

# NRC/BWROG Meeting

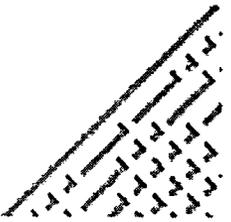
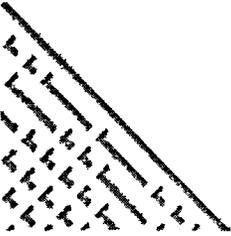
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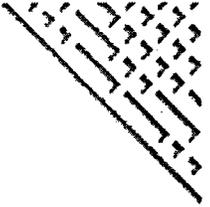
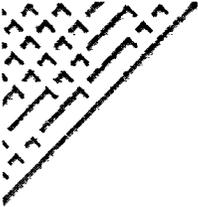
## Containment Overpressure Credit for NPSH

NRC Headquarters

Rockville, MD

September 27, 2006

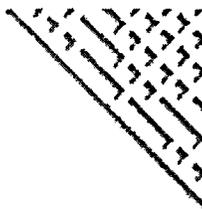
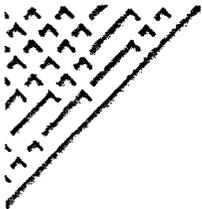




# Introduction and Purpose of Meeting

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- ❖ Present Containment Overpressure Credit for NPSH Committee plans and schedule
- ❖ Obtain staff agreement on approach and end product to meet staff needs



# BWROG Overview

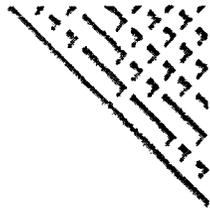
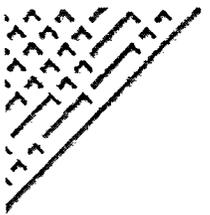
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## ❖ BWROG Mission

- To provide a forum, in the spirit of partnership with General Electric, which allow its member utilities to maintain and improve plant safety, achieve higher plant reliability, minimize and share costs, facilitate regulatory interaction, and effectively apply limited technical resources for mutual resolution of issues applicable to two or more members.

❖ All US BWR utilities are members

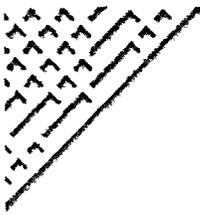
❖ 16 international associate member utilities



# BWROG Overview

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- ❖ BWROG managed by utility personnel
- ❖ Generic Projects
  - Must apply to fleet or one of the product lines
  - Executive approval and oversight
  - Currently 18 active generic projects
- ❖ Non-Generic Projects
  - Two or more utility participants
  - Primary Representative approval and oversight
  - Currently 20 active non-generic projects



# BWROG Overview



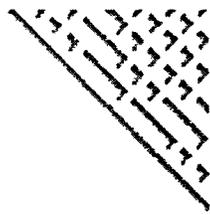
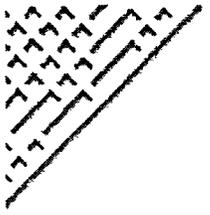
Issue Identification

Strategy, Scope & Funding Definition  
(Ad Hoc)

Strategy, Scope & Funding Approval

Review & Monitor Work Performance

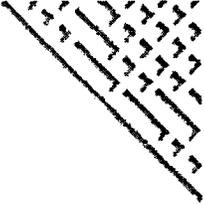
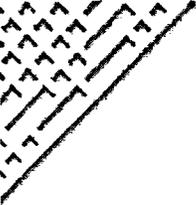
Approve Final Products and Distribution



# Background

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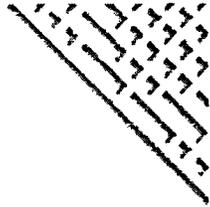
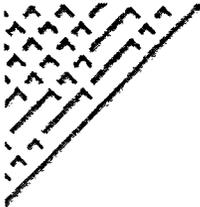
- ❖ NRC staff presented proposed RG 1.82 revision to ACRS in September 2005 meeting
- ❖ ACRS rejected proposed revision in letter dated September 20, 2005
  - Requested clarification and additional restrictive guidance such as:
    - ❖ Demonstrate that there are no practical alternative approaches
    - ❖ Grant credit only for robust containments
    - ❖ Limit the time intervals for which such credit is needed



# Background

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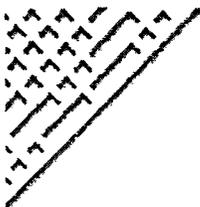
- ❖ Brian Sheron called Lewis Sumner, BWROG Executive Chairman requesting meeting to discuss need for containment overpressure credit for NPSH
  - Some plants rely on containment overpressure but others do not
  - Indicated that this may be due to inconsistent assumptions and methods among BWRs
  - Requested BWROG involvement to provide information that could be used by staff to address ACRS issues
- ❖ Follow-up call between Joe Conen (BWROG Chairman) and Tom Martin (NRC) provided added detail of staff needs



# Background

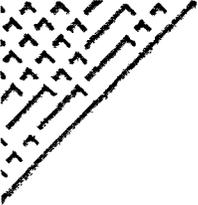
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- ❖ BWROG authorized Ad Hoc funding to hold meeting and determine role of BWROG
- ❖ Ad Hoc committee was formed and a meeting was held in April 2006
- ❖ Ad Hoc committee proposed work scope and funding for Containment Overpressure Credit for NPSH Committee
- ❖ Committee was approved by BWROG Executives in May 2006



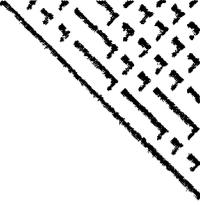
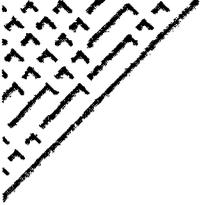
# Containment Overpressure Credit Committee Objective

- ❖ Develop guidance for NRC approval of credit for containment overpressure
  - Define conservatisms in methodology
  - Assess safety implications
  - Define reasonable and consistent requirements and methods



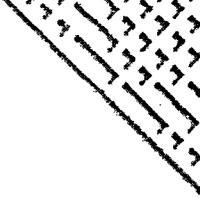
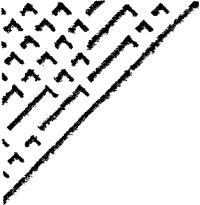
# Containment Overpressure Credit Committee Work Scope

- ❖ Identify example plant – Monticello
- ❖ Review containment analysis inputs and methods for conservatisms
- ❖ Perform sensitivity study to assess impact of conservatisms
- ❖ Identify conservatisms in example plant NPSH analysis



# Containment Overpressure Credit Committee Work Scope

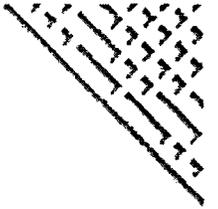
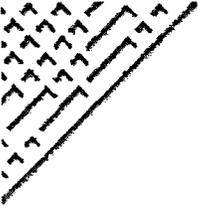
- ❖ Perform containment analyses for example plant
  - Licensing basis inputs
  - Realistic inputs
  - Compare results
- ❖ Perform risk assessment
- ❖ Assess effect of credit for containment overpressure on special events
- ❖ Write report and submit results to NRC (type of submittal TBD)



# Schedule



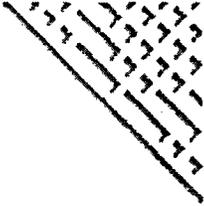
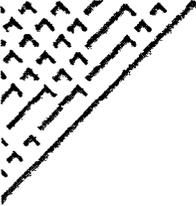
- ❖ Sensitivity study will be complete by end of 2006
- ❖ Remaining work to be done in 2007
- ❖ Submittal in September, 2007



# Submittal Content

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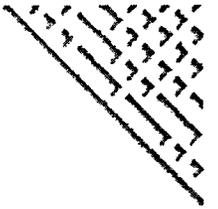
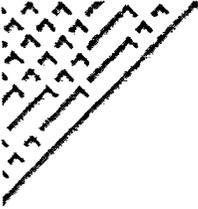
- ❖ Anticipated submittal topics
  - Conservatism and the effect on the need for containment overpressure credit
  - Proposed methodology for containment analysis that includes which conservatisms should be relaxed to support a license amendment request
  - Acceptance criteria (or range of analysis results) that could make NRC review more efficient
  - Effect of credit for containment overpressure on special events
  - Alternatives to containment overpressure credit
  - Risk associated with taking credit for containment overpressure on ECCS performance



# Submittal Content



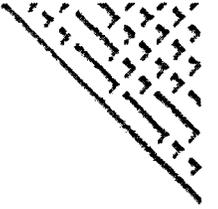
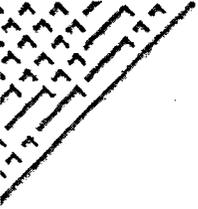
- ❖ Form of submittal to best meet staff needs
  - Technical Report for input to Reg Guide
  - Markup or comments on draft Reg Guide
  - Markup or comments on Reg Guide 1.82
  - Topical Report containing methodology
  - Other??



# Fee Waiver Consideration

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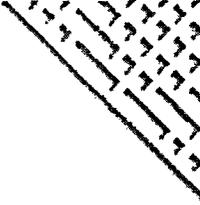
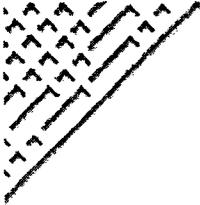
- ❖ BWROG believes that the submittal should be exempt from review fees per 10 CFR 170.11
  - (a) No application fees, license fees, renewal fees, inspection fees, or special project fees shall be required for:
    - (1) A special project that is a request/report submitted to the NRC-
      - (ii) In response to an NRC request (at the Associate Office Director level or above) to resolve an identified safety, safeguards, or environmental issue, or to assist NRC in developing a rule, regulatory guide, policy statement, generic letter, or bulletin; or
      - (iii) As a means of exchanging information between industry organizations and the NRC for the specific purpose of supporting the NRC's generic regulatory improvements or efforts.
- ❖ BWROG effort was requested by Brian Sheron, Associate Director for Project Licensing & Technical Analysis



# Fee Waiver Consideration

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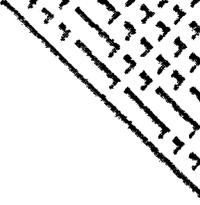
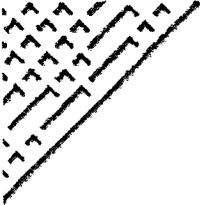
- ❖ BWROG believes that the submittal should be exempt from review fees per 10 CFR 170.11 (cont'd)
  - (A) *This fee exemption applies only when:*
    - (1) It has been demonstrated that the report/request has been submitted to the NRC specifically for the purpose of supporting NRC's development of generic guidance and regulations (e.g., rules, regulations, guides and policy statements);
    - (2) The NRC, at the time the document is submitted, plans to use it for one of the purposes given in paragraph (a)(1)(iii)(A)(1) of this section. In this case, the exemption applies even if ultimately the NRC does not use the document as planned; and
    - (3) The fee exemption is requested in writing to the Chief Financial Officer in accordance with 10 CFR 170.5, and the Chief Financial Officer grants this request in writing.



# Fee Waiver Consideration

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- ❖ BWROG would not fund this activity without the request from Brian Sheron
  - This is not an initiative by the BWROG to resolve a licensing or safety issue
  - It is being done specifically to support NRC's development of a Reg Guide
  - BWROG member utilities are not the primary beneficiaries and will not gain direct benefit from the submittal
- ❖ BWROG will request fee waiver when submittal is made to staff in accordance with 10 CFR 170.11



# Conclusion

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- ❖ Action items, follow up discussions, next communication, etc.