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October 7, 1983

Mr. A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Limerick Generating Station, Units 1 and 2
Core Performance Branch

Reference: Telecon, W. Brooks (NRC) to R. J. Stipceovich
and D. F. Ciarlone (PECO), July 15, 1983

File: GOVT 1-1 (NRC)

Dear Mr. Schwencer:

As requested by the Core Performance Branch Reviewer in the reference telecon, with this letter we are providing additional information on the Misplaced Bundle Accident Analysis presented in FSAR Section 15.4.7.

The first attachment, entitled Requested Additional Information, clarifies the analytical results of this accident presented in FSAR Table 15.4-6.

The second attachment is a draft replacement for FSAR Table 15.4-6. This revision is being made to document the clarification discussed in the first attachment.

The attached draft FSAR revision will be incorporated into the FSAR exactly as it appears on the attachment in the revision scheduled for November, 1983.

Sincerely,

DFC/gra/J-4

Copy to: See Attached Service List

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cc: Judge Lawrence Brenner (w/o enclosure)
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REQUESTED ADDITIONAL INFORMATION
CORE PERFORMANCE BRANCH

Subject: FSAR Subsection 15.4.7, Misplaced Bundle Accident

Reference: Telecon, W. Brooks (NRC) to R. J. Stipceovich and D. F. Ciarlone (PECO), "Questions on FSAR Table 15.4-6, Initial Conditions and Results of Fuel Bundle Loading Error," July 15, 1983.

Concern: In reference telecon the NRC reviewer questioned the the information presented in Table 15.4-6. Specifically, he questioned the notation used to specify the location of the most severe error (with respect to each of the two criteria used to evaluate this accident), and he questioned the meaning of the Minimum CPR data as presented in the Rev. 23, 8/83 version of this Table.

Response: The core location notation used in Table 15.4-6 followed the convention of the nodal computer code used in the analysis and was not converted into the core location notation used throughout the balance of the Limerick FSAR. This concern has been addressed in replacement Table 15.4-6, attached.

The format of the Table has been revised to clarify that the analysis of this accident assumed an initial operating CPR of 1.40, which is typical of normal operation, and that the accident resulted in a maximum Δ CPR of 0.11. When this Δ CPR is added to the Safety Limit MCPR of 1.06, the Operating Limit MCPR for this accident is 1.17. Since this is within the OLMCPR of 1.22 already established by the limiting transient (Loss of Feedwater Heater, Manual Flow Control), no further change to the FSAR is required to resolve the above concern.

TABLE 15.4-6
INITIAL CONDITIONS AND RESULTS
OF FUEL BUNDLE LOADING ERROR⁽¹⁾

Reactor Power, % rated	100
Core Flow, % rated	100

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For Largest Δ CPR

Core Exposure, MWD/ST	7810
Location of Error	(29,32)
Initial Operating CPR	1.40
Δ CPR with Fuel Loading Error	0.11

For Largest MLHGR

Core Exposure, MWD/ST	5000
Location of Error	(21,54)
Initial LHGR, KW/FT	13.4
(Assumed at Operating Limit)	
LHGR with Fuel Loading Error,	16.97
KW/FT	

(1) Core conditions are assumed to be normal for a hot, operating core.

DRAFT