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## ERRATA And ADDENDA SHEET

NO.	3
DATE	October 1983
NOTE: Correct all copies of the applicable publication as specified below.	

ITEM	REFERENCES (SECTION, PAGE PARAGRAPH, LINE)	INSTRUCTIONS (CORRECTIONS AND ADDITIONS)
01	Page 1-1	Replace with new page 1-1.  NOTE: Changes are indicated by vertical bar in the right-hand margin.

## 1. INTRODUCTION

The purpose of this document is to provide the results of the loss-of-coolant accident (LOCA) analysis for the Pilgrim Nuclear Power Station (Pilgrim). The analysis was performed using approved General Electric (GE) calculational models.

This reanalysis of the plant LOCA is provided in accordance with the NRC requirement (Reference 1) and to demonstrate conformance with the ECCS acceptance criteria of 10CFR50.46. The objective of the LOCA analysis contained herein is to provide assurance that the most limiting break size, break location, and single failure combination has been considered for the plant. The required documentation for demonstrating that these objectives have been satisfied is given in Reference 2. The documentation contained in this report is intended to satisfy these requirements.

The general description of the LOCA evaluation models is contained in Reference 3. Recently approved model changes (Reference 4) are described in References 5 and 6. These model changes are employed in the new REFLOOD and CHASTE computer codes which have been used in this analysis. In addition, a model which takes into account the effects of drilling alternate flow path holes in the lower tieplate of the fuel bundle and the use of such fuel bundles in a full or partial core loading is described in References 7, 8, and 9. This model was also approved in Reference 4. Also included in the reanalysis are current values for input parameters based on the LOCA analysis reverification program being carried out by GE. The specific changes as applied to Pilgrim are discussed in more detail in later sections of this document. The MAPLHGR values for the non-barrier fuel are applicable to barrier fuel of the same type.

Plants are separated into groups for the purpose of LOCA analysis (Reference 10). Within each plant group there will be a single lead plant analysis which provides the basis for the selection of the most limiting break size yielding the highest peak cladding temperature (PCT). Also, the lead plant analysis provides an expanded documentation base to provide added insight into evaluation of the details of particular phenomena. The remainder of

the plants in that group will have non-lead plant analyses referenced to the lead plant analysis. This document contains the non-lead plant analysis for Pilgrim which is a BWR/3 in the BWR/4 with loop selection logic group of plants and is consistent with the requirements outlined in Reference 2.

The same models and computer codes are used to evaluate all plants. Changes to these models will cause changes in phenomenological responses that are similar within any given plant group. The difference in input parameters are not expected to result in significantly different results for the plants within a given group. Emergency core cooling system (ECCS) and geometric differences between plant groups may result in different responses for different groups but within any group the responses will be similar. Input changes have been made in the new analysis which are essentially an upgrading of the input parameters to the computer codes. Thus, the lead plant concept is still valid for this evaluation.