MEMORANDUM TO: Anthony J. Mendiola, Chief

Licensing Processes Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Joseph A. Golla, Project Manager /RA/

Licensing Processes Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: CLOSED MEEING (AUDIT) OF BOILING WATER REACTOR

OWNER'S GROUP

DATE & TIME: Tuesday, June 25, 2013

1:00 p.m. - 4:30 p.m.

LOCATION: U.S. Nuclear Regulatory Commission (NRC)

One White Flint North, Room O-7B4

11555 Rockville Pike Rockville, MD 20852

PURPOSE: The purpose of this audit is for the NRC staff to review draft and other

technical information pertaining to the design of the test apparatus for in-vessel downstream effects testing in support of the NRC staff's review and approval of Licensing Topical Report BWROG-TP-11-002, Boiling Water Reactor Emergency Core Cooling Suction Strainer In-Vessel Downstream effects, NEDC-33608P. (Due to the

proprietary nature of the material to be reviewed and discussed, this

meeting is closed to the public.)

AUDIT CONTACT: Joseph A. Golla

(301) 415-1002 Joe.Golla@nrc.gov

REFERENCE: Licensing Topical Report BWROG-TP-11-002, Boiling Water Reactor

Emergency Core Cooling Suction Strainer In-Vessel Downstream effects, NEDC-33608P (Redacted Version at Agencywide Documents

Access and Management System (ADAMS) Accession No.

ML110140481)

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PARTICIPANTS: Participants from the NRC include members of the Office of Nuclear

Reactor Regulation (NRR).

NRC Industry

John Lehning Ed Asbury, GEH/BWROG
Erv Geiger Stuart Cain, Alden Research Lab
Steve Smith Jose Casillas, GEH/BWROG
Joseph Golla, et al. Rob Choromokos, ANATECH

Dan Fouts, Entergy/BWROG Harry Goodman, Entergy/BWROG

Ken Mccall, GEH/BWROG

Ludwig Haber, Alden Research Lab, et al.

Project No. 691

Enclosure: Audit Plan

A. Mendiola - 2 -

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NAME	JGolla	DBaxley	SBailey	SWhaley	AMendiola	JGolla
DATE	05/15/2013	05/07/2013	05/15/2013	05/20/2013	05/21/2013	05/21/2013

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AUDIT PLAN

UNITED STATES NUCLEAR REGULATORY COMMISSION (NRC) AUDIT OF

BOILING WATER REACTOR OWNERS GROUP (BWROG) TECHNICAL INFORMATION

AND TEST PROCEDURE

JUNE 25, 2013

- a. <u>Background</u>: BWROG-TP-11-002, Rev. 2 (LTR-1) was written to address the in-vessel downstream effects (DSE) issue identified in a letter written by Mr. John Grobe, Associate Director for Engineering and Safety Systems, Office of Nuclear Reactor Regulation, to Mr. Richard Anderson, BWROG Executive Chairman, dated April 10, 2008, entitled "Potential Issues Related to Emergency Core Cooling Systems (ECCS) Strainer Performance At Boiling Water Reactors" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML080500540). The letter encouraged the BWROG to develop a comprehensive evaluation plan integrated with the efforts of the NRC to address in-vessel DSE and six other issues detailed in the letter.
- b. Regulatory Audit Basis: NRC regulations in 50.46 of Title 10 of the Code of Federal Regulations require that the ECCS have the capability to provide long-term cooling of the reactor core following a loss-of-cooling accident. That is, the ECCS must be able to remove decay heat, so that the core temperature is maintained at an acceptably low value for the extended period of time required by the long-lived radioactivity remaining in the core.
- c. Regulatory Audit Methodology: The audit will be conducted in a conference room at NRC Headquarters. Members of the BWROG and BWROG consultants will provide to the NRC staff, information regarding the test apparatus constructed at Alden Research Laboratory in Holden, Massachusetts which will be used for the LTR-1 testing. The BWROG and consultants will also provide information as needed to address questions that may arise from the NRC staff regarding the test procedure and aspects of analytical portions of LTR-1.
- d. <u>Team Assignments</u>: John Lehning of SNPB and Erv Geiger and Steve Smith of SSIB will conduct the audit. All three of these team members may inquire about the test apparatus and test procedure. Joseph Golla of PLPB will provide project manager support. Erv Geiger will function as team leader.
- e. <u>Deliverables</u>: A regulatory audit summary will be delivered within one month of the date of the audit (by July 25, 2013). Further requests of the BWROG by the NRC staff resulting from the audit will be treated as requests for additional information and be documented separately due to the proprietary nature of the material.