Jersey Central Power & Light Company

MADISON AVENUE AT PUNCH BOWL ROAD • MORRISTOWN, N.J. 07960 • 539-6111

May 22, 1973

Mr. A. Giambusso
Deputy Director for Operating Reactors
Directorate of Licensing
United States Atomic Energy Commission
Washington, D.C. 20545

Dear Mr. Giambusso:

SUBJECT: OYSTER CREEK NUCLEAR GENERATING STATION
DOCKET 50-219
SUPPLEMENT NO. 4
FACILITY CHANGE REQUEST NO. 4

Pursuant to Title 10, Code of Federal Regulations, Section 50.59, three signed originals and 37 copies of the Oyster Creek Nuclear Generating Station Supplement No. 4 to Facility Change Request No. 4 are herein submitted.

This document supplements information presented in the subject Change Request by indicating that the reported values for beginning of cycle and maximum reactivity effective multiplication factors are conservative in light of the fact that calculational uncertainties have been added to the reported values in a conservative manner in lieu of reporting the design point with the uncertainties indicated separately.

Very truly yours,

Ivan R. Finfrock, Jr.
Vice President

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Enclosures

B1235 3401

SUPPLEMENT NO. 4

FACILITY CHANGE REQUEST NO. 4

OYSTER CREEK NUCLEAR GENERATING STATION

DOCKET NO. 50-219

This Supplement is in response to a Commission concern regarding the minimum shutdown margin reported in Facility Change Request No. 4.

JERSEY CENTRAL POWER & LIGHT COMPANY

By _____
Vice President

STATE OF NEW JERSEY)
)
COUNTY OF MORRIS)

Sworn and subscribed to before me this 23rd day of May 1973.

_____
Notary Public

asb

MARION P. BAWIEC
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Jan. 21, 1974

OYSTER CREEK NUCLEAR GENERATING STATION

SUPPLEMENT NO. 4 TO FACILITY CHANGE REQUEST NO. 4

DOCKET NO. 50-219

AEC QUESTION ON FACILITY CHANGE REQUEST NO. 4:

Please discuss the relationship between the uncertainty in the R values and the value of k_{eff} at the point of maximum reactivity in Cycle 3 and the uncertainty in this value. Why is the design point for k_{eff} with the strongest single rod withdrawn as high as 0.996?

RESPONSE:

Refer to Section IV, E, Facility Change Request No. 4. The reactivity and shutdown margin values were reported and discussed in a context of being conservatively biased rather than being most probable values with superimposed uncertainties. Rearranging the reported values would yield:

	BOC	At Max. Reactivity
k_{eff}, Strongest Rod Withdrawn	0.984±0.004	0.987±0.009

The R value would be 0.003±0.005. Therefore, the design point for the maximum reactivity with the strongest rod withdrawn does not exceed 0.99.