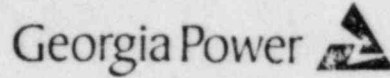


E. I. HATCH NUCLEAR PLANT



TRAINING LESSON PLAN

TITLE: CODE OF FEDERAL REGULATIONS, PARTS 20 and 100	NUMBER: L-RQ-409
PROGRAM: SPECIAL AND ADVANCED LICENSE TRAINING	DATE: 9/25/84 REV 0
REFERENCES:	

Author: General Physics
(Phil Bennett)

1. Code of Federal Regulations, Chapter 1, January 1, 1984
2. FSAR Chapter 1
3. Georgia Power Nuclear Training Manuals, Chapter 10.3

Estimated Length of Training: 50 minutes

LESSON	NOTES:
I. Purpose To provide special and advanced license training to those individuals holding reactor operator licenses, senior reactor operator licenses, and senior reactor operator certifications, to comply with 10CFR Part 55, operator requalification requirements.	

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I. Objectives:

Upon completion of this lesson the student should be able to:

1. Explain what the Code of Federal Regulations is and how it is structured.
2. State the purpose of 10CFR20 and purpose of 10CFR100.
3. Identify which 10CFR applies to Abnormal Operative Transients and which to accidents.
4. Define the following areas and list any limits or standards associated with each.

Restricted
Unrestricted

Radiation
Hi Radiation

Exclusion
Low Population Zone
Population Center Distance

5. State where Table I and Table II of 10CFR20 Appendix B applies.

Code of Federal Regulations (Parts 20 & 100)

III. Introduction

Reason for Study

- A. A utility has two obligations to the public:
- o Produce a reliable source of electrical power
 - o Protect the public from any hazards or risks

The fissioning of elements to produce heat for the generation of electricity also produces radiation.

Due to the somatic and genetic effects radiation has on the body, the Federal Government controls or regulates the use of nuclear power.

The document which contains the regulations through which the government controls the use of nuclear power is the Code of Federal Regulations.

Familiarity with this code allows you, the operator, to better understand the necessity, content and thus use of the utilities' procedures.

In so doing you will be more knowledgeable to better protect yourself and the public

- B. A specific review of 10CFR20 and 10CFR100 will be done to interrelate these CFR's to BWR Text Chapter 10.3 and to the FSAR. A copy of 10CFR20 and 100 are available to support this review.

IV. Presentation

A. Code of Federal Regulations

1. The Federal Government has established general and permanent rules to regulate the various areas for which it is responsible.

These rules, made by the Executive departments and agencies of the Federal Government are published in the Federal Register.

The Code of Federal Regulations (CFR) is a codification of the rules published in the Federal Register.

2. The CFR is divided into 50 titles which represent broad areas subject to Federal Regulation.
3. Each title is divided into chapters which usually bear the name of the issuing agency. Each chapter is published in a volume.
4. Each chapter is subdivided into parts covering specific regulatory areas.
5. The CFR is revised at least once each year. For Title 10 this date is January 1.

TP-1 - Federal Register

Pass around copy of Federal Register.

TP-2 - List of Titles

TP-3 - List of Chapters

Display Chapter I, Volume I.

TP-4 - List of Parts in Chapter 1,

Note: Title 10 is comprised of 5 chapters or volumes. Chapter/Vol. I has parts 0-99. Chapter/Vol. II has parts 200-699.

Thus it is not necessary to indicate the chapter or volume no. when identifying a specific part. Example: 10CFR20 is Title 10, Part 20. By definition part 20 is in Chapter I or Vol. I.

Subject Outline

Support Information

6. The CFR is kept up to date by the individual issues of the Federal Register. These two (CFR and FR) publications must be used together to determine the latest version of any given rule.

B. 10 CFR 20

Standards for Protection Against Radiation

Reference to 10CFR20 H/O.
Have students highlight their copy.

1. Review Table of Contents and emphasize major headings.
2. State the Purpose
 - It is the purpose of the regulations in this part to control the possession, use and transfer of licensed material by any licensee in such a manner that the total dose to an individual does not exceed the standards of radiation protection prescribed in the regulation in this part.
3. Point out the ALARA statement in 20.1c.
4. Define the following areas and list any limits or standards associated with each.
 - a. Restricted Area
Reference Sections:
20.3(14), 20.101(a) and (b), 20.103(a)(1)
Appendix B

- b. Unrestricted Area
Reference Sections:
20.3(17), 20.105(a)
and (b) 20.106(a)
Appendix B
 - c. Radiation Area
Reference Section:
20.202(b)(2)
 - d. High Radiation Area
Reference Section:
20.202(b)(3)
5. Per FSAR Chapter 1, one of the unacceptable criteria for Abnormal Operational Transients is: Releases in excess of 10CFR20.

C. 10 CFR 100

Reactor Site Criteria

1. Review Table of Contents
2. State the purpose
 - It is the purpose of this part to describe criteria which guide the commission in its evaluation of the suitability of proposed sites for stationary power and testing reactors subject to Part 50 of this chapter.
3. Define the following areas and list any limits or standards associated with each.
 - a. Exclusion Area
Reference Sections:
100.3(a), 100.11(a)(1)

Subject Outline

Support Information

- b. Low Population Zone
Reference Sections:
100.3(b), 100.11(a)(2)
- c. Population Center
Distance
Reference Sections:
100.3(c), 100.11(a)(3)
- 4. Review the following in
Appendix A - Seismic and
Geologic Siting Criteria
for Nuclear Power Plants:
 - I. Purpose
 - III. Definitions -
 - (a) Magnitude Richter Scale
 - (b) Intensity Modified Mercalli Scale
 - (c) Safe Shutdown Design Basis Earthquake
 - (d) Operating Basis
Earthquake