Part 21 (PAR) Event # 50636

Rep Org: AREVA, INC.		**Notification Date / Time:** 11/25/2014 10:10 (EST)	
Supplier: AREVA, INC.		**Event Date / Time:** 10/19/2014 (EST)	
		Last Modification: 11/25/2014	
Region: 1	**Docket #:**		
City: LYNCHBURG	**Agreement State:**	Yes	
County:	**License #:**		
State: VA			
NRC Notified by: GAYLE ELLIOTT	**Notifications:**	JAMES NOGGLE	R1DO
HQ Ops Officer: JOHN SHOEMAKER		FRANK EHRHARDT	R2DO
Emergency Class: NON EMERGENCY		ERIC DUNCAN	R3DO
10 CFR Section:		VIVIAN CAMPBELL	R4DO
21.21(d)(3)(i) DEFECTS AND NONCOMPLIANCE		PART 21 GROUP	EMAIL
		HAROLD CHERNOFF	EMAIL

PART 21 - DEFECT IN LOCA ANALYSIS FOR B&W PLANTS

The following information was summarized from the report obtained from the vendor via facsimile:

"The defect is related to the thermal conductivity model in the codes TAC03 and GDTACO which are used in the AREVA LOCA model for B&W plants. The thermal conductivity model does not adequately represent the change in conductivity with burnup for the fuel. The correction of the thermal conductivity model results in the peak cladding temperature limit in 10 CFR 50.46 (2200 degrees F) being exceeded.

"The defect exists for the following plants: Oconee Nuclear Station Unit 1, Oconee Nuclear Station Unit 2, Oconee Nuclear Station Unit 3, Arkansas Nuclear One Unit 1, Three Mile Island Unit 1, and Davis-Besse Unit 1"

If there are any technical questions or concerns, please contact:

Gayle Elliott
AREVA, Inc., 3315 Old Forest Road
Lynchburg, VA 24501
Ph. # 434-841-0306.

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IE19
NRR

Reportable Defect

(i) Name and address of the individual or individuals informing the Commission.

Gayle Elliott, AREVA Inc., 3315 Old Forest Road, Lynchburg, VA 24501

(ii) Identification of the facility, the activity, or the basic component supplied for such facility or such activity within the United States which fails to comply or contains a defect.

The defect is in the LOCA analyses provided by AREVA Inc. for B&W plants.

(iii) Identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect.

AREVA Inc.

(iv) Nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply.

The defect is related to the thermal conductivity model in the codes TACO3 and GDTACO which are used in the AREVA LOCA model for B&W plants The thermal conductivity model does not adequately represent the change in conductivity with burnup for the fuel. The correction of the thermal conductivity model results in the peak cladding temperature limit in 10 CFR 50.46 (2200 degrees F) being exceeded.

(v) The date on which the information of such defect or failure to comply was obtained.

October 19, 2014

(vi) In the case of a basic component which contains a defect or fails to comply, the number and location of these components in use at, supplied for, being supplied for, or may be supplied for, manufactured, or being manufactured for one or more facilities or activities subject to the regulations in this part.

The defect exists for the following plants:

Oconee Nuclear Station Unit 1, Oconee Nuclear Station Unit 2, Oconee Nuclear Station Unit 3, Arkansas Nuclear One Unit 1, Three Mile Island Unit 1, Davis-Besse Unit 1

(vii) The corrective action which has been, is being, or will be taken; the name of the individual or organization responsible for the action; and the length of time that has been or will be taken to complete the action.

AREVA Inc. recommended to the affected plants that the LHR limits be reduced by 2 kw/ft at middle-of-life conditions. This reduction in LHR limits will result in the peak cladding temperature limit being met. The individual utilities are responsible for this action and AREVA believes that this action has been implemented by each utility.

(viii) Any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees.

AREVA Inc. recommended to the affected plants that the LHR limits be reduced by 2 kw/ft at middle-of-life conditions.