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July 31, 1984

Docket Nos. 50-277
50-278

Mr. D. G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

SUBJECT: Peach Bottom Atomic Power Station,
Units 2 and 3 - Recombiner Capability
Requirements of 10 CFR 50.44(c) (3) (ii)

- REFERENCES:
- (a) T. B. Conner (Conner & Moore) letter to S. J. Chilk (NRC) dated April 8, 1982
 - (b) T. J. Dente (BWROG) letter to D. G. Eisenhut (NRC) dated June 21, 1982
 - (c) W. G. Council (NUSCo) letter to W. J. Dirks (NRC) dated August 6, 1982
 - (d) W. G. Council (NUSCo) letter to W. J. Dirks (NRC) dated November 5, 1982
 - (e) USNRC Generic Letter 84-09 dated May 8, 1984
 - (f) S. L. Daltroff (PECo) letter to J. F. Stolz (NRC) dated June 2, 1983

Dear Mr. Eisenhut:

This letter responds to Generic Letter 84-09 regarding recombimer requirements of 10 CFR 50.44(c) (3) (ii). In reference (a), Philadelphia Electric Company petitioned for reconsideration and alternatively exemption from Interim Requirements related to Hydrogen Control, 10 CFR 50.44(c) (3) (ii). This petition was based on our contention that inerting of the primary containment was the primary means of combustible gas control used at Peach Bottom and that, as such, the recombimer capability requirement did not apply.

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The Boiling Water Reactor Owners' Group (BWROG) and Northeast Utilities (NUSCo) have subsequently submitted substantial information (references b, c & d) which demonstrates that post-LOCA recombiner capability is not required for BWR's with inerted Mark I containments. In Generic Letter 84-09 (reference e), the NRC acknowledged the validity of the BWROG contentions and stipulated that "a Mark I BWR plant will be found not to rely upon purge/repressurization systems as the primary means of hydrogen control if certain technical criteria are satisfied". Thus, plants meeting these technical criteria are not required to have recombiner capability per 10 CFR 50.44(c)(3)(ii).

BWROG generic studies were directed by Philadelphia Electric Company personnel and specifically apply to Peach Bottom Units 2 and 3. Additionally, NUSCo submittals on this topic have been reviewed and confirmed to apply to the Peach Bottom units. Inerting is the primary means of combustible gas control utilized at Peach Bottom and a safety-grade Containment Atmosphere Dilution (CAD) System has been provided as a backup. The CAD system is described in FSAR Supplement I, Response to Question 14.6. The following Peach Bottom Atomic Power Station information is submitted relative to the specific criteria stated in Generic Letter 84-09:

- 1) Technical Specification 3.7.A.5.a requires that the containment atmosphere be maintained at less than 4% oxygen.
- 2) Pneumatic control systems inside containment are supplied with recycled containment atmosphere by the Primary Containment Instrument Gas System as described in FSAR Supplement 1, Response to Question 10.4. Essential pneumatic users inside containment (i.e., ADS, SRV's) are provided with a safety-grade backup supply derived from cylinders of nitrogen gas as described in reference (f).
- 3) There are no known potential sources of oxygen in containment following an accident other than radiolysis of the reactor coolant. Appropriate guidance for the management of combustible gases under all accident situations will be a part of the BWR Owners' Group Emergency Procedure Guidelines, Rev. 4. Plant specific procedures based on this guidance will be implemented following NRC approval of the EPG's. In the interim, post-accident combustible gas control practices will be in accordance with plant Technical Specification 3.7.A.5 and CAD operating procedures S17.1, S17.2, and S17.3.

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Based on the above, it is concluded that Peach Bottom is in compliance with the technical criteria established in Generic Letter 84-09 and that recombiner capability is therefore not required.

Please contact us if further information on this topic required.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Shafiq", is written over the typed text "Very truly yours,".

cc: A. R. Blough, Site Inspector