GE Nuclear Energy

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March 14, 2002

U.S Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555-0001

Attention: Chief, Information Management Branch
Program Management
Policy Development and Analysis Staff

Subject: **GE Draft Presentation Slides (Non-Proprietary)**
Re: MELLLA+ Stability & ATWS Pressure with TRACG

Reference: GE Licensing Topical Report NEDC-33006P, "General Electric Boiling Water Reactor Maximum Extended Load Line Limit Analysis Plus," January 2002

Enclosed are the non-proprietary draft presentation slides for two meetings with the NRC staff on March 27, 2002. The first (Attachment 1) is for the MELLLA+ Stability Meeting, which refers to the M+LTR, which was submitted for NRC Review (Reference). The second (Attachment 2) is for the ATWS Pressure with TRACG Meeting, on the same day. The proprietary draft slides were provided in a separate transmittal on March 12, 2002.

If you have any questions about the information provided here please contact PT Tran at (408) 925-3348, or myself.

Sincerely,

George Stramback

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Attachments:

1) *Stability LTS Option III Licensing Basis For MELLLA+, LTS Option III-CD (Confirmation Density),* Open Session, March 27, 2002
2) *TRACG Application for ATWS Overpressure Transient Analyses*, Open Session, March 27, 2002

cc:

JE Donoghue – USNRC
FT Bolger
JF Klapproth
I Nir
PT Tran

Draft

GE Nuclear Energy

Stability LTS Option III Licensing Basis For MELLLA+

LTS Option III-CD (Confirmation Density)

Open Session

Presentation to USNRC
Israel Nir

March 27, 2002

Meeting Objective

- **Present Stability Option III-CD licensing basis for MELLLA+**
- **Obtain feedback on the proposed approach**
- **Review schedule/plan**

Outline

- **Introduction**
- **Approach Objectives**
- **Proposed Approach**
- **Methodology Changes**
- **Expected MCPR Margin**
- **Methodology Elements**
- **Summary of Benefits**
- **Proposed Schedule**
- **Feedback/Questions**

Introduction

- **M+LTR Submittal to the NRC 1/02**
- **Kickoff Meeting with NRC 02/02**
- **M+LTR stability technical discussion**
  - **Not included in current M+LTR submittal**
  - **Deferred to be addressed consistent with DIVOM Curve Issue**
- **Stability DIVOM Curve status for MELLLA+**
  - **Study concluded that DIVOM curve may not be viable for M+**
  - **GE proposes LTS Option III-CD concept**
  - **Plan to implement LTS Option III-CD for MELLLA+ lead plants**

Approach Objectives

- **Lasting fix to existing LTS III DIVOM issue**
- **Minimize method complexity**
- **Reliable detection algorithms/suppression methods**
- **Avoid significant HW/SW modifications**
- **Minimize impact on reload analysis**
- **Acceptable to NRC**

Proposed Approach

- **Introduce new efficient reactor instability detection method**
- **Minimize method complexity**
- **Reliable detection algorithms/suppression methods**
- **No hardware changes**
- **Minimal SW change to implement new detection logic**
- **Eliminate detailed cycle specific reload analysis**

Summary

- **LTS III-CD expected to provide adequate protection against reactor instability**
- **Separate LTR for LTS III-CD will be generated and submitted**
- **M+LTR will reference LST III-CD LTR**

M+LTR with LTS Option III-CD concept resolution provides adequate technical content to initiate NRC review of M+LTR

Draft

MELLLA+ Implementation Target Plan

- **M+LTR Submittal** **01/02**
- **LTR for LTS III-CD** **06/02**
- **Plant Specific Submittals:**

	M+SAR	Expected SER
– **Clinton:**	**TBD**	**TBD**
– **Brunswick:**	**TBD**	**TBD**
– **Browns Ferry:**	**01/03**	**TBD**

- **Proposed:**
  - **Initiate M+LTR Review** **01/02**
  - **MELLLA+ Technical Meeting with Staff** **04/02**
  - **Technical Review Follow-up w/ Staff in SJ** **06/02**
  - **Initiate stability Technical Review** **07/02**
- **NRC SER on**
  - **LTS III-CD** **01/03**
  - **M+LTR** **01/03**
- **Questions/Feedback**

DRAFT

GE Nuclear Energy

TRACG Application for ATWS Overpressure Transient Analyses

Open Session

Presentation to USNRC
Fran Bolger
March 27, 2002

Objectives

- Propose a methodology,via Licensing Topical Report (LTR), to perform BWR/2-6 licensing analyses for ATWS overpressure transients with TRACG

- Obtain NRC approval (SER) to use TRACG for the ATWS overpressure transient application

Scope

- Limit the scope of the LTR to the overpressure portion of the ATWS transient

- Utilize the same LTR format as the recently approved TRACG AOO Application LTR

Nuclear Power Plant Selection

- BWR/2, external pump, variable speed recirculation pumps
- BWR/3, jet pump, variable speed recirculation pumps
- BWR/4, jet pump, variable speed recirculation pumps
- BWR/5, jet pump, valve flow control or variable speed recirc pumps
- BWR/6, jet pump, valve flow control, fast scram

Applicable to BWR/2-6

Code Documentation

- **TRACG Model Description LTR**
- **TRACG Qualification**
- **TRACG Application for AOO Transient Analyses**
- **TRACG02A User's Manual**
- **TRACG Application for ATWS Overpressure Transient Analyses**
  - to be submitted

Code Internal Documentation and Application Procedures

Compliant with the intent of NQA 1, Part 2.7 and the overlapping requirements from 10CFR50 Appendix B governing all aspects of software development, testing, documentation, deployment and control.

Proposed Schedule - 2002