Charles H. Cruse
Vice President
Nuclear Energy

1650 Calvert Cliffs Parkway
Lusby, Maryland 20657
410 495-4455

Constellation
Nuclear

Calvert Cliffs
Nuclear Power Plant

A Member of the
Constellation Energy Group

February 26, 2002

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: Calvert Cliffs Nuclear Power Plant
Unit Nos. 1 & 2; Docket Nos. 50-317 & 50-318
Response to Request for Additional Information Concerning the License Amendment Request to Incorporate Methodology References for the Implementation of ZIRLO™ Clad Fuel Rods into the Technical Specifications

REFERENCES:

(a) Telephone Conference between Ms. D. J. Moeller (CCNPP) and Ms. D. M. Skay, et al. (NRC), dated February 12, 2002, same subject

(b) Letter from Mr. C. H. Cruse (CCNPP) to NRC Document Control Desk, dated July 27, 2001, "License Amendment Request: Incorporate Methodology References for the Implementation of ZIRLO™ Clad Fuel Rods into the Technical Specifications"

(c) Letter from Mr. C. H. Cruse (CCNPP) to NRC Document Control Desk, dated January 16, 2002, "Response to Request for Additional Information Concerning the License Amendment Request to Incorporate Methodology References for the Implementation of ZIRLO™ Clad Fuel Rods into the Technical Specifications"

This letter provides the information you requested in the February 12, 2002 teleconference (Reference a) that supports and/or clarifies the information provided in References (b) and (c). Reference (c) provides Calvert Cliffs Nuclear Power Plant (CCNPP) responses to five conditions to the Nuclear Regulatory Commission safety evaluation regarding ZIRLO cladding material. The following is a clarification to one of those conditions:

Condition 4:

Until data is available demonstrating the performance of ZIRLO™ cladding in CENP designed plants, the fuel duty will be limited for each CENP designed plant with some provision for adequate margin to account for variations in core design (e.g., cycle length, plant operating conditions, etc.). Details of this condition will be addressed on a plant specific basis during the approval to use ZIRLO™ in a specific plant.

A001

CCNPP Response:

Initially, the modified Fuel Duty Index (mFDI) of each ZIRLO™ clad fuel pin will be restricted to 523, which is 110% of the maximum fuel duty previously experienced at CCNPP plants. For a fraction of the fuel pins in a limited number of assemblies (no more than eight fuel assemblies), the mFDI of ZIRLO™ clad fuel pins will be restricted to 570, which is 120% of the maximum fuel duty previously experienced at CCNPP.

Currently, the maximum fuel pin value of the mFDI previously experienced at CCNPP is 475. The predicted duty will be verified during the design of each fuel cycle.

If the mFDI and measured oxide thickness correlate as expected or is conservative relative to predictions, the mFDI would no longer be restricted except as required to meet the 100-micron oxide limit. The results from these inspections and measurements will be provided to the Nuclear Regulatory Commission. Prior to increasing the baseline mFDI limit (523) CCNPP will discuss with the Nuclear Regulatory Commission the inspections and measurements supporting the increase.

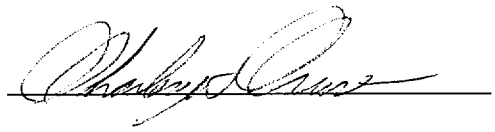
This information does not change the conclusions of the significant hazards determination provided in Reference (b).

Should you have questions regarding this matter, we will be pleased to discuss them with you.

Very truly yours,

STATE OF MARYLAND :
: **TO WIT:**
COUNTY OF CALVERT :

I, Charles H. Cruse, being duly sworn, state that I am Vice President - Nuclear Energy, Calvert Cliffs Nuclear Power Plant, Inc. (CCNPP), and that I am duly authorized to execute and file this License Amendment Request on behalf of CCNPP. To the best of my knowledge and belief, the statements contained in this document are true and correct. To the extent that these statements are not based on my personal knowledge, they are based upon information provided by other CCNPP employees and/or consultants. Such information has been reviewed in accordance with company practice and I believe it to be reliable.



Subscribed and sworn before me, a Notary Public in and for the State of Maryland and County of Calvert, this 26 day of February, 2002.

WITNESS my Hand and Notarial Seal:

Notary Public

My Commission Expires: 02/01/06

Date

CHC/DJM/bjd

cc: R. S. Fleishman, Esquire
J. E. Silberg, Esquire
Director, Project Directorate I-1, NRC
D. M. Skay, NRC
H. J. Miller, NRC
Resident Inspector, NRC
R. I. McLean, DNR