



UNITED STATES
NUCLEAR REGULATORY COMMISSION
ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
WASHINGTON, DC 20555 - 0001

October 9, 2007

MEMORANDUM TO: Dr. Mario Bonaca, Chairman
AP1000 Subcommittee

FROM: David C. Fischer, Senior Staff Engineer /RA/
ACRS

SUBJECT: **STATUS REPORT** FOR THE MEETING OF THE AP1000
SUBCOMMITTEE, October 31, 2007– ROCKVILLE, MARYLAND

The purpose of this memorandum is to provide a status report for the meeting of the ACRS AP1000 Subcommittee on October 31, 2007. The purpose of the meeting is to discuss with the NRC Staff, Westinghouse Electric Company (W), and the AP1000 Design Center Working Group (DCWG): the AP1000 design, proposed revisions to 10 CFR Part 52 Appendix D, issues to be resolved collectively for Combined License (COL) applicants referencing the AP1000 certified design by the AP1000 DCWG, and issues that will be resolved on a plant-specific basis by COL applicants. The Subcommittee will gather information, analyze relevant issues and facts, and formulate proposed positions and actions, as appropriate, for deliberation by the full Committee. Attached please find the agenda, status report, and background materials.

Attendance by the following members is anticipated and reservations have been made at the following hotels for the night of October 30, 2007:

Bonaca	Maynard
Abdel-Khalik	Shack
Apostolakis	Sieber
Armijo	Stetkar
Banerjee	Clarke
Bley	Ryan
Corradini	Weiner

Please notify Ms. Barbara Jo. White at (301) 415-7130 if you need to change or cancel the above reservations.

Attachments:

1. Agenda
2. Status Report

cc: ACRS Members
C. Santos
S. Durraiswamy
Y. Diaz Sanabria

ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
AP1000 SUBCOMMITTEE
AP1000 DESIGN AND AP1000 COL APPLICATIONS
OCTOBER 31, 2007
ROCKVILLE, MARYLAND

TABLE OF CONTENTS

	<u>Page</u>
I. Table of Contents	1
II. Proposed Agenda	2
III. Status Report	3-4

Attachments:

1. New Reactor Licensing Applications (Site and Technology Selected), September 13, 2007
2. AP1000 COLA and DCD Review Schedule
3. The Westinghouse AP1000 Advanced Nuclear Plant, Plant Description
4. AP1000 Design Control Document (Revision 16) Presentation, June 19, 2007
5. AP1000 R-COLA FSAR Standardization DCWG Meeting Presentation, July 25, 2007

Cognizant ACRS Member:

Dr. Mario V. Bonaca

Cognizant ACRS Staff Engineer:

David Fischer

**Advisory Committee on Reactor Safeguards
AP1000 Subcommittee
AP1000 Design and AP1000 Combined License Applications
October 31, 2007
Rockville, Maryland**

-PROPOSED AGENDA-

Cognizant ACRS Staff Engineer: David C. Fischer DCF@NRC.GOV (301) 415-6889

Topics		Lead	Presentation Time
I	Introduction	Dr. Mario Bonaca, ACRS Mr. E. Cummins, <u>W</u>	8:00 am - 8:05 am
II	AP1000 Technology Overview	Andrea Sterdis, <u>W</u>	8:05 am - 8:35 am
III	Passive Systems Defense-in-Depth Systems Instrumentation and Controls Secondary Systems Electrical Systems Fire Protection	Jim Winters, <u>W</u> Terry Schultz, <u>W</u>	8:35 am - 10:15 am
	BREAK		10:15 am - 10:30 am
IV	Proposed Revisions to the AP1000 Certified Design	Andrea Sterdis, <u>W</u>	10:30 am - 11:15 am
V	Part 52 Amendment Process	Jerry Wilson, NRO	11:15 am - 11:30 pm
	LUNCH		11:30 pm - 12:15 pm
VI	Issues being collectively addressed by the AP 1000 Design-Centered Working Group	Peter Hastings, NuStart Energy	12:15 pm - 1:45 pm
VII	Plant specific issues to be addressed by individual COL applicants	Subsequent COL Applicant	1:45 pm - 2:15pm
VIII	Closing Comments/Adjourn	Andrea Sterdis, <u>W</u> Dr. Mario Bonaca, ACRS	2:15 pm - 2:20 pm

NOTE:

- 100 copies of the presentation materials to be provided to the Subcommittee.

Revised: October 3, 2007

**ADVISORY COMMITTEE ON REACTOR SAFEGUARDS
AP1000 SUBCOMMITTEE
AP1000 DESIGN AND AP1000 COL APPLICATIONS
OCTOBER 31, 2007
ROCKVILLE, MARYLAND**

- STATUS REPORT -

PURPOSE

The purpose of the subcommittee meeting is to discuss the AP1000 design, proposed revisions to 10 CFR Part 52 Appendix D, issues to be resolved collectively for Combined License (COL) applicants referencing the AP1000 certified design by the AP1000 Design-Centered Working Group (DCWG), and issues that will be resolved on a plant-specific basis by COL applicants.

BACKGROUND AND DISCUSSION

Attached are several documents that should help prepare you for our upcoming subcommittee meeting on the AP1000 design and AP1000 COL applications. They include the latest AP1000 review schedules, a high-level plant description, and the vugraphs from two industry presentations. The plant description was handed out at the August 2006 AP1000 training session at the Department of Energy facility in Germantown.

The first set of industry vugraphs is from a June 19, 2007, public meeting during which Westinghouse described Revision 16 to the AP1000 Design Control Document (Reference 2). Changes to the AP1000 DCD include information added to address COL information item closures described in technical reports, design information added to resolve design acceptance criteria described in technical reports, design changes described in technical reports, changes to clarify COL applicant activities, and editorial changes. NRC staff review and safety evaluation report (SER) preparation for the technical reports are expected to drive the content of the design certification amendment final SER. Some of the more significant DCD changes include: extension of the seismic spectra to soil conditions, revision of buildings for enhanced protection, update of the fuel design approach, update of the protection system instrumentation and control, update of the electrical system, completion of the human factors engineering activities, the addition of piping design acceptance criteria information, a change in turbine manufacturer, and revisions to the λ/Q and dose calculations.

The second set of industry vugraphs is from a July 25, 2007, public meeting with NuStart Energy during which the AP1000 DCWG described which FSAR sections will be "incorporated by reference" (IBR), which sections will be standardized based on the reference COL (R-COL) application, and which sections will be plant specific. Incorporated by reference means that the FSAR section will refer back to the applicable AP1000 DCD section. This set of vugraphs also includes a generic description of the various parts of a COL application (e.g., cover letter, FSAR, environmental report, technical specifications, emergency plans, etc.).

EXPECTED SUBCOMMITTEE ACTION

None

References:

1. Appendix D to 10 CFR Part 52 — Design Certification Rule for the AP1000 Design
2. Letter dated May 26, 2007, from A. Sterdis, Westinghouse Electric Company, to USNRC Document Control Desk, Subject: Westinghouse Application to Amend the AP1000 Design Certification Rule.