



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555  
June 10, 1985

Docket Nos: 50-424  
and 50-425

APPLICANT: Georgia Power Company

FACILITY: Vogtle, Units 1 and 2

SUBJECT: SUMMARY OF MEETING HELD TO DISCUSS RETESTING OF SIMULATOR RESPONSE

On May 8, 1985, the staff met with the applicant to discuss the retesting of simulator response in line with Regulatory Guide 1.149, "Nuclear Power Plant Simulators for Use in Operator Training." Enclosure 1 lists the participants.

The applicant gave a presentation to the staff regarding the process it employs to ensure that its simulator is up to date. The presentation outline is provided in Enclosure 2. In its presentation, the applicant stated that it collects actual plant data and compares it to simulator data during training conducted on the simulator. The applicant also stated that operators report discrepancies between the plant and simulator. The applicant committed, as part of the simulator updating process, to evaluate changes in procedures and to systematically incorporate these changes into the simulator data base. Each time the simulator data base is changed, the applicant stated that it would retest the simulator under normal, accident and loss of coolant accident conditions.

The staff clarified that the applicant's reference in the FSAR to annual performance testing should actually be performance testing every 4 years.

The applicant further indicated that verifying over 200 malfunctions to conform with Regulatory Guide 1.149 would present a problem since not all of these analyses are done on the plant.

The staff indicated several problems with the applicant's approach. First, no provision has been made for actual documentation of performing the test, its results, and the evaluation of results. Second, testing has not been differentiated from training indicating an informal approach to performance testing. Also, the applicant's approach does not detail how the simulator's data base would be systematically reviewed against the complete data base of the plant. In general, the applicant's method is not strict enough. The staff indicated that the applicant's proposed program of simulator testing does not appear to meet the intent of Regulatory Guide 1.149.

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A PDR

The applicant indicated that it would attempt to incorporate staff concerns in a future submittal on this issue.

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Enclosures:  
As stated

cc: See next page

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Enclosure 1

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VEGP SIMULATOR FIDELITY

A

PRESENTATION TO

THE

NUCLEAR REGULATORY

COMMISSION

MAY 8, 1985

BY

GEORGIA POWER

COMPANY

## AGENDA

INTRODUCTIONS

PURPOSE

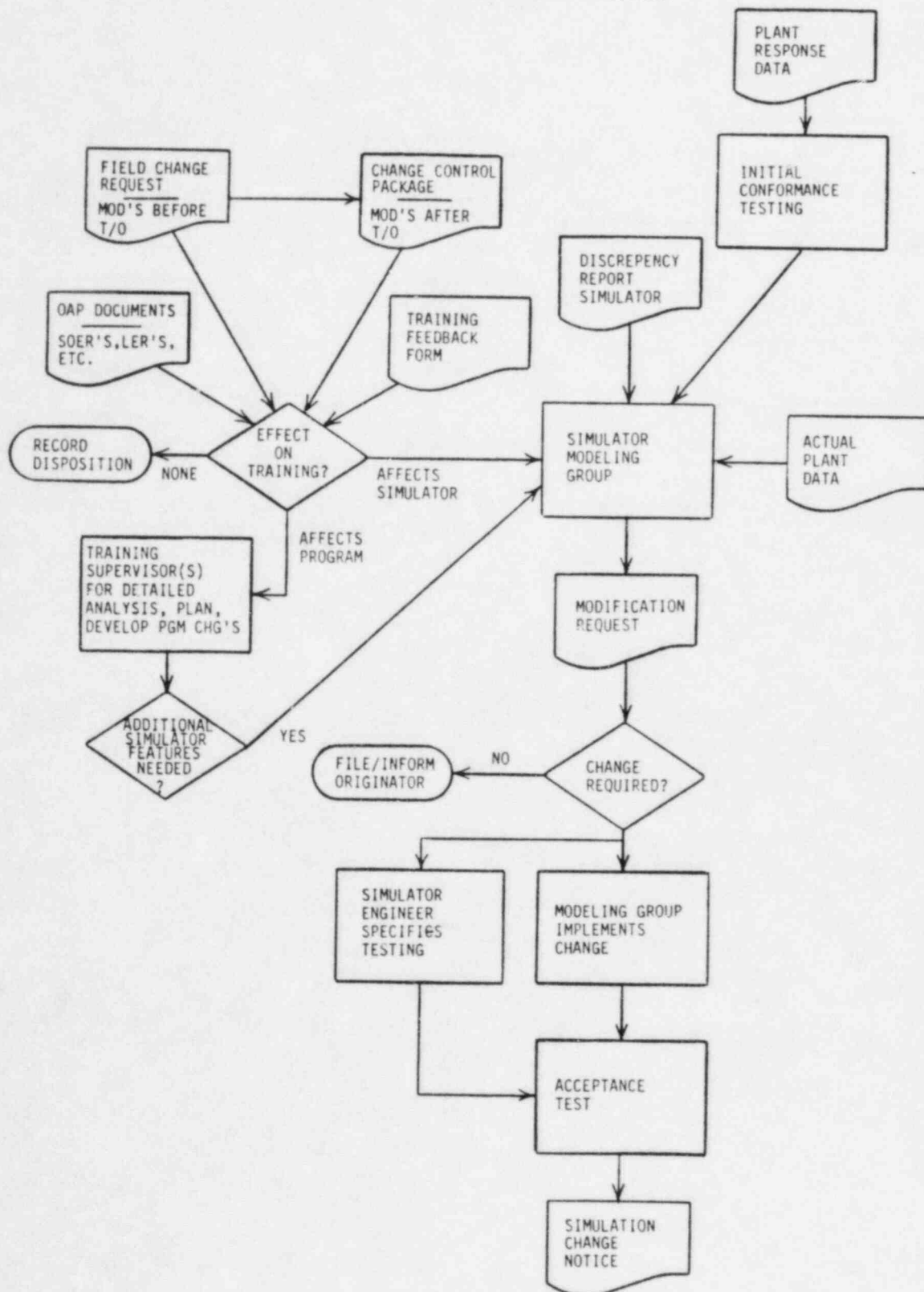
BACKGROUND

SIMULATOR CONFIGURATION MANAGEMENT

SIMULATOR UPDATE PROCESS

SUMMARY

# SIMULATOR CONFIGURATION MANAGEMENT



SIMULATOR UPDATE PROCESS  
(ANSI/ANS-3.5-1981)

- ° Simulator Data Base Updating
- ° Annual Physical Comparison
- ° Use of Feedback for Updating
- ° Simulator Performance Testing



## VOGTLE SIMULATOR QUALIFICATION PLAN

### PURPOSE

This report underscores the determination of Georgia Power Company to implement the most effective, quality nuclear training possible. This includes use of accurate full scope simulators at both nuclear sites.

### BACKGROUND

Georgia Power Company realized early the value of strong, effective training programs for ensuring acceptable qualifications of nuclear plant personnel. As early as 1978 (pre-TMI) Georgia Power Company started work on substantially upgrading the effectiveness of nuclear training. Full scope simulators were ordered for the Hatch and Vogtle facilities and construction of new elaborate training centers was begun. This commitment to excellence will continue as we finish construction of Plant Vogtle and put the plant into operation.

### VEGP SIMULATOR

- \* ANSI 3.5 qualified to design data base at time of delivery by completion of a detailed factory acceptance test.
- \* Will be matched to plant by:
  1. Physical panel comparison at or near fuel load.
  2. Comparison to plant startup data.
  3. Comparison to best estimate of transient and accident response.

## SIMULATOR UPDATE PROCESS

### Reg Guide 1.149/ANSI 3.5

1. Each modification to the reference plant shall be evaluated and appropriate modifications made to the simulator.

2. The reference plant control room environment, controls, meters, alarms, recorders, switches, annunciators, controllers and other components shall be reviewed annually against the simulator to evaluate compliance.

3. Feedback from instructors, reactor operators, and operator trainees shall be evaluated and appropriate modifications made to the simulator.

4. Simulator performance testing shall be conducted not less than every four (4) years.

### VEGP

Plant and procedure changes will be evaluated, incorporated into the simulator and retested where appropriate.

Physical panel changes are made only through the design change process and will be reviewed and incorporated into the simulator as they occur.

Continuous use of the simulator for initial and requalification training will frequently exercise all relevant operations, transients, and emergency events. Feedback from experienced staff members will be collected and evaluated. Changes will be made to the simulator and retesting completed at the time of each change.

Performance testing is conducted continuously during training scenarios and following any changes which are made to the simulator. This specific in use testing provides more immediate updating of simulator performance than general testing every four years. Additionally, since training scenarios are repeated more frequently and with a greater degree of variation, a much wider scope of testing results.

## SUMMARY

Georgia Power Company is committed to high quality training which includes the use of full scope simulators at both nuclear sites. Many more simulator exercises are performed during training than during a performance test. Continuous feedback collection coupled with plant change review is a better way to ensure simulator fidelity. Periodic performance retesting is redundant and would not contribute to improved simulator fidelity.

MEETING SUMMARY DISTRIBUTION

Docket No(s): 50-424/425

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Local PDR

NSIC

PRC System

LB #4 r/f

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