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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,

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- Attachments:
- 1) *Stability LTS Option III Licensing Basis For MELLA+, 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**

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**Stability LTS Option III Licensing Basis  
For MELLA+**

**LTS Option III-CD  
(Confirmation Density)**

**Open Session**

**Presentation to USNRC  
Israel Nir**

**March 27, 2002**



*Draft*



## *Meeting Objective*

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



# *Outline*

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



# *Introduction*

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- **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*

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- **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*

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- **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*

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- **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**



# **MELLLA+ Implementation Target Plan**

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

	<u><b>M+SAR</b></u>	<u><b>Expected SER</b></u>
– <b>Clinton:</b>	<b>TBD</b>	<b>TBD</b>
– <b>Brunswick:</b>	<b>TBD</b>	<b>TBD</b>
– <b>Browns Ferry:</b>	<b>01/03</b>	<b>TBD</b>
- **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**

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***TRACG Application for  
ATWS Overpressure  
Transient Analyses***

***Open Session***

***Presentation to USNRC  
Fran Bolger  
March 27, 2002***



# ***Objectives***

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- 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**

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- 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***

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- 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***

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- **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***

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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***

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