-244/ 4.3
 89-80-05 (Cont'd)

Comment 5) Step 31, RNO b, Pg. 29
 The intent of this step is to energize Instrument Bus D. As written, it assumes that if MCC B is not energized, the MCC A will be energized (since MCC A powers the maintenance bus for Instrument Bus D). To prevent the above, MCC A must be energized, or verified energized, prior to placing Instrument Bus D on the maintenance supply.

Response: The step has been modified throughout the EOP set to ensure MCC A is energized if required (see below):

- | | |
|--|--|
| b. Verify instrument bus D - ENERGIZED | b. Energize MCC B. <u>IF</u> MCC B <u>NOT</u> available, <u>THEN</u> perform the following: <ol style="list-style-type: none"> 1) Verify MCC A energized. 2) Place instrument bus D on maintenance supply. |
|--|--|

Comment 6) Attachment N2 PORVs, (B) (1) (a)
 The words "AND OPERABLE" are missing after the word "OPEN."

Response: The comment has been incorporated.

Comment 7) Attachment SD-1

- The sequence in which the valves and equipment are listed in this attachment does not optimize the efficiency of the Auxiliary Operator who will be required to carry out the actions of this attachment. A re-evaluation of the sequence could reduce the time required to carry out the actions and reduce the chance of missing a step.
- The secondary chemical addition pumps and their controllers are not labeled clearly.

Response: After review and walkthrough by three auxiliary operators, a more appropriate sequencing of steps has been incorporated which optimize the efforts of the AO. Also, the secondary chemical pump labelling will be upgraded as part of the ongoing labeling program.

NRC CONCERN

50-244/ 4.3

89-80-05 (Cont'd)

ECA-1.2, LOCA Outside Containment

Comment 1) Step 2.a, Pg. 4
The procedure has the operator close a list of isolation valves but does not provide for re-opening the valves as is done in the RNO.

Response: Procedure ECA-1.2 has been completely rewritten, reverified, and revalidated. There were several problems with the procedure which resulted in less than optimum implementation of the guidance provided. Several of these concerns arose during requalification training on this procedure during December. These concerns have been addressed and changes have resulted in a more operator friendly procedure.

ECA-2.1 Uncontrolled Depressurization of Both Steam Generators

Comment 1) General
The charging pumps are designated A/B/C in the procedures and on the control boards; however, on print #33013-1265, the pumps are designated as 1/2/3, respectively.

Response: The new P&IDs have been changed to reflect that the charging pumps are labelled A, B, and C.

Comment 2) Cautions, 2nd open bullet, Pg. 3
The caution location is not consistent with other switchover criteria; i.e., is not located on the Foldout Page.

Response: This item has been added to the foldout page.

Comment 3) Step 3.b, Pg. 4
To determine which bus is supplying the swing SI pump in, the operator looks at two red lights and must decide which light is brighter. During the walkdown, the operator was not able to make this determination due to both lights being dim.

Response: This apparently was a misconception of the operator involved. The way to determine which bus is supplying the C SI pump is to look at the status lights for the associated breakers. The bright dim lights discussed in the comment are associated with the breaker closing circuits; they merely indicate which bus is available to power the C SI pump. If the pump starts on one bus, the other



NRC CONCERN

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89-80-05 (Cont'd)

bus breaker is blocked from closure and its closing circuit status light should be off. This comment will be discussed in training; however, all operators should be able to readily determine which C SI pump breaker is closed.

Comment 4) Caution, Pg. 5
Change the wording to "...to less than 2335."

Response: Incorporated the comment as stated.

Comment 5) Step 17.c, Pg. 13
The operator was confused as to how the thermocouple reading was to be obtained; i.e., computer versus incore, average of all or average of five highest or the highest.

Response: The use of incore thermocouple readings was clarified in a letter to Operations, Training, and Technical, dated 10/11/89.

Comment 6) Step 20.a - RNO, Pg. 14
The caution before Step 20 warns of backflow to the BASTs. Add a second substep under the RNO for Step 20.a, "If at least one valve in each flow path cannot be closed, go to Step 21."

Response: A contingency was added to the RNO as follows: "If either flowpath can NOT be isolated, THEN dispatch AO to locally isolate flowpath." The flowpath from the BASTs must be isolated to prevent backflow from RWST to BASTs. Therefore, Step 20b cannot be bypassed.

Comment 7) Step 25.a, Pg. 19
The value for seal return temperature is not consistent with the value in AP-RCP.1.

Response: The value used in the EOPs is consistent with the RCP technical manual value specified for restoration of RCP cooling. The value used in AP-RCP.1 is a more conservative value used to determine if the pump should be tripped to prevent radial bearing damage. Different numbers are appropriate. The maximum allowed radial bearing temperature is 225°F and there is a 10°F temperature rise assumed across #1 seal which results in 235°F seal outlet temperature value.



NRC CONCERN
50-244/ 4.3
89-80-05 (Cont'd)

ECA-3.1, SGTR With Loss Of Reactor Coolant - Subcooled Recovery
Desired

Comment 1) Paragraph B.1, Pg. 2
Several entry conditions list the wrong step of the referenced procedure.

Response: Same response as Item 1 under E-3 SGTR.

Comment 2) Step 11, RNO b, Pg. 11
The ERG step directs the operator back to E-3, STEAM GENERATOR TUBE RUPTURE, Step 1, but this step within the procedure directs the operator to take other actions. This comment also applies to ECA-3.2, Step 4, and ECA-3.3, Step 6.

Response: The ERG reference plant has 4 loops; therefore, it could sustain a second SGTR and still have two intact S/Gs available. In that situation, return to E-3 and isolation of second S/G would be appropriate. However, the intent of the ERG is that if no intact S/Gs are available, ECA-3.1 or ECA-3.2 provide the proper mitigation strategies and, since Ginna is a 2-loop plant, if both S/Gs were ruptured, ECA-3.1 or 3.2 would be the appropriate procedures. This is discussed in the step difference document, ECA-3.1 background document, Page 2, last paragraph, "The operator is also directed to ECA-3.1 if the ruptured S/G is needed for RCS cooldown" (i.e., no intact S/G).

Comment 3) Step 17., First Note, Pg. 14
The justification for this note states that the selection of the appropriate PORV will not noticeably delay subsequent recovery actions because the status of the block valves is determined in Step 5 of E-3, STEAM GENERATOR TUBE RUPTURE. This justification is not completely valid because this procedure can be entered from Step 3 of E-3. In that case, the block valve status will not have been determined.



NRC CONCERN

50-244/ 4.3

89-80-05 (Cont'd)

Response: The intent of this note was to remind the operator to consider whether the block valve for the PORV to be used is available before opening the PORV. This is accomplished by a quick check of status lights only. This note was inserted to ensure that block valves are evaluated. Currently, the justification for the note states:

This note is included to remind the operator to ensure that the corresponding pressurizer PORV block valve is available to isolate a PORV if it should fail to reclose in the following step.

Comment 4)

Step 20.b, Pg. 17

The ERG indicates the status of charging pumps as either running or not. This procedure only indicates the availability of charging pumps, which is not the same condition as running. This comment also applies to Step 21 of this procedure and similar steps in ECA-3.2.

Response:

During this step, it is most likely that one charging pump will be running and the other two charging pumps will be available (unless out of service, cannot be loaded onto a diesel generator, etc.). The minimum subcooling requirement for stopping an SI pump assumes that any charging pump that is available may be started as needed in Step 22 to maintain pressurizer level. The EOP Step Difference Document has been revised for this step, Step 21, and similar steps in ECA-3.2 to explain and justify this deviation.



NRC CONCERN:

50-244/ 4.3
89-80-05 (Cont'd)

Comment 5) Step 21.b, Pg 18
The deviation statement for this step states that the minimum required subcooling for stopping the last SI Pump was found to be irrespective to charging pumps status. This appears to conflict with the table in this step which indicates different subcooling requirements for different charging pump availabilities.

Response: Since the minimum subcooling values for stopping the SI pumps do not vary much with regards to the RCPs being on or off, the most limiting minimum subcooling values are used in the EOPs. The data is presented in EOP setpoints K.8 and K.10, and the EOP Step Difference Document has been revised for this step and Step 20 to explain and justify the deviation. Also, note that the reference to the minimum subcooling values being irrespective of the number of charging pumps available has been deleted in the Step Difference Document.

Comment 6) FOLDOUT PAGE, 3
The phrase "unless needed for RCS cooldown" is used in the ERG after the word "isolated," but it is not used in this procedure. This comment is applicable to ECA-3.2 and ECA-3.3 also.

Response: This comment has been incorporated.

ECA-3.2, SGTR With Loss of Reactor Coolant - Saturated Recovery
Desired

Comment 1) Step 4, RNO b, Pg. 5
ECA-3.1, Step 11 has the same justification and the same wording as this step, but refers the operator to Attachment RUPTURED S/G. This step refers the operator to Attachment FAULTED S/G.

Response: The comment has been incorporated, FAULTED S/G has been changed to RUPTURED S/G which is appropriate.

NRC CONCERN:
 50-244/ 4.3
 89-80-05 (Cont'd)

Comment 2) Step 11, RNO b, Pg. 9
 This step is more complicated than the identical step in ECA-3.1 because of the added statements concerning RHR normal cooling. This added complication is unnecessary since RHR normal cooling would not be established until Step 30 of this procedure. This comment is also applicable to Step 12 and 13.

Response: RHR may be placed in service in Step 30 and then, if core exit T/Cs are not less than 200°F in Step 31, the RNO returns the operator to Step 4. Therefore, it would be possible to loop through the SI reduction steps (11, 12, and 13) with RHR normal cooling in service. SI reduction steps in ECA-3.1 and ES-1.2 have also been changed to be consistent with this guidance. The wording of the RNO statements in question have been changed to make the guidance clearer.

ECA-3.3, SGTR Without Pressurizer Pressure Control.

Comment 1) Paragraph B.1, Pg. 2
 The entry condition lists the wrong step of the referenced procedure.

Response: Same response as Item 1 under E-3 SGTR.

Comment 2) Step 25, NOTE, Pg. 20
 The note states a pressurizer level that is different from the value specified in the ERG, and there is no comment or discussion on this change in the deviation document.

Response: The ERG footnote value specifies PRZR level just in range (5%, 30%). This note has been changed to incorporate the appropriate values.

Comment 3) Step 32, RNO, Pg. 23
 The S/G level specified in this step of the ERG is the same as the level specified in Step 1 of the ERG. This procedure uses 90% in Step 1 and 67% in this step.

Response: The ERG footnote for Step 1 specifies S/G level corresponding to S/G level hi hi setpoint which, at Ginna, is 67%. Step 1 has been changed to reflect the appropriate footnote (67%).

NRC CONCERN:

50-244/ 4.3

89-80-05 (Cont'd)

ES-1.1, SI Termination

Comment 1) Step 12.a, Pg. 10
The meaning of annunciator window G-15, Steam Dump, is not clear.

Response: Submitted label change request to change G-15 wording to STEAM DUMP ARMED and submitted PCN to annunciator procedure AR-G-15. This will be complete by 5/1/90.

Comment 2) Step 7, Pg. 2
Deviation Document: The justification for deleting the caution and incorporating it into a following step is inadequate.

Response: Step difference justification has been expanded to indicate that flushing SI lines may be a significant concern which should be handled in a step rather than a caution to ensure that it receives appropriate consideration.

Comment 3) Steps 12-19, Pgs. 5, 6
Deviation Document: The justification statements for steps 12 through 19 are not in the proper sequence.

Response: ERG Step 7, which establishes condenser steam dump, was moved ahead of restoring CVCS since RCS temperature control may be a significant concern following faulted S/G dryout to prevent RCS heatup and overpressurization. Steam dump is set in E-2 to limit RCS heatup; however, this step simply re-verifies that RCS temperature is being controlled. The other steps affected provide restoration of normal CVCS functions. Momentarily delaying these steps will not adversely affect recovery.

NRC CONCERN

50-244/ 4.3

89-80-05 (Cont'd)

ES-3.1, Post-SGTR Cooldown Using Backfill

Comment 1) Step 4, RNO b, Pg. 4
 The ERG step directs the operator back to Step 1 of E-3, STEAM GENERATOR TUBE RUPTURE, but the step directs the operator to transition to another procedure, ECA-3.1, SGTR WITH LOSS OF REACTOR COOLANT - SUBCOOLED RECOVERY DESIRED, Step 1.

Response: Same response as Item 2 under ECA-3.1.

Comment 2) Step 8.c, and RNO c, Pg. 6
 This step and its RNO are not in the ERG and are not discussed in the deviation document.

Response: The Step Difference Document was modified to include justification of the addition of Substep c. The purpose of Substep c is to ensure that the S/G tubes remain covered to prevent possible uncontrolled depressurization of the ruptured S/G.

ES-3.3, Post-SGTR Cooldown Using Steam Dumps

Comment 1) Step 6, Caution, Pg. 7
 This caution is not contained in the deviation document.

Response: This caution was added to the Step Difference Document and there was no significant difference from the ERG caution.

CRITICAL SAFETY FUNCTION STATUS TREES:F-0.3, Heat Sink CSFST

Comment 1) Second block
 The flowrate listed applies to AFW system only. The conditions do not consider the MFW system which indicates in lbm/hr.

Response: For all procedures except ES-0.1 and possibly ES-0.2 and ES-0.3, main feed water will be out of service. Also, because of the span of the main feedwater flow indicators and the low flow used to recover S/G level, selecting an appropriate value of main feed flow would be difficult. S/G level should be monitored in this situation to determine adequate feed flow. For these reasons, it was determined that the AFW flow value is the only one required.

NRC CONCERN

50-244/ 4.3

89-80-05 (Cont'd)

F-0.4, Integrity CSFST

Comment 1) The second question in the Red Path asks "All RCS pressure-cold leg temperature points to right of Limit A on attached figure?" The Limit A figure does not label which of the three lines is the "Limit A" curve.

Response: The Limit A curve has now been identified on the graph.

FUNCTIONAL RESTORATION GUIDELINES PROCEDURES:FR-H.1, Response To Loss Of Secondary Heat Sink

Comment 1) Step 12.b, Pg. 11
The phrase "proper emergency alignment" is not clear. The operator does not have any reference to check the proper alignment to.

Response: At Ginna, the SI pump emergency alignment verification requires checking only a suction flowpath (RWST or BAST) and the discharge valves for the C SI pump. This has always been common operator knowledge and operators have been trained accordingly.

FR-P.1, Response to Imminent Pressurized Thermal Shock Condition

Comment 1) Step 1, RNO, Pg. 3
The ERG step and the deviation are identical for this step and Step 1 of FR-P.2, but the steps themselves are different.

Response: Changed FR-P.2, Step 1, to be identical with FR-P.1, Step 1, as in ERG.



NRC CONCERN

50-244/ 4.3

89-80-05 (Cont'd)

- Comment 2) Step 2, RNO b, Pg. 4
The action required by the last sentence needs to be more specific. All it says is to "locally check breaker."
- Response: This guidance is provided for a Control Room licensed operator who will dispatch an AO to perform the local operation. This is sufficient guidance for the operator to determine that the required action is to check the local breaker closed. This wording has resulted in no apparent operator confusion during validation or requalification training simulator exercises.
- Comment 3) Step 4, RNO, Pg. 5
The step directs the operator to the wrong step.
- Response: This comment has been incorporated. The proper step reference has been provided.
- Comment 4) Step 6, Caution, Pg. 6
The ERG contains a caution that is not included in this procedure.
- Response: The appropriate caution has been added before Step 6 and has also been included in the Step Difference Document.
- Comment 5) Step 9, RNO a, Pg. 7
As written, this step would bypass the next step in the procedure until the operator reaches Step 18. The step needs to be modified to ensure that the next step is performed as soon as two SW pumps are available.
- Response: All steps between Step 9 and Step 18 can be accomplished without IA. At Step 18, the operator is reminded to restore IA when possible. Also, the most reasonable scenario which could result in only one SW pump being available is if only one train of safeguards power were available. In this event, operation of air compressors may be precluded. The Step 9 RNO (a) was changed to ensure with 1 SW pump running that SW isolation is verified and that Attachment SD-1 is performed which manually isolates Turbine Building SW loads. When these actions are complete, there may be adequate SW pressure to allow operation of air compressors if sufficient AC power exists. The step is appropriate as written.

NRC CONCERN
50-244/ 4.3
89-80-05 (Cont'd)

Comment 6) Step 16.c, Pg. 13
The ERG contains a step to stop RCS pressurization.
The procedure does not contain this step.

Response: This comment was incorporated; the appropriate
substep was added.

Comment 7) Step 22, Pg. 17
The ERG specified the same pressurizer level for
this step and Step 16.b. This step uses 87%, but
Step 16.b uses 75%.

Response: The ERG footnote value intended for use in both
steps is the high level Rx trip setpoint. Step
16b will be changed to reflect this value. This
item will be complete by 5/1/90.

FR-P.2, Response To Anticipated Pressurized Thermal Shock Condition

Comment 1) Paragraph B.1.a, Pg. 2
The entry condition from F-0.4 is Yellow vice
either.

Response: This comment has been incorporated.

FR-S.1, Response To Nuclear Power Generation/ATWS

Comment 1) Step 2, RNO, Pg.3
The ERG step includes direction to manually run
back the turbine, which is not contained in this
procedure.

Response: The ATWS analyses have shown that the turbine must
be tripped very quickly to maintain S/G inventory
for a loss of feedwater event. For the scenario
in which turbine trip cannot be accomplished,
either turbine runback or closure of the MSIVs
will help maintain S/G inventory. Since turbine
runback is a relatively slow process, closure of
the MSIVs is preferred since less S/G inventory
will be lost. Refer to the EOP Step Difference
Document for further discussion.

NRC CONCERN:

50-244/ 4.3
89-80-05 (Cont'd)

Comment 2) Step 4, RNO a, Pg. 4
The ERG step includes direction to verify containment ventilation isolation, which is not contained in this procedure.

Response: This substep will be reinserted to ensure CNMT ventilation isolation if PORV lifting and PRT integrity threatened. However, the depressurization action is still not required with PD charging pumps.

Comment 3) Step 13, Caution, Pg. 9
The caution in Step 13 of the ERG is not included in this procedure.

Response: This comment has been incorporated. The caution has been inserted in accordance with the ERG.



RGE RESPONSES FOR AP/ER CONCERNSAbnormal Procedures:

Comment: Generic to most of the APs: the first caution listed needs to be changed to "If...E-0 shall be performed."

Response: This comment has been incorporated throughout the APs.

AP-CCW.2 Loss Of CCW During Power Operation

Comment 1) Step 4, Pg. 5
The step does not give any reference or guidelines to the operator to specify what the proper valve alignment is.

Response: An attachment has been developed and included in AP-CCW.2 to describe NORMAL CCW at power alignment. This attachment is referenced in Step 4.

Comment 2) Step 5.a, Pg. 6
The step does not specify what containment sump indications to use nor give guidelines as to what "Normal" is.

Response: The intent here was the CNMT sump levels were not increasing. Therefore, the step was changed to reflect that.

CNMT sump A Levels - NOT INCREASING NOTICEABLY

Comment 3) Step 9, Pg. 7
The step does not specify that chromate concentration information is obtained from the HP Dept.

Response: The step has been changed to direct the HP to sample for chromates. The HP will then compare his results to the acceptable limits and inform the Control Room of results.

AP-CCW.3, Loss Of CCW - Plant Shutdown

Comment 1) Step 5.a, Pg. 5
Same comment as No. 2 for AP-CCW.2

Response: Same response as Item 2 for AP-CCW.2.



AP/ER CONCERNS (Cont'd)

AP-CR.1 Control Room Inaccessibility

Comment 1) Step 3, Pg. 4
Evaluate making this an immediate action step; the decision is made on whether it is necessary to enter the alternate shutdown procedure for complex fire.

Response: Per Emergency Procedure Committee decision, this is an important transition step that should not be performed from memory. Sufficient time will be available while performing Steps 1-3 to obtain the procedure.

Comment 2) Step 11, RNO, Pg. 6
Recommend changing this step to direct the operator back to Step 5 vice Step 7. This will ensure that any actions missed when the Local Operating Stations were established were accomplished.

Response: This item will be incorporated. The PCN has been submitted to correct the transition step.

AP-RHR.1, Loss Of RHR

Comment 1) Step 2, Pg. 3
Relocate the Caution to before the Step 1 Note.

Response: The Emergency Procedures Committee disagreed with this comment. For a trip of an RHR pump due to motor concerns, operators would be allowed to evaluate conditions and start other pump if available. This is consistent with the Westinghouse Owners Group approved guideline.

Comment 2) Step 18, Pg. 7
The step does not specify what evaluation is to be completed by the plants Technical Staff.

Response: This concern will be rectified. Some specific alternatives will be listed. This item will be complete by 6/1/90.

AP-IA.1, Loss Of Instrument Air

Comment 1) Paragraph B.1, Pg. 2
Three entry conditions list the wrong step of the referenced procedure.

Response: This response is same as response for Item 1 under E-3.

AP/ER CONCERNS (Cont'd)

- Comment 2) Step 5, Pg. 6
The nomenclature of the primary IA loads in Steps 5, 7, and 9 is not consistent with that used in Attachment A. To avoid confusion, standard nomenclature should be used in Figure 1 to identify the location of the loads.
- Response: Attachment A has been rewritten and restructured using appropriate nomenclature to be consistent with the procedure text.
- Comment 3) Step 10, RNO c, Pg. 7
This step should send the operator to Step 15 rather than Step 16. Since the leak in the IA has not been isolated at this point in Step 10, it is necessary to establish isolation of IA leak (Step 15) before restoration of unaffected portions of the IA system (Step 16).
- Response: This comment has been incorporated; the step reference has been changed.
- Comment 4) Figure 1, Pg. 1
Valves AOV-5251, V-5365, and V-7350 are needed because they are used in the procedure.
- Response: Inclusion of valves AOV-5251 and V-5365 is not warranted. These valves are the auto and manual crossties between IA and service air. This drawing would have to be expanded significantly to include these valves. In addition, these valves are not part of the isolation process, but rather the air supply. The intent of the diagram was to provide a quick indication of how isolation of portions of the header may affect IA loads. When this drawing is updated, V-7350 will be added.



EQUIPMENT RESTORATION PROCEDURES:

Comment: Generic to most of the ERs: the format and terminology used is not consistent with the EOPs and APs.

Response: The Emergency Procedures Committee has reviewed this issue and has decided the current ER format is appropriate. ER procedures are for restoring equipment or processes using specific sequential guidance in most cases. They do not fit the two-column format well since many of the tasks being performed are lengthy local operations. This item is complete.

ER-ELEC.4, TSC D/G Feed to Bus 16 to Supply Charging Pumps

Comment: Step 4.5
The step directs the operator to remove the normal/emergency fuse. The operator was unable to locate a control fuse in the transfer cabinet.

Response: This procedure has been re-evaluated and rewritten with input from the electricians. The step in question is no longer an operator task. It is now the responsibility of the electricians, as it should have been before. This item is complete.

ER-INST.2, Loss of Annunciator

Comment: Provide an attachment that lists all of the annunciator alarms for which there is no panel instrumentation to alert the operator to an alarm condition when the annunciator is out of service. If there is an associated computer alarm, this can be annotated on the list.

Response: This will be done for annunciators which are associated with safety-related equipment or processes. Since this will be a time-consuming task, the scheduled completion date will be 12/31/91.

ER-NIS.1, SR Malfunction

Comment: Step 4.3.1, Pg. 3
Include the valve alignment to re-align the suction of the charging pumps to the RWST.

Response: This comment has been incorporated. This item is complete.

NRC CONCERN:

50-244/ 4.4
89-80-06

Evaluation of Site Contingency procedures
related to fire fighting.

Response:

It has been determined that the procedures relating to firefighting strategies do not have to be maintained in procedure format as long as firefighting plans and strategies for safety-related safe shutdown areas are maintained and available to the operators. An action plan is being generated to delete the appropriate Site Contingency procedures and reformat the information. This item will be completed by 12/31/92.



NRC CONCERN:

50-244/ 5.4
89-80-07

Resolution of weaknesses observed during simulator exercises.

OBSERVATIONS:

Observations a through e are not deficiencies.

Observation f) The team noted two inconsistencies in the simulator:

Simulated communications with the AOs used the page system and telephones; in plant, radios are carried by the AOs.

The simulator had recently incorporated the use of radios as a part of training within the last month and has experienced some problems. The use of radios is planned for subsequent training cycles.

Response: The problems with the radios in the simulator have been corrected. Radio use is now a standard part of simulator training.

Observation The operators stated that they did not believe the timeliness of the simulated feedback from the AOs was accurate.

Response: Simulator operators are expected to allow a reasonable time for completion of tasks assigned to the Auxiliary Operator. Instructor experience is that different operating shifts have expressed different estimates on the length of time an evolution should take. These estimates can also be affected by the number of Auxiliary Operators available and the number of evolutions in progress. An additional consideration is the need to train on tasks with a high safety factor, but with a low frequency. The need to keep the Licensed Operators proficient in these Control Room tasks and procedures during the course of the normal requalification cycle obligates us to utilize time compression of some Auxiliary Operator actions.

No specific guidelines currently exist on how long the various Auxiliary Operator tasks should take. To ensure consistency in the times allotted, the Supervisor, Simulator Training, will establish and maintain a list of minimum times for routine evolutions for reference by Simulator Instructors, and will

NRC CONCERN:

50-244/ 5.4

89-80-07 (Cont'd)

Response: (Cont'd) provide guidance on the use of these time estimates. This guidance will identify circumstances during which deviations from the guidelines is necessary to accomplish training goals. The scheduled completion date for this action is 5/31/90.

Observation g) When an EOP is revised, the required operator training was determined jointly between the Operations Manager and the Training Manager. However, the criteria used to determine which type of training was appropriate (i.e., required reading, classroom training, or simulator exercise) had not been formally established.

Response: Nuclear Training Manual procedure TR 2.2, Instructional Settings, Methods, and Aids, provides guidance for determining the appropriate setting for training. This procedure is applicable to training on EOP revisions.

Observation h) The use of the STA during training of the shift crews was not consistent. Three of the six operating crews trained regularly with a qualified STA, the remaining crews trained with an instructor acting as the STA. This method does not provide for consistent performance by the plant crews and STAs.

Response: The value of training STAs with shift personnel is recognized. The STA requalification training program, currently under revision, will have STAs participate in simulator training and evaluation on a random basis with shift crews. This process will reflect the STA duty schedule utilized in the plant. The planned implementation date for this program is June, 1990.



NRC CONCERN:
50-244/ 5.4
89-80-07 (Cont'd)

Observation i) The team noted the following simulator differences:

Two MOV indicator lights on the status section of the MCB are mislabeled. MOV-825A and MOV-825B are labeled "open" where, in the Control Room, they are labeled "closed." The facility has an on-going labeling program which corrects discrepancies between the Control Room and the Simulator.

Response: The correct labels for the MOV indicator have been installed.

Observation: The fire alarm status panel in the Control Room has a white strobe light and an audible alarm associated with it that is not simulated. The strobe light and audible alarm are both new modifications added to the Control Room within the last year. The Training Department has submitted the proper requests to have the simulator upgraded.

Response: The scope of modeling required for the simulated fire system is under evaluation. The simulator modification process will then be followed. TCD: 4/30/91

Observation: The site evacuation alarm is muted in the Control Room, but sounds in the Simulator. A new modification was added to the Control Room that mutes the site evacuation alarm.

Response: Muting of the simulator control room evacuation alarm has been added to a modification to the simulator phone system. A meeting to plan the next phase of this modification will be held after the 1990 plant outage. TCD for the modification is 8/31/90.

NRC CONCERN:

50-244/ 6.3
89-80-08

Resolution of generic weaknesses (Paragraph 6.3) and specific weaknesses (Attachment 3) related to the Writers Guide and the Users Guide.

RGE RESPONSE TO 'A' PROCEDURE CONCERNS

DEFICIENCIES IDENTIFIED WITHIN THE WRITERS & USERS GUIDE

A-502.1, Emergency & Abnormal Operating Procedures Writers Guide

NOTE: Unless otherwise indicated, all required changes to A-502.1 will be completed and approved by 6/1/90.

Comment a) 6.3 Writers Guide and Users Guide

To assure the written accuracy and consistency of the EOPs over time, a writers guide should clearly and explicitly define every aspect of procedure content elements, organization, format, and style. Administrative procedure A-502.1, Emergency and Abnormal Operating Procedures Writers Guide, was found to cover the relevant procedure aspects and, for the most part, to provide clear, explicit, detailed guidance. However, there was no formalized process to ensure that changes to the Writers Guide are reflected in the procedures. Reviews and revisions to incorporate Writers Guide changes are conducted at the discretion of the EOP Coordinator. Review for conformance to Writers Guide changes was not incorporated into the A-601.4, Procedure Control - Periodic Review, and A-601.6, Procedure Control of Emergency & Abnormal Procedures.

Response:

A PCN has been submitted to add a step in A-601.4 and A-601.6 to require that procedures be reviewed and modified as necessary to reflect any writers guide changes.



NRC CONCERN:

50-244/ 6.3

89-80-08 (Cont'd)

- Comment 1) Section 2.2.2 - Does not state the difference between "Symptoms" and "Entry Conditions" nor when one or both is required. Based on tabletop review of procedures, it appears that, for some procedures, entry conditions only are used (e.g., the FR series), and that they consist of identification of the other procedure steps or Status Tree conditions from which the current procedure may be entered.
- Response: Entry conditions and symptoms are now defined in A-502.1. A statement has also been included to indicate that symptoms are only included for direct entry procedures. (See 2.2.2, 2.2.3, and 2.2.4.) This item is complete.
- Comment 2) Section 3.5 and Figure 6 - Does not indicate where figures, tables, and automatic action pages are to be located in the procedure and their order relative to each other. In practice, it was found that all of these are treated as appendices to the procedure, except for tables in some cases (the location of tables is addressed in Section 2.4).
- Response: Guidance will be added to A-502.1 to define appendix pages, to describe their location in the Control Room/Simulator binders, and to indicate the appropriate order of appendix pages relative to each other.
- Comment 3) Sections 4.1.2 and 4.1.3 - The required font, pitch, style, margins, and other specifications for word processing are not stated (unless they are stated elsewhere).
- Response: Definition of font, pitch, style, and margins have been added to A-502.1 (see 4.1.2.1, 4.1.3, 4.1.3.1, and 4.1.3.2). This item is complete.

NRC CONCERN:

50-244/ 6.3

89-80-08 (Cont'd)

- Comment 4) Section 4.1.11 - Does not prohibit the division of a substep between two pages. Although this was found rarely in the EOPs, it did occur (e.g., in FR-I.1, Step 8). The division of a substep between two pages can make it difficult to keep in mind the relationship between the Action/Expected Response and the RNO.
- Response: Further guidance for splitting steps between pages has been added to indicate that splitting substeps may affect operator readability and that it should not be done. (See 4.1.8.2 and 4.1.8.2.1.) This item is complete.
- Comment 5) Section 4.3 and Figure 2 - Referred to in Section 4.3, but is incomplete. It is supposed to illustrate the format for page headings, but it omits the page numbering format.
- Response: A discussion of page numbering techniques has been added to Section 4.3 for both procedure step pages and attachment pages. Figure 2 has also been modified to indicate how the page number should be displayed. This item is complete.
- Comment 6) Sections 4.3.3.1 and 4.3.3.2 - Use the term "preliminary pages." It would be better to state the specific pages intended. Contain an example, such as "Page 3 of 15."
- Response: A definition of preliminary pages and appendix pages has been included in the definition section. Preliminary pages are defined to include the cover page and the Entry Conditions/Symptoms page. This item is complete. (See 1.3.9.)
- Comment 7) No comment 7 included in the inspection report.
- Comment 8) Section 4.5.1.3 - Is not consistent with the procedures; in that, does not state that immediate action steps shall be identified in a note at the beginning of the procedure. This is done in the procedures, but is not stated in the Writers Guide.
- Response: Step 4.5.1.3 has been changed to indicate that the first immediate action step shall be preceded by a note indicating which steps are immediate actions. This item is complete.

NRC CONCERN:

50-244/ 6.3

89-80-08 (Cont'd)

Comment 9) Section 4.5.1.5 - Examples are needed of routine tasks for which it is not necessary to indicate the expected response.

Response: An example has been provided:

Ex: Reset SI

This item is complete.

Comment 10) Section 4.5.1.5 - The wording is confusing.

Response: This step has been reworded and, during review, resulted in no apparent confusion. This item is complete.

Comment 11) Section 4.5.1.9 - The example of a series of conditional statements is poorly formatted. If a series of conditional statements is necessary, do not lump them together like a paragraph block. Instead, separate them by a space so that each is a distinct, individual statement.

Response: The guidance for format of conditional statements has been expanded and described in much greater detail in Sections 4.5.1.12 and 4.5.1.13. Also, dependent and independent contingencies have been defined in the definitions section to aid in understanding of the above listed sections. This item is complete.

Comment 12) Sections 4.5.2.9 and 4.5.3.6 - What is a "passive action statement?" The example provided does not make the meaning clear.

Response: Passive actions have been more clearly defined by use of example passive verbs "should" and "may." (See 4.5.2.9 and 4.5.3.6.) This item is complete.

Comment 13) Section 4.6 - The List of Appendices does not include the current revision number of each appendix. At present, there is no way to ensure what is the current revision number of an appendix.

Response: The list of all EOP attachments has been added to the master procedure index. This list provides the current revision number for each attachment. This is consistent with the method used to verify correct revision numbers for all other procedures prior to use. This item is complete.

NRC CONCERN:

50-244/ 6.3

89-80-08 (Cont'd)

Comment 14) Sections 5.2.4 and 5.2.5 - The instructions given in these sections regarding the use of open and closed bullets do not explain that there is an implied "AND" between bullets in a series if no other logic term is specified. This is stated in Section 3.3.3.1 of the Users Guide (A-503.1), but is not stated in the Writers Guide.

Response: The implied "AND" is indicated by the following statement in Step 5.2.4.1:

All bulleted statements should be completed unless otherwise indicated by use of logic terms between bullets.
This item is complete.

Comment 15) Section 5.5 - Procedure steps were not always written as complete, imperative sentences; the required action and the object(s) of the action were not clear. In the procedures reviewed, complete sentences were consistently used with short phrases that qualify the action (i.e., make it more specific) presented in list format (they are a grammatical part of the sentence). However, the Writers Guide statement would allow writers not to use complete sentences.

Response: Section 5.5 has been rewritten to be more specific as to structure of action statements. The guidance now provided is consistent with the ERG Writers Guide information. This item is complete.

Comment 16) Section 6.0 - The format specifications for the CSFSTs are incomplete. If changes are made in the Status Trees, guidance may be needed regarding character style, character size and spacing, question block dimensions, and color code. Figure 7 is supposed to illustrate the number codes and color codes. The figure was not in color and the number code "3" was not visible. A color example was not provided in the Writers Guide nor the complete set of number codes.

Response: The complete number code is now provided in Section 6.1.5. There is no color example of a status tree since it would be impractical to copy and would make distribution of the procedure more difficult. The black/white copy of the example status tree (Figure 8) does show all the appropriate path symbols. This item is complete.

NRC CONCERN:

50-244/ 6.3

89-80-08 (Cont'd)

- Comment 17) Figures 2 through 5 - The page number was incomplete.
- Response: The page numbers have been corrected. This item is complete.
- Comment 18) Figure 3 - Addition of the column headings (STEP, ACTION/EXPECTED RESPONSE, and RESPONSE NOT OBTAINED) would make the figure easier to understand. In Step 3, the expected response specific values are omitted; instead, the word "later" appears in parentheses.
- Response: Figure 3 is now Figure 4. This figure has been changed to include the requested information and to show all actual information required. This item is complete.
- Comment 19) Figure 4 does not provide a useful illustration of the attachment page format.
- Response: Figure 4 is now Figure 5. A new figure will be added to show an actual attachment which conforms to the format requirements described in Section 4.6.4.
- Comment 20) General comment - A table of contents would make it easier to find things in the Writers Guide and also would help users understand the organization of the Guide. The table of contents could be limited to major section headings and first level subordinate headings.
- Response: A Table of Contents section will be added to A-502.1 to list the major sections of the procedure for ease of procedure use.

NRC CONCERN:

50-244/ 6.3

89-80-08 (Cont'd)

A-503.1, Emergency & Abnormal Operating Procedures Users Guide

NOTE: Unless otherwise indicated, all required changes to A-503.1 will be completed and approved by 6/1/90.

Comment 1) Although this is the Users Guide, in several places, the guidance seems to be directed to a procedure writer rather than to a user. For example, Section 2.2.2 states that "The symptoms used should be unique to the procedure." Other examples of this are in Sections 2.3.1, 2.3.3, and 2.3.3.1.

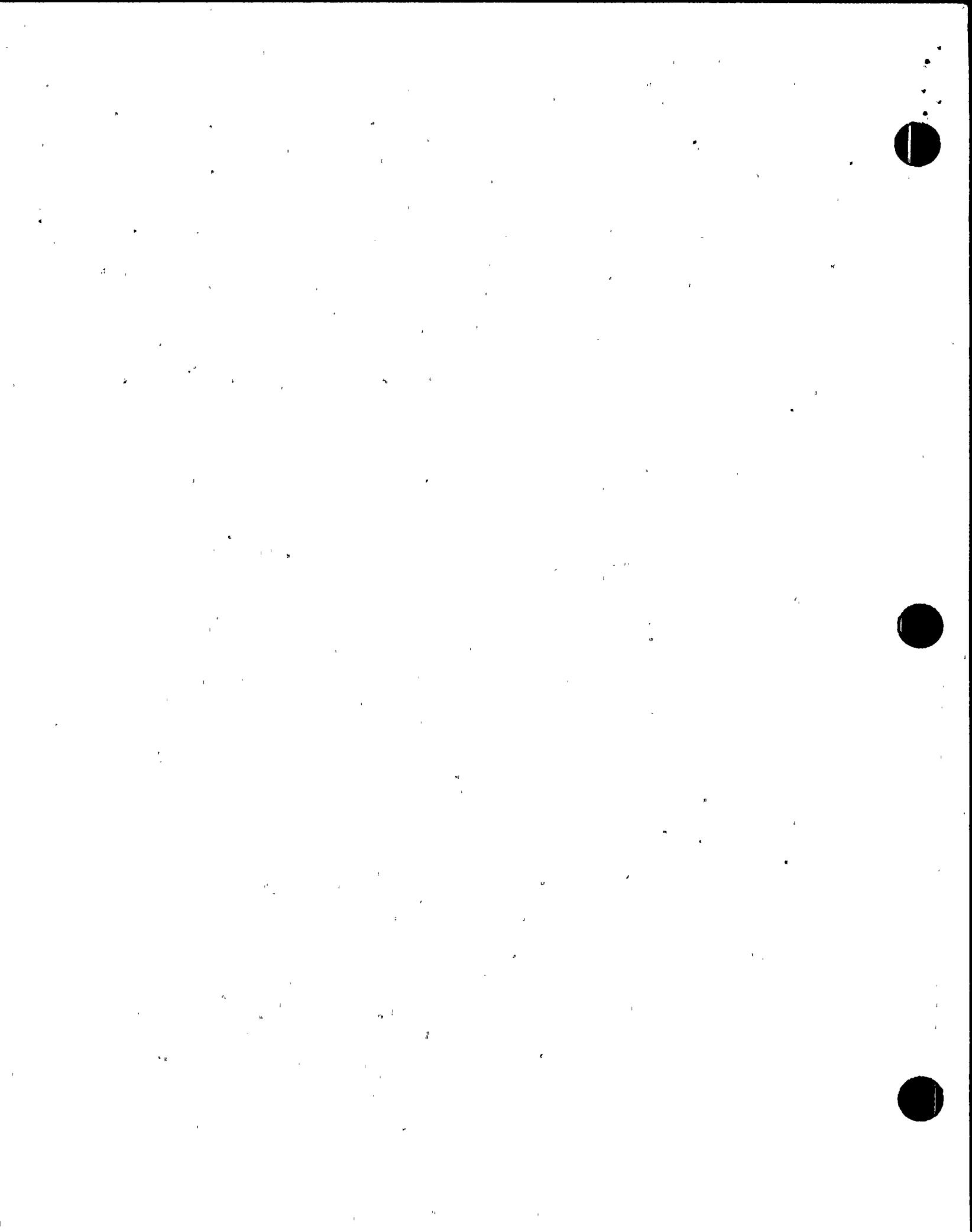
Response: All Section 2 information is contained in the Writers Guide A-502.1 and should not be repeated in A-503.1 as it relates to writing of procedures vice procedure use. Therefore, Section 2 information will be deleted and Section 3 will become Section 2.

Comment 2) Section 1.4 - Contains definitions of terms. The verbs used to specify operator actions are not included in this section. During the inspection, there were indications that the precise meanings of some of the verbs were not clearly understood by all operators. It appears desirable to include verb definitions in the Users Guide.

Response: The three verbs of most concern are "check," "verify," and "ensure." The definition of each of these verbs will be included in Users Guide, Section 1. All other verbs are defined in the A-502.1 verb list (Table 1).

Comment 3) Section 3.2 - Does not require the operator to review symptoms and entry conditions, states that the operation may review the purpose/entry conditions page of the procedure.

Response: This is the philosophy which has been adopted at Ginna and accepted by the Emergency Procedures Committee. The operating shift should be sufficiently familiar with the procedures included in the EOPs to be able to readily determine which EOP to use. In the event that a question arises, the purpose or entry conditions/symptoms may be referenced. There have been relatively few instances of improper procedure application during simulator use. And, typically in the past, when a concern arose, it was a result of improper or



NRC CONCERN:

50-244/ 6.3

89-80-08 (Cont'd)

confusing guidance provided in the transition step. As a result of a rigorous validation program, confusion related to procedure transition steps has been eliminated, resulting in increased efficiency of the operating crews during simulator exercises.

Comment 4) Section 3.7.2 - Contains an incorrect reference to another section of the Users Guide (should be 3.7.3).

Response: This comment has been incorporated. The correct step reference will be inserted.

Comment 5) Sections 3.7.3 and 3.7.3.3 - Contain an incorrect reference to a preceding section of the Guide (should be 3.7.1).

Response: This comment has been incorporated. The correct step references will be inserted.

Comment 6) Section 3.8.1 - Contains an incorrect figure reference. There is no figure in the Users Guide that shows the binder layout of the EOPs and APs. Figure 1 shows the CSFST format.

Response: The figure showing the organization of the EOP metal binders will be added as Figure 2 and the erroneous reference will be changed.

Comment 7) Section 3.10.1 - Contains the specific parameter values that define adverse containment, but they are not included within the procedures themselves. The Inspection Team found that the adverse containment criteria have not been committed to memory by the operators.

Response: A note describing Adverse CNMT criteria will be added before the first step of all EOPs which contain adverse values. This will also be emphasized in training. Training will also emphasize that to ensure proper implementation of the criteria, they should be committed to memory.

Comment 8) Figure 1 - Is not useful because some of the path lines and priority number codes were missing.

Response: A new figure has been inserted which includes all appropriate symbols and markings.

NRC CONCERN:

50-244/ 6.3

89-80-08 (Cont'd)

Comment 9) Attachment 1 - Is not consistent with the current revision of procedure E-2. The attachment contains incorrect step references and action step statement. In addition, the discussion of Step 2 is garbled.

Response: Attachment 1 has been revised to reflect the actions of the updated version of E-2.

NRC CONCERN:

50-244/ 6.4
89-80-09

Resolution of concern that changes to satellite procedures may not be reviewed for impact on the emergency procedures.

RGE RESPONSE:

A PCN was submitted to A-601.6 to require that changes to satellite procedures be reviewed for impact on the EOP series of procedures. A list of these procedures will be attached to A-601.6. This change will be effective 6/1/90.

NRC CONCERN:

50-244/ 6.5
89-80-10

Clarification that the emergency procedures are controlled by A-601.6 vice A-601.1/2.

RGE RESPONSE:

PCNs have been submitted to A-601.1 and A-601.2 to reflect that new Emergency Procedures or changes to existing ones shall be processed in accordance with A-601.6, PROCEDURE CONTROL OF EMERGENCY AND ABNORMAL PROCEDURES. These changes will be effective 6/1/90.

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4
9



NRC CONCERN:

50-244/ 6.7
89-80-11Resolution of weaknesses identified within
the Verification & Validation program.

RGE RESPONSE:

- Comment a) Satellite procedures (i.e., Equipment Restoration Procedures) and attachments did not always receive the same level of V&V as did the emergency procedures. The verification checklists of the procedure, Attachments 1 and 2, addressed both referenced procedures and attachments. The validation checklist, Attachment 3, addressed neither. A-601.6 does not require that satellite procedures and attachments be included in both validation and verification
- Response: A PCN has been submitted to A-601.6 to designate which procedures are subject to review in accordance with this procedure. The list includes all satellite procedures. This change will be effective by 6/1/90.
- Comment b) A-601.6 (Paragraph 3.2.4) stated that V&V was not required for "minor changes" but the procedure did not explicitly state that V&V was required for major changes. It was noted that V&V was being conducted for major changes.
- Response: A PCN has been submitted to state that V&V is required for major changes. This change will be effective by 6/1/90.
- Comment c) A-601.6 (Paragraphs 3.4.1.1 and 3.4.4.10) allowed for tabletop validation of changes. A tabletop review is not an acceptable alternative to a walkthrough validation. The license stated that tabletop reviews were not used as a method of validation.
- Response: Submitted PCN to delete reference to TABLETOP REVIEW. This change will be effective by 6/1/90.
- Comment d) A-601.6 describes a scenario-based, team approach to validation. However, there is no provision to ensure human factors expertise on the team.
- Response: A practical human factors training session will be developed to familiarize individuals involved with V&V. This will be complete within 18 months.

