

EDO Principal Correspondence Control

FROM: DUE: / /

EDO CONTROL: G20080147

DOC DT: 02/27/08

FINAL REPLY:

W. E. Cummins  
Westinghouse Electric Company

TO:

NRC

FOR SIGNATURE OF :

\*\* GRN \*\*

CRC NO:

DESC:

ROUTING:

Schedule for AP1000 Design Certification Amendment  
(EDATS: OEDO-2008-0166)

Reyes  
Virgilio  
Mallett  
Ash  
Ordaz  
Burns  
Cyr, OGC

DATE: 02/29/08

ASSIGNED TO:

CONTACT:

NRO

Borchardt

SPECIAL INSTRUCTIONS OR REMARKS:

For Appropriate Action.

Template: EDO-001

E-RIDS: EDO-01

# EDATS

Electronic Document and Action Tracking System

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**Source:** OEDO

## General Information

**Assigned To:** NRO

**OEDO Due Date:** NONE

**Other Assignees:**

**SECY Due Date:** NONE

**Subject:** Schedule for AP1000 Design Certification Amendment

**Description:**

**CC Routing:** NONE

**ADAMS Accession Numbers - Incoming:** NONE

**Response/Package:** NONE

## Other Information

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**Staff Initiated:** NO

**Related Task:**

**Recurring Item:** NO

**File Routing:** EDATS

**Agency Lesson Learned:** NO

**Roadmap Item:** NO

## Process Information

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**Priority:** Medium

**Signature Level:** No Signature Required

**Sensitivity:** None

**Urgency:** NO

**OEDO Concurrence:** NO

**OCM Concurrence:** NO

**OCA Concurrence:** NO

**Special Instructions:** For Appropriate Action.

## Document Information

**Originator Name:** W. E. Cummins

**Date of Incoming:** 2/27/2008

**Originating Organization:** Westinghouse

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**Addressee:** Document Control Desk

**Date Response Requested by Originator:** NONE

**Incoming Task Received:** Letter



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Your ref: Docket Number 52-006  
Our ref: DCP/NRC2089

February 27, 2008

Subject: Schedule for AP1000 Design Certification Amendment

Westinghouse has reviewed the NRC review schedule for the AP1000 Design Certification amendment provided in a letter dated February 15, 2008. We appreciate the effort that went into creating this. In general it appears that a few outliers on the schedule have driven the schedule longer. It is appropriate for Westinghouse and the NRC staff to focus on these outliers.

Of the most concern is the apparent loss of float between the review of the AP1000 amendment and the Bellefonte COL application. Westinghouse has a major objective to prevent the certification amendment from driving the schedule of the COLA. Westinghouse is very interested in trying to recover float and we believe it is in the interest of the NRC and TVA/NuStart to do so. We understand that there is general agreement by the staff to make reasonable efforts to improve the "target" schedule for the AP1000 review.

The NRC has indicated that completion of information on the recirculation screen and the finalization of information in the technical specifications cause the critical path of the review schedule to be extended by approximately four months. The schedule included in the February 15 letter indicates that three chapters (6, 15, and 16) are delayed for completion of information that affects a small handful of SER section and subsection write-ups. This schedule delay for the three chapters is carried forward for the entire review in Phases 4, 5, and 6.

The information on design and testing of the recirculation screen impacts a small portion of DCD Section 6.3 and does not impact the balance of Chapter 6. The reviewers of Chapter 6 sections not impacted by the screen design do not appear to need three to four more months to prepare their Requests for Additional information and SER with open items. Westinghouse is providing information on the design and testing of the screens in the first week of March 2008. Drafts of these reports are currently being reviewed by the Westinghouse and NuStart review teams. The remaining items supporting the screen design, an evaluation of downstream effects and a revised ITAAC, are expected to be provided to the NRC by the end of March 2008. Westinghouse has also agreed to perform a sensitivity analysis of long term cooling to demonstrate the margins that exist in the plant. This report is scheduled for submittal by April 30, 2008. As discussed below the long term cooling sensitivity analysis is not expected to impact Chapter 15.

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The AP1000 screen test has been completed and the results indicate that the impact of debris on screen differential pressure is essentially zero. Therefore, the Chapter 15 safety analyses will not be impacted and staff review of Chapter 15 may be able to be completed on a schedule consistent with the rest of the chapters. In early March when Westinghouse submits the screen design report and the screen test report, Westinghouse is requesting that the staff reassess the AP1000 review schedule and try to recover the float between the AP1000 review and the Bellefonte COLA review. This schedule improvement can be achieved if the staff completes its review of the screen design and provides an SER with open items for the section describing the screen design by the end of 2008. For target scheduling purposes Westinghouse requests that the expectation for that the portion of the write-up addressing the screens be that the SER with open items will be completed when the balance of the SER is complete at the end of 2008. Westinghouse will provide the resources needed to provide RAI responses and other information needed to support such a schedule.

Westinghouse has committed to providing a sensitivity evaluation of the effect of larger pressure drops across the screen on the safety analyses. This sensitivity study will not alter the safety analysis of record. The completion of the SER for Chapter 15 is not expected to be impacted by the screen design information since the screen performs in a manner consistent with the existing Chapter 15 analysis. This was demonstrated by the test program.

The extended schedule for Chapter 16 is apparently due to a small handful of values with brackets remaining in the AP1000 Technical Specification at the completion of the acceptance review. The AP1000 Certified Design included approximately 300 values in the technical specification and bases that were shown inside brackets. The use of brackets indicates that the value is not final and may be finalized as part of the COL application review. In DCD Revision 16 which supports the Design Certification amendment all but a handful of the values were finalized and the brackets removed. Westinghouse is providing information to support the removal of the remaining design related brackets and finalization of the associated values in the first week of March 2008. A draft of this report is currently being reviewed by Westinghouse and NuStart. For target scheduling purposes Westinghouse requests that the portion of the SER write-up addressing the removal of the last of the remaining brackets for the SER with open items be complete when the balance of the SER with open items is complete at the end of 2008. Several of the remaining Technical Specification values in brackets are related to surveillance intervals for the instrumentation and control Protection and Safety Monitoring System (PMS). The support information to justify the intervals is based on detailed information on the automatic testing of the PMS (Chapter 7). Westinghouse requests that the detailed review schedule be evaluated to verify that the bracketed items are not a critical path activity for the AP1000 review.

Westinghouse requests that the AP1000 schedule be reassessed to remove the delay due to the outliers and recover the float relative to the Bellefonte schedule. This can be accomplished after the early March submittals are made and reviewed for acceptance. Westinghouse suggests that a meeting with the staff in mid-March would be useful to facilitate such a reassessment. At that meeting Westinghouse would have the preliminary downstream effects evaluation, ITAAC review disposition, and long term cooling sensitivity results.

Westinghouse fully appreciates the value of schedule discussions and interactions with the NRC staff. When the NRC identified the screen design as a critical activity during the acceptance review Westinghouse initiated high priority activities for both screen testing and for detailed screen design. The prioritization of these activities has permitted Westinghouse to schedule the key deliverables on these issues for the first week of March. The confirmation of the very conservative AP1000 screen design by testing and the prioritization of key design activities enable us to propose "target" schedules that are not controlled by the screen design.

Westinghouse hopes that future schedule discussions with the staff can be pro-active in preventing other issues from eliminating float between the AP1000 and Bellefonte review schedules. Our joint attention and prioritization on developing schedule issues should minimize impacts on the review schedule.

Very truly yours,



W. E. Cummins  
Vice President  
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