

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
MISSISSIPPI POWER AND LIGHT COMPANY
GRAND GULF NUCLEAR STATION, UNIT 1
DOCKET NO. 50-416

1.0 INTRODUCTION

On November 1, 1984 the staff issued Facility Operating License NPF-29, together with Technical Specifications (TS) and Environmental Protection Plan, for the Grand Gulf Nuclear Station, Unit 1 (Grand Gulf). Included in the Grand Gulf TS were the Radiological Effluent Technical Specifications (RETS). Section 6.14 of the TS referenced an Offsite Dose Calculation Manual (ODCM) and prescribed the methods for its change.

2.0 EVALUATION

The docketed submittal of an ODCM dated January 20, 1981 (Revisions through January 12, 1982) by Mississippi Power and Light Company (MP&L, licensee) received NRC approval by letter dated November 16, 1982 from A. Schwencer to the licensee.

Since 1982 a number of changes have been made in the Grand Gulf ODCM and reported to NRC in ODCM revisions in accordance with Grand Gulf TS 6.14.2. The latest of these, Revision 6, dated 9/85 and submitted October 10, 1985, has been reviewed for us by Franklin Research Center (FRC) as part of our technical assistance contract program. Their report (the enclosed section from TER-C5506-590) provides their technical evaluation of the compliance of the Licensee's submittal with NRC criteria. The staff has reviewed this report, and agrees with the evaluation that the Grand Gulf ODCM, Rev. 6, generally uses documented and approved methods that are consistent with the methodology and guidelines in NUREG-0133. Therefore, we conclude that this ODCM is an acceptable reference for use with Grand Gulf TS 6.14. However, several minor discrepancies listed in Attachment 1 should be addressed within six months in another revision.

3.0 CONCLUSIONS

The Grand Gulf ODCM, Rev. 6, is acceptable. The changes incorporated in Rev. 6 and earlier revisions are in compliance with Grand Gulf TS 6.14.2.

ATTACHMENT 1

Discrepancies in Grand Gulf ODCM, Rev. 6:

- o The Licensee has not addressed the monthly dose projection requirements as specified by the Licensee's Technical Specifications 3.11.1.3 on liquid waste treatment and 3.11.2.5 on ventilation exhaust treatment.
- o The Licensee has not addressed the total dose (40CFR190) requirement including direct radiation from uranium fuel cycle sources, as specified by the Licensee's Technical Specification 3.11.4.
- o The Licensee's flow diagrams describing the liquid and gaseous waste treatment systems are of poor legibility; the quality of the diagrams should be improved.