Docket Nos. 50-580

JUN 2 6 1979

MEMORANDUM FOR: Robert Gilbert, EPM

Environmental Projects Branch No. 2, DBB

FROM:

William S. Bivins, Leader Hydrologic Engineering Section Hydrology-Meteorology Branch, DSE

SUBJECT:

FLOODPLAIN CONSIDERATIONS

PLANT NAME: Erie Nuclear Units 1 and 2

LICENSING STAGE: CP

DOCKET NUMBERS: 50-580/587

RESPONSIBLE GRANCH: EPB#2; R. Gilbert, EPM

POOR ORIGINAL

REGULATORY COMMENTER GORY

As per your request, enclosed is a discussion of floodplain issues, in conformance with Executive Order 11988, which should be included in the FES. We have concluded that because no ignificant offsite hydrological impacts have been identified, alternatives to the proposed action, as discussed in Executive Order 11988 on Floodplain Management, need not be considered. If other reviewers, e.g., biological and sociological, can come to similar conclusions, you may be able to generalize our statement by eliminating the word "hydrological". This review was performed by M. Fliegel.

Original Signed by Terry L. Johnson

Hydrologic Engineering Section
Hydrology-Meteorology Branch
Division of Site Safety and
Environmental Analysis

Enciosure: As Stated

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cc: w/enclosure:

. Muller

W. Kreger

D. Sells

HMB RDG

NEC POEM 318 (9-76) NECM 0249

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## FLOODPLAIN CONSIDERATIONS

In conformance with Executive Order 11988, Floodplain Management, we have investigated the floodplain related aspects of the proposed plant, during both construction and operation. We conclude, that because no significant offsite hydrological impacts have been identified, alternatives to the proposed action, as discussed in Executive Order 11988, Floodplain Management, need not be considered.

The floodplains relevent to the site are the section of Lake Eric coast near the intake/discharge system and the upper reaches of two tributaries to Cranberry Creek.

The intake and discharge structures are both offshore on the lake bottom in over 5 meters of water. Because of their small size relative to the scale of the lake and its shoreline, we conclude that they will have no measurable effect on shoreline processes; i.e., water levels or coastal erosion. Section 4.2.2 contains a discussion of the impacts of emplacing these structures and their pipelines. The makeup water pump house will be constructed on a bluff overlooking the lake and approximately 10 meters above the lake surface. It is well above the floodplain.

The headwaters of the east branch and a tributary of the west branch of Cranberry Creek will be permanently relocated during construction. No plant structures will be built on the floodplains of these relocated streams. Furthermore, no significant change in the capacity of the floodplain to carry large floods, or to speed runoff adversely, are anticipated. A discussion of the impacts resulting from the stream alterations is contained in Section 4.3.2.2.