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**Subject:** ANO Spent Fuel Pool Reactivity Control Presentation

Tom,

Attached is a simple power point presentation of the major talking points we will discuss on Thursday. If we decide to include drawings I'll send them to you in a separate e-mail.

Thanks for your help in pulling this together,

Dana

<<Spent Fuel Pool Reactivity Control.ppt>>

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# Spent Fuel Pool Reactivity Control

- Introduction -
- Meeting Purpose:
  - To communicate ANO's future plans for use of Metamic as a poison panel insert in the ANO-1 and ANO-2 Spent Fuel Pools.

# Spent Fuel Pool Reactivity Control

- **ANO-1 Current Status** (Affected CTS 3.8.15, 3.8.16, Figures 3.8.1 & 3.8.2, 5.4.1 & 5.4.2; ITS 3.7.15 & 4.3.1.1)
  - Spent Fuel Pool description, two regions one of which contains Boraflex poison.
  - Analysis originally assumed a boron 10 content to 90% of minimum design areal loading.
  - August 2002 - Boraflex degradation forecast to go below assumed boron 10 content.
  - Compensatory measures will be implemented Generic Letter 91-18. (Letter to NRC dated March 18, 2002)

# Spent Fuel Pool Reactivity Control

- **ANO-2 Current Status** (TS 3.9.12.a, 3.9.12.b, & 3.9.12.c, Figures 3.9.1 & 3.9.2, TS 5.3.1 & 5.3.2)
  - ANO-2 Pool description, two regions one of which contains Boraflex poison.
  - Analysis originally assumed a boron 10 content to 90% of minimum design areal loading.
  - August 2003 - Boraflex degradation forecast to go below assumed 90% content.

# Spent Fuel Pool Reactivity Control

- **Project Objectives**

- Provide long term solution for Spent Fuel Pool reactivity control (with no credit for Boraflex).
- Provide for storage of high enrichment, low burnup fuel assemblies simplifying Spent Fuel Pool loading patterns in any region.
- For ANO-1 support storage of fuel assemblies that have an initial enrichment of less than or equal to 5.0 w/o U-235.

# Spent Fuel Pool Reactivity Control

- **Project Status**

- Holtec International, Inc. is primary contractor.
- Designated a portion of current region 2 in each unit's Spent Fuel Pool to be used as a new Region 3 in which poison panels will be inserted in the rack flux traps.
- Based on analysis, Metamic was selected as the only material that satisfied the project objectives.

# Spent Fuel Pool Reactivity Control

- **Conceptual Design**
  - Racks
  - Insert Design
  - Testing

# Spent Fuel Pool Reactivity Control

- **Project Schedule**

- July/August 2002 - Submit Metamic Topical
- October 2002 - Submit ANO-1 and ANO-2  
Tech Spec changes

- **ANO need dates for license amendments**

- July 2003 - ANO-2
- October / November 2003 - ANO-1

# Spent Fuel Pool Reactivity Control

- **Conclusion**

- ANO is proposing a long term solution to Boraflex degradation with the use of Metamic inserts and with the creation of a new region in each unit's Spent Fuel Pool.