

# BWR OWNERS' GROUP

J.E Conen, Chairman  
Tel: (734) 586-1960  
conenj@dteenergy.com

Detroit Edison Company • 200 TAC • 6400 North Dixie Highway • Newport, MI 48166

## Project Number 691

BWROG-05033  
December 20, 2005

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

**Subject:** BWR Owners' Group Submittal of Structural Integrity Associates Fracture Mechanics Methodology Licensing Topical Report

### **BWROG Project Number 691**

**Enclosure:** SIR-05-044, "Pressure Temperature Limits Report Methodology for Boiling Water Reactors", Revision 0, December 2005

**Attention:** Chief, Information Management Branch  
Division of Program Management

The BWR Owners' Group (BWROG) is submitting the enclosed Licensing Topical Report (SIR-05-044), "Pressure Temperature Limits Report Methodology for Boiling Water Reactors", Revision 0, dated December 2005 under the NRC Licensing Topical Report (LTR) program for review and acceptance for referencing in subsequent licensing actions. Staff review and an associated Safety Evaluation Report is requested by December 2006.

The BWROG is providing this LTR to support the ability of BWR licensees to relocate their Pressure-Temperature (P/T) curves and numerical values of the other P/T limits (such as heatup/cooldown rate) from Technical Specifications to a Pressure Temperature Limits Report (PTLR), a licensee-controlled document, using the guidelines provided in Generic Letter 96-03 (Relocation of the Pressure Temperature Limit Curves and Low Temperature Overpressure Protection System Limits). The attached LTR details the fracture mechanics methodology developed by Structural Integrity Associates, Inc. (SIA) for use by BWR licensees in preparing their P/T curves and limits. It is intended that this methodology can be used with any of the current NRC-approved methods for calculating reactor pressure vessel fluence for deriving the requisite P/T curves and limits.

D044

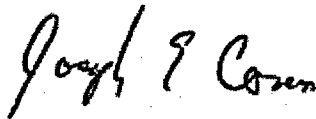
BWROG-05033  
December 20, 2005  
Page 2

Consistent with the Office of Nuclear Reactor Regulation, Office Instruction LIC-500, "Processing Request for Reviews of Topical Reports," a public pre-meeting was held between the NRC Staff and the BWROG to discuss this LTR on March 16, 2005. The Staff's comments and suggestions from that meeting have been incorporated into the attached report. In particular, appendices have been added that contain a template for a PTLR based upon the SIA methodology and discuss the use of surveillance capsule data from the Integrated Surveillance Program (ISP).

In accordance with NRC procedures, three (3) copies of the Enclosure are being provided to the BWROG NRC Project Manager for Staff use during the review.

Any questions regarding this submittal can be directed to the undersigned or Tony Browning (Nuclear Management Company), BWROG PTC Committee Chairman at (319) 851-7750.

Sincerely,



Joseph E. Conen, Chairman  
BWROG Owners' Group

cc: JC Bunt, BWROG Vice Chairman  
BWROG EOC  
BWROG Primary Representatives  
BWROG PTC-SIA Committee  
Michelle Honcharik, USNRC (3 copies)  
Technical Specification Branch Office of  
Nuclear Reactor Regulation  
TG Hurst, GE  
F Emerson, GE