

April 26, 2011

Document Control Desk  
U. S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, MD 20852

Attention: Jonathan Rowley

Subject: Project No. 704 – “BWRVIP-241: BWR Vessel and Internals Project, Probabilistic Fracture Mechanics Evaluation for the Boiling Water Reactor Nozzle-to-Vessel Shell Welds and Nozzle Blend Radii”

Enclosed are five (5) copies of the report “BWRVIP-241: BWR Vessel and Internals Project, Probabilistic Fracture Mechanics Evaluation for the Boiling Water Reactor Nozzle-to-Vessel Shell Welds and Nozzle Blend Radii,” EPRI Technical Report 1021005, October 2010. This report is being transmitted for NRC review approval in accordance with NRC topical report submittal procedures. We anticipate that the NRC review of the enclosed report will be NRC fee billable to the BWRVIP.

The enclosed report documents supplemental analyses for boiling water reactor (BWR) reactor pressure vessel (RPV) recirculation inlet and outlet nozzle-to-shell welds and nozzle inner radii to address limitations imposed by the NRC regarding the reduction of American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section XI inspections. The report supplements the analyses documented in BWRVIP-108, which supports reduced nozzle-to-shell weld and nozzle inner radii examinations in accordance with ASME Code Case N-702. NRC approval will allow plants to gain inspection relief for nozzles that would currently not qualify for relief in accordance with the NRC Safety Evaluation for BWRVIP-108.

Please note that the enclosed BWRVIP-241 report contains proprietary information. A letter requesting that the report be withheld from public disclosure and an affidavit describing the basis for withholding this information are provided as Attachment 1.

All proprietary information is highlighted with yellow shading. The proprietary information is also marked with the letters “TS” in the margin indicating the information is considered trade secrets in accordance with 10CFR2.390.

Two (2) copies of the non-proprietary report “BWRVIP-241NP: BWR Vessel and Internals Project, Probabilistic Fracture Mechanics Evaluation for the Boiling Water Reactor Nozzle-to-Vessel Shell Welds and Nozzle Blend Radii,” EPRI Technical Report 1021005NP, October 2010, are also enclosed. This non-proprietary report is identical to the enclosed

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Additional  
copies sent to  
PM  
6004  
NRK

proprietary report except that the proprietary information has been deleted and the letters "NP" appear in the report number.

Also enclosed as Attachment 2 is a "Draft TR Prioritization Scheme Matrix" taken from NRC Office Instruction LIC-500, Revision 4, "Topical Report Process," dated December 14, 2009. As requested in LIC-500, the BWRVIP has provided input in Attachment 2 to assist the NRC staff in prioritizing review of BWRVIP-241.

If you have any questions on this subject please call Randy Schmidt (PSEG Nuclear, BWRVIP Assessment Committee Technical Chairman) at 856-339-3740.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Czufin". The signature is stylized with a large, looped "C" and a long horizontal stroke.

Dave Czufin  
Exelon  
Chairman, BWR Vessel and Internals Project

c: Matt Mitchell, NRC  
Andy Hon, NRC



April 25, 2011

Document Control Desk  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject: Request for Withholding of the following Proprietary Document:**

BWRVIP-241: BWR Vessel and Internals Project, Probabilistic Fracture Mechanics Evaluation for the Boiling Water Reactor Nozzle-to-Vessel Shell Welds and Nozzle Blend Radii, EPRI Technical Report 1021005, October 2010

To Whom It May Concern:

This is a request under 10 C.F.R. §2.390(a)(4) that the U.S. Nuclear Regulatory Commission ("NRC") withhold from public disclosure the information identified in the enclosed Affidavit consisting of the proprietary information owned by Electric Power Research Institute, Inc. ("EPRI") identified above (the "Report"). Proprietary and non-proprietary versions of the Correspondence and the Affidavit in support of this request are enclosed.

EPRI desires to disclose the Report in confidence to assist the NRC. The Report is not to be divulged to anyone outside of the NRC or to any of its contractors, nor shall any copies be made of the Report provided herein. EPRI welcomes any discussions and/or questions relating to the information enclosed.

If you have any questions about the legal aspects of this request for withholding, please do not hesitate to contact me at (650) 855-2164. Questions on the content of the Report should be directed to Randy Stark of EPRI at (650) 855-2122.

Sincerely,

A handwritten signature in cursive script that reads "Christine King".

Christine King  
Sr. Manager, Business & Operations

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## AFFIDAVIT

**RE: Request for Withholding of the Following Proprietary Document:**

BWRVIP-241: BWR Vessel and Internals Project, Probabilistic Fracture Mechanics Evaluation for the Boiling Water Reactor Nozzle-to-Vessel Shell Welds and Nozzle Blend Radii, EPRI Technical Report 1021005, October 2010

I, Christine King, being duly sworn, depose and state as follows:

I am the Senior Manager of Business & Operations for the Nuclear Power Sector at Electric Power Research Institute, Inc. whose principal office is located at 3420 Hillview Avenue, Palo Alto, California ("EPRI"), and I have been specifically delegated responsibility for the above-listed Report that is sought under this Affidavit to be withheld (the "Report"). I am authorized to apply to the U.S. Nuclear Regulatory Commission ("NRC") for the withholding of the Report on behalf of EPRI.

EPRI requests that the Report be withheld from the public on the following bases:

Withholding Based Upon Privileged And Confidential Trade Secrets Or Commercial Or Financial Information:

a. The Report is owned by EPRI and has been held in confidence by EPRI. All entities accepting copies of the Report do so subject to written agreements imposing an obligation upon the recipient to maintain the confidentiality of the Report. The Report is disclosed only to parties who agree, in writing, to preserve the confidentiality thereof.

b. EPRI considers the Report and the proprietary information contained therein (the "Proprietary Information") to constitute trade secrets of EPRI. As such, EPRI holds the Report in confidence and disclosure thereof is strictly limited to individuals and entities who have agreed, in writing, to maintain the confidentiality of the Report. EPRI made a substantial economic investment to develop the Report, and, by prohibiting public disclosure, EPRI derives an economic benefit in the form of licensing royalties and other additional fees from the confidential nature of the Report. If the Report and the Proprietary Information were publicly available to consultants and/or other businesses providing services in the electric and/or nuclear power industry, they would be able to use the Report for their own commercial benefit and profit and without expending the substantial economic resources required of EPRI to develop the Report.

c. EPRI's classification of the Report and the Proprietary Information as trade secrets is justified by the Uniform Trade Secrets Act which California adopted in 1984 and a version of which has been adopted by over forty states. The California Uniform Trade Secrets Act, California Civil Code §§3426 – 3426.11, defines a "trade secret" as follows:

"Trade secret" means information, including a formula, pattern, compilation, program device, method, technique, or process, that:

(1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and

(2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.”

d. The Report and the Proprietary Information contained therein are not generally known or available to the public. EPRI developed the Report only after making a determination that the Proprietary Information was not available from public sources. EPRI made a substantial investment of both money and employee hours in the development of the Report. EPRI was required to devote these resources and effort to derive the Proprietary Information and the Report. As a result of such effort and cost, both in terms of dollars spent and dedicated employee time, the Report is highly valuable to EPRI.

e. A public disclosure of the Proprietary Information would be highly likely to cause substantial harm to EPRI's competitive position and the ability of EPRI to license the Proprietary Information both domestically and internationally. The Proprietary Information and Report can only be acquired and/or duplicated by others using an equivalent investment of time and effort.

I have read the foregoing and the matters stated herein are true and correct to the best of my knowledge, information and belief. I make this affidavit under penalty of perjury under the laws of the United States of America and under the laws of the State of California.

Executed at 3420 Hillview Avenue being the premises and place of business of Electric Power Research Institute, Inc.

Date: April 25, 2011

Christine King 4/25/11  
Christine King



(State of California)  
(County of Santa Clara)

Subscribed and sworn to (or affirmed) before me on this 25 day of April, 2011, by Christine King, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Signature Berthe A. Dahl (Seal)

My Commission Expires 20th day of March, 202015

## Draft TR Prioritization Scheme Matrix

<b>Draft TR Prioritization Scheme Matrix*</b>			
* NRR will evaluate the shaded areas. Industry input on these areas is not requested.			
<b>Factors</b>	<b>Select the Criteria That the TR satisfies</b>	<b>Points Assigned For Each Criteria</b>	<b>Total Points (if points are cumulative, total them for each factor in this column)</b>
<b>TR Classification</b> (Points are cumulative)	Generic Safety Issue	6	6
	Emergent Technical Issue	3	
	Standard TR	1	
<b>Applicability</b> (Points are not cumulative)	Industry-wide Implementation	3	2 (BWRVIP)
	Applicable to entire groups of licensees (BWROG, PWROG, BWRVIP, etc.)	2	
	Applicable only to partial groups of licensees	1	
<b>Specialized Resource Availability</b> (Points are cumulative)	NRC staff expertise is readily available ( <i>The NRC staff will evaluate this criteria</i> )	1.5	0.5 (needed to support utility request for inspection relief)
	Technical data is available/readily accessible ( <i>The NRC staff will evaluate this criteria</i> )	1	
	A SE is requested by a certain date (less than two years) to support a licensing activity. Provide justification.	0.5	
Total Points (Add the total points from each factor and total here): (NRC staff will total the points)			

\* This TR Prioritization Scheme will be used by NRR to support the prioritization of incoming TRs, when necessary. NRR maintains its discretion to prioritize incoming TRs on a case-specific basis, when NRR management deems it necessary to consider other criteria not captured in this prioritization scheme.