

May 7, 2004

MEMORANDUM TO: Laura A. Dudes, Chief
New Reactors Section
New, Research and Test Reactors Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

FROM: Raj K. Anand, Grand Gulf ESP Project Manager */RA/*
New Reactors Section
New, Research and Test Reactors Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

SUBJECT: TRIP REPORT FROM SITE VISIT TO THE GRAND GULF EARLY SITE
PERMIT (ESP) SITE AND AUDIT OF METEOROLOGY AND DESIGN
BASIS ACCIDENT ASPECTS OF GRAND GULF ESP APPLICATION

On April 13 and 14, 2004, members of the U.S. Nuclear Regulatory Commission (NRC) staff visited the Grand Gulf site designated by System Energy Resources, Inc., a subsidiary of Entergy Corporation, in its application for an ESP in accordance with 10 CFR Part 52, and conducted an audit of meteorology and design-basis accident-related information presented in the application. This site visit was conducted in conjunction with the environmental site audit.

Attached is the trip report from this activity.

cc: D. Matthews
F. Gillespie
J. Lyons
L. Dudes
J. Lee
B. Harvey

Docket No. 52-009

Attachment: As stated

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NAME	RAnand	RDennig	TSmith/TRS	LDudes
DATE	5/5/04	4/29/04	5/4/04	5/5/04

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**TRIP REPORT
SITE VISIT AND AUDIT
GRAND GULF EARLY SITE PERMIT APPLICATION REVIEW
APRIL 13 AND 14, 2004**

Subject

Site visit and audit in support of review of meteorology, design basis accident, and severe accident sections of Grand Gulf early site permit (ESP) application

Dates of Travel

April 12 -14, 2004

NRC staff and contractor participants

- Stephen Koenick, New, Research and Test Reactors Program, Division of Regulatory Improvement Programs, Office of Nuclear Reactor Regulation
- Raj Anand, New, Research and Test Reactors Program, Division of Regulatory Improvement Programs, Office of Nuclear Reactor Regulation
- Thomas Kenyon, Division of Regulatory Improvement Programs, Office of Nuclear Reactor Regulation
- Jay Lee, Division of Systems Safety and Analysis, Office of Nuclear Reactor Regulation
- Brad Harvey, Division of Systems Safety and Analysis, Office of Nuclear Reactor Regulation

PNNL:

- Van Ramsdell
- Eva Hickey

Applicant staff participants

Entergy:

- George Zinke, Project Manager
- Rick Buckley,
- John Lassetter
- Roger Tolbert
- Ken Lumbley
- Ewel Hughes

Enercon:

- Guy Cseasar,
- Marvin Morris
- Ralph Berger

Background/Purpose

By letter dated October 16, 2003, System Energy Resources, Inc. (SERI) submitted an early site permit (ESP) application to the NRC for a site designated in SERI's application as the Grand Gulf ESP site. By letter dated November 21, 2003, and by *Federal Register* Notice on December 1, 2003 (68 FR 67219), the NRC accepted SERI's Grand Gulf ESP application for review.

As part of the NRC staff's review of the Grand Gulf ESP application, the staff assesses the applicant's site safety analysis report (SSAR) for compliance with applicable regulations. In support of the staff's review of the applicant's SSAR, the staff reviewers visit the ESP site to observe relevant onsite and local area conditions. The staff also audits information in the SSAR and its references. These audits may include visits to the applicant's offices to obtain better understanding of the application's contents through technical discussions with knowledgeable applicant staff.

This trip report documents the staff's site visit in the meteorology and design-basis accident aspects of SERI's Grand Gulf ESP application on April 13 and 14, 2004.

Discussion

On April 13 and 14, 2004, the NRC staff and its consultants from the Pacific Northwest National Laboratory conducted a site visit in conjunction with the environmental audit. The specific subject matters discussed were meteorology, design-basis accidents, and severe accidents. The staff participated in a site tour which included the footprint of the proposed facility, the proposed intake and outflows to the Mississippi River, the cooling tower footprint, and the meteorological tower.

Following the site tour, the groups split up into various discussion groups. Below is a brief summary of the discussions. No documents were provided by the applicant to the staff during this site visit.

Meteorology

There were two primary aspects which were discussed:

1. Wind roses present in the application were from 1996 through 2001. This data could be thought of in two groupings, 1996 through 2000, and the 2001 data. The latter occurred after an upgrade to the meteorological tower. The NRC staff observed the new meteorological tower, reviewed pictures of the previous configuration and discussed how each data set was used in the application.
2. The NRC staff and applicant discussed the regional meteorological site data from Vicksburg and Jackson, Mississippi and the relationship to the Grand Gulf site.

Design-Basis Accidents

The NRC staff discussed the status of the AP1000 design certification review (of which the design was referenced in the Grand Gulf application) with the applicant. However, it was noted that the information included in the application is not from a certified design; rather, the best information at the time the application was developed. The staff also discussed whether the dose values were based on the initial 2-hour release period as opposed to a sliding 2-hour time frame. The staff also discussed whether the source terms presented were done so in a consistent fashion on the new and previous source term models.

These items may be the subject of future requests for additional information.

Attachments

None