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NSD-NRC-97-4936  
DCP/NRC0702  
Docket No.: STN-52-003

January 10, 1997

Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

ATTENTION: T. R. QUAY

SUBJECT: SUBMITTAL OF AP600 EMERGENCY RESPONSE GUIDELINES  
REVISION 2

- REFERENCES:
1. NSD-NRC-96-4805 (DCP/NRC0589), SUBMITTAL OF AP600 AT-POWER ERG BACKGROUND DOCUMENTS, 8/30/96.
  2. NSD-NRC-96-4896 (DCP/NRC0669), WESTINGHOUSE RESPONSE TO COMMENTS ON AP600 EMERGENCY RESPONSE GUIDELINES (ERGs), 12/20/96.

Dear Mr. Quay:

Please find attached a complete copy of Revision 2 of the AP600 Emergency Response Guidelines (ERGs) for your review. This copy replaces the ERG revisions currently housed in the ERG binders except that SDF-0.1 and SDG-1 through SDG-6, housed at the back of Background Document Book 2, remain in place as Revision 2.

**List of Changes**

As noted in Reference 1, there are only a small number of changes since the previous revision. In order to facilitate NRC review of the ERGs, as requested by the NRC, a list of the changes from the ERGs previously issued (see Reference 1) is as follows:

1. Since the AP600 design is such that suction is now constantly taken from the condensate storage tank, the related caution statement has been removed throughout.
2. AES-0.1 step 3 wording for startup and main feedwater pumps was clarified.
3. An action was added to AES-1.2 step 7 to check for subcooling.
4. AFR-C.1 step 8 for hydrogen ignitors was moved to Step 1. The hydrogen check was then unnecessary and removed.

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5. To reflect PRA insights, a step was added for AFR-C.1, before what was step 17, to flood the cavity.
6. AE-1 step 15 was deleted since it is not applicable to AP600.
7. Changes were made related to the PAMS review as documented in Reference 2.
8. References to Low-3 cold leg temperature were changed to Low  $T_{\text{cold}}$  throughout.
9. AE-0 item 10 steamline isolation signal is changed from Low-2 RCS  $T_{\text{avg}}$  to Low  $T_{\text{cold}}$ .
10. AE-0 Step 12d was deleted to avoid stopping PRHR during a FLB.
11. Pressurizer level setpoints L05 and L06 were better defined as post-S throughout.
12. AE-0 background p4-20 text was changed to say SFW pumps start due to low feedwater flow and low narrow-range SG level.
13. AES-0.1 background p4-9 text was changed from "Following CMT actuation..." to "Following reactor trip, the control level setpoints are adjusted so that the makeup pumps automatically control pressurizer level between (L37) and (L38)."
14. Reference to some fuel rod damage being acceptable for Condition II events was deleted from AFR-S.1 background p2-3.
15. The reference to SSAR Appendix 15B was replaced with a reference to WCAP-14601 in AFR-S.1 background page 2-6.

Items 1 through 7 were communicated to the NRC via a 12/3/96 telecon while items 8 through 15 were communicated to the NRC on 1/8/97. Also, there were some minor changes such as adding Footnotes to the table of contents and MMIS to the acronym list, etc, and the following background document changes:

1. Corrected AE-2 p 2-3 reference to E-1 rather than AE-1.
2. Changed the Figure 2-10 title for AE-1 from temperature to pressure, consistent with the figure.
3. Changed the last sentence of AES-1.2 Introduction paragraph 1.
4. Changed the first sentence in the last paragraph of AES-1.2 page 2-1.
5. Added a sentence, "For the 1.0 inch LOCA case, CMT injection is not isolated since the inventory loss precludes pressurizer refill and subsequent RCP restart.", to AES-1.2 page 2-3 second paragraph.

6. Added reference to Figure 2-8 to reference to Figure 2-10 in the last full paragraph of AES-1.2 page 2.6.
7. Corrected references to Figure numbers for AES-1.2 page 2-21.
8. Corrected setpoint numbers for AFR-P.1 step 11 (2 places).

With this list of changes, Westinghouse considers the commitment to provide a redline/strikeout ERG version met. If, after its review of the ERGs, the NRC desires a redline/strikeout copy, please advise the undersigned.

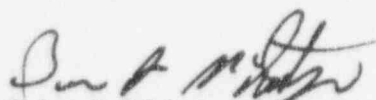
#### **Status of Related DSER Open Items**

Reference 1 provided a list of DSER open item tracking system items which were, at that time, assigned to the ERGs. This letter discussed the status of each of those items, as well as others related to the ERGs, and that status is reflected in the attached OITS report markup. These changes are being incorporated upon issuance of this letter. Please provide NRC status information for these items.

<u>OITS</u>	<u>DSER</u>	<u>Status</u>
1222	13.3.5	This is no longer considered an ERG item (i.e., no ERG changes are required). However, it has been reassigned to MMIS, along with related item 2033, with a Westinghouse action to provide a response.
1270	15.3.4-3	This issue was closed previously with submittal of the Shutdown ERGs.
1365	18.9.3-3	Because Westinghouse has determined no ERG changes are necessary to address this item, it is reassigned to MMIS and closed.
1366	18.9.3-4	Because Westinghouse has determined no ERG changes are necessary to address this item, it is reassigned to MMIS and closed.
1367	18.9.3-5	Because Westinghouse has determined no ERG changes are necessary to address this item, it is reassigned to MMIS and closed.
1368	18.9.3-6	Because Westinghouse has determined no ERG changes are necessary to address this item, it is reassigned to MMIS and closed.
1369	18.9.3-7	Because Westinghouse has determined no ERG changes are necessary to address this item, it is reassigned to MMIS and closed.
1370	18.9.3-8	Because Westinghouse has determined no ERG changes are necessary to address this item, it is reassigned to MMIS and closed.

1371	18.9.3-9	Because Westinghouse has determined no ERG changes are necessary to address this item, it is reassigned to MMIS and closed.
1525	20.4-2	Because Westinghouse has determined no ERG changes are necessary to address this item, it is reassigned to MMIS and closed.
1547	20.4-24	This item was closed previously.
1548	20.4-25	This item was closed previously.
2043	18.	With this submittal of the AP600 ERGs Revision 2, the Westinghouse status is "Closed".
2304	13.5	With this submittal of the AP600 ERGs Revision 2, the Westinghouse status is "Closed". Specifically, the changes incorporated into this revision do not affect this previously-resolved item.
2305	13.5	This item is requesting improved RCS drainage procedures referred to in the response to RAI 440.70. While the ERGs address loss of inventory or loss of RNS, this item is not related to the ERG submittal. It has been reassigned with a Westinghouse action
3505		Closed previously (NTD-NRC-96-4815).
3965	7.	Closed by NSD-NRC-96-4896, dated 12/20/96.

Please contact Robin K. Nydes (412) 374-4125 if you have any questions regarding this transmittal.



Brian A. McIntyre, Manager  
Advanced Plant Safety and Licensing

/jml

attachment

cc: T. Kenyon - NRC (w/enclosure)  
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