



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 31, 2012

LICENSEE: Entergy Operations, Inc.
FACILITY: Grand Gulf Nuclear Station
SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON
AUGUST 15, 2012, BETWEEN THE U.S. NUCLEAR REGULATORY
COMMISSION AND ENTERGY OPERATIONS, INC., CONCERNING
REQUESTS FOR ADDITIONAL INFORMATION PERTAINING TO THE GRAND
GULF NUCLEAR STATION, LICENSE RENEWAL APPLICATION
(TAC. NO. ME7493)

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Entergy Operations, Inc., held a telephone conference call on August 15, 2012, to discuss and clarify the staff's requests for additional information (RAIs) concerning the Grand Gulf Nuclear Station, license renewal application. The telephone conference call was useful in clarifying the intent of the staff's RAIs.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the RAIs discussed with the applicant, including a brief description on the status of the items.

The applicant had an opportunity to comment on this summary.

A handwritten signature in black ink, appearing to read "N. Ferrer", with a long horizontal line extending to the right.

Nathaniel Ferrer, Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-416

Enclosures:
As stated

cc w/encls: Listserv

TELEPHONE CONFERENCE CALL
GRAND GULF NUCLEAR STATION
LICENSE RENEWAL APPLICATION

LIST OF PARTICIPANTS
AUGUST 15, 2012

PARTICIPANTS

Nate Ferrer

Jim Gavula

Ted Ivy

Andy Taylor

Alan Cox

Wayne Bichlmeir

Larry Seamens

AFFILIATIONS

U.S. Nuclear Regulatory Commission (NRC)

NRC

Entergy Operations, Inc. (Entergy)

Entergy

Entergy

Entergy

Entergy

REQUESTS FOR ADDITIONAL INFORMATION (SET 32)
GRAND GULF NUCLEAR STATION
LICENSE RENEWAL APPLICATION
AUGUST 15, 2012

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Entergy Operations, Inc., held a telephone conference call on August 15, 2012, to discuss and clarify the following requests for additional information (RAIs) concerning the license renewal application (LRA).

Draft RAI B.1.22-7a

Background. In addressing an error report associated with the CHECWORKS software, GGNS condition report CR2010-00823 stated that CHECWORKS is only one of the tools used by the Flow-Accelerated Corrosion Program to determine component wear. In its initial response to the RAI for this issue, the staff requested GGNS provide a description of other in-place processes or verification methods used by the Flow-Accelerated Corrosion Program to determine component wear that could validate or detect errors in the CHECWORKS software.

The response dated May 25, 2012, stated that the results of component inspections are the primary input used to calculate the next scheduled inspection, and that this approach provides reasonable assurance that an error in the CHECWORKS software will not prevent the GGNS Flow-Accelerated Corrosion Program from providing reasonable assurance that the intended function of components will be maintained. The response concluded that as more actual inspection data is acquired, the already limited reliance of CHECWORKS becomes less.

Issue. The condition report discussed above documented an error in the CHECWORKS software and the resolution of this issue stated that CHECWORKS is only one of the tools used by the Flow-Accelerated Corrosion Program to predict component wear. The response appears to state that GGNS calculates the next scheduled inspection primarily using the results of component inspections independently from CHECWORKS. It is not clear to the staff how GGNS calculates the next scheduled inspection using the results of component inspections without CHECWORKS. Further, it is not clear to staff how reliance on the component inspection results reduces the effects of the errors in CHECWORKS. Since the condition report stated that CHECWORKS is only one of the tools used by the Flow-Accelerated Corrosion Program to determine component wear, the staff needs additional information about the other tools that are used to calculate component wear.

Request. Provide a description of the other tools (i.e., any in-place process or verification method), which are used in the Flow-Accelerated Corrosion Program to determine component wear that could detect or validate errors in the CHECWORKS software. If CHECWORKS is the only prediction tool being used, then explain how the use of component inspection results reduces the effects of any errors in CHECWORKS.

Discussion: The applicant indicated that the question is clear. The staff will issue the question as a formal RAI.

Draft RAI B.1.43-1a

Background. Generic Aging Lessons Learned (GALL) Report AMP XI.M2, "Water Chemistry," states that the water chemistry program for boiling water reactors (BWRs) relies on monitoring and control of reactor water chemistry based on industry guidelines in the BWR Vessel and Internals Project (BWRVIP)-190. The response to RAI B.1.43-1, dated May 25, 2012, regarding the methods used to determine the effectiveness of hydrogen water chemistry (HWC) at GGNS, states that platinum loading will be verified by using an artifact that had been removed from the reactor core, because an electrochemical corrosion potential (ECP) mitigation monitoring system was not available during the last operating cycle. The response continued by stating that BWRVIP-62, Revision 1, "Technical Basis for Inspection Relief for BWR Internal Components with Hydrogen Injection," does not require platinum deposition measurements on coupons to demonstrate mitigation for reactors that use on-line noble chemistry (OLNC). The response also stated that the recommendations by the NRC in the safety evaluation to BWRVIP-62 were incorporated into BWRVIP-62-A, which have been incorporated into BWRVIP-62, Revision 1. The applicant further stated that continuous ECP monitoring will be installed during the spring 2012 outage, which will meet the recommendations of BWRVIP-62, Revision 1.

Issue. The NRC has not reviewed BWRVIP-62, Revision 1, and there are differences between the NRC's recommendations for verification of noble metal loading in the safety evaluation related to BWRVIP-62-A, and the guidance given in BWRVIP-62, Revision 1. Specifically, BWRVIP-62-A states that noble metal (platinum) loading shall be monitored by periodic removal of durability monitors or by removal and analysis of deposits from artifacts within the vessel. In addition, the staff noted that BWRVIP-190, states that for plants using noble metal chemical application with ECP probes, catalyst (platinum) loading on durability monitors or vessel artifacts are to be monitored to demonstrate the effective implementation of HWC. Furthermore, although BWRVIP-190 discusses OLNC, it does not address any difference for platinum deposition measurements on coupons for plants using this technique. It is not clear to the staff whether the applicant will continue to monitor noble metal loading during the period of extended operation or whether continuous ECP monitoring has been installed.

Request. Confirm that, during the period of extended operation, the Water Chemistry Control – BWR program will monitor noble metal loading by either periodic removal of durability monitors or by removal and analysis of deposits from artifacts within the vessel. If not, provide an exception to the Water Chemistry Control – BWR program and justify the difference with BWRVIP-190 for monitoring catalyst loading to demonstrate effective implementation of HWC. Additionally, confirm that continuous ECP monitoring has been installed.

Discussion: The applicant stated that the request was unclear because an exception may not be necessary. The staff will reword the the request section as follows:

Request. Confirm that, during the period of extended operation, the Water Chemistry Control BWR program will monitor noble metal loading by either periodic removal of durability monitors or by removal and analysis of deposits from artifacts within the vessel. If not, justify the difference with BWRVIP-190 for monitoring catalyst loading to demonstrate effective implementation of HWC. Additionally, confirm that continuous ECP monitoring has been installed.

The staff will issue the revised question as a formal RAI.

October 31, 2012

LICENSEE: Entergy Operations, Inc.

FACILITY: Grand Gulf Nuclear Station

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON AUGUST 15, 2012, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND ENTERGY OPERATIONS, INC., CONCERNING REQUESTS FOR ADDITIONAL INFORMATION PERTAINING TO THE GRAND GULF NUCLEAR STATION, LICENSE RENEWAL APPLICATION (TAC. NO. ME7493)

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Entergy Operations, Inc., held a telephone conference call on August 15, 2012, to discuss and clarify the staff's requests for additional information (RAIs) concerning the Grand Gulf Nuclear Station, license renewal application. The telephone conference call was useful in clarifying the intent of the staff's RAIs.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the RAIs discussed with the applicant, including a brief description on the status of the items.

The applicant had an opportunity to comment on this summary.

/RA/

Nathaniel Ferrer, Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-416

Enclosures:
As stated

cc w/encls: Listserv

DISTRIBUTION: See next page

ADAMS Accession No. ML12250A105

*concurrence via email

OFFICE	PM:RPB1:DLR	LA:RPB2:DLR*	BC:RPB1:DLR	PM:RPB1:DLR
NAME	NFerrer	IKing	DMorey	NFerrer
DATE	10/15/12	9/14/12	10/18/12	10/31/12

OFFICIAL RECORD COPY

Memorandum to Entergy Operations, Inc. from Nathaniel Ferrer dated October 31, 2012

**SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON
AUGUST 15, 2012 BETWEEN THE U.S. NUCLEAR REGULATORY
COMMISSION AND ENTERGY OPERATIONS, INC., CONCERNING
REQUESTS FOR ADDITIONAL INFORMATION PERTAINING TO THE GRAND
GULF NUCLEAR STATION, LICENSE RENEWAL APPLICATION
(TAC. NO. ME7493)**

DISTRIBUTION:

E-MAIL:

PUBLIC

RidsNrrDir Resource

RidsNrrDirRpb1 Resource

RidsNrrDirRpb2 Resource

RidsNrrDirRarb Resource

RidsNrrDirRapb Resource

RidsNrrDirRasb Resource

RidsNrrDirRerb Resource

RidsNrrDirRsg Resource

NFerrer

DDrucker

DWrona

DMorey

AWang

RSmith, RIV

BRice, RIV

DMcIntyre, OPA