



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

IN REPLY REFER TO:

February 11, 1966

DOCKET NO. 50-245
-247

Mr. Edson G. Case, Assistant Director
Division of Reactor Licensing
U. S. Atomic Energy Commission
4915 St. Elmo Avenue
Bethesda, Maryland 20545

Dear Mr. Case:

In response to your requests of November 22, 1965 and December 10, 1966, we are enclosing preliminary draft reports of those geological features relating to the proposed Millstone Point and Indian Point reactor site locations that may have a bearing upon your evaluations of suitability.

Mr. H. W. Coulter prepared the geologic evaluation; the hydrologic conditions are now being reviewed and we hope to forward an evaluation shortly.

Sincerely yours,

Donald R. Nichols, Acting
Assistant Chief Geologist
for Engineering Geology

Enclosures

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

DRAFT: February 1966

Indian Point Nuclear Generating Unit No. 2
Buchanan, New York

The detailed analysis of the geology of the Indian Point plant site presented in A.E.C. Docket No. 50-247, Exhibit B, Volume 1, was prepared by Mr. Thomas W. Fluhr, who is one of the most widely experienced and highly regarded engineering geologists in the New England area. Based on a careful review of the applicant's exhibit and of the available literature, it appears that their geological analysis is carefully derived and presents an adequate appraisal of those aspects of the geology which would be pertinent to an engineering evaluation of the site.

Although it may be anticipated that earthquakes within the general region will continue with approximately the same frequency and with approximately the same intensity with which they have been recorded during the past 100 years, there are no demonstrable controls which could be expected to concentrate such events in the immediate vicinity of the site.

Henry W. Coulter



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DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

DRAFT: February 1966

Millstone Nuclear Power Reactor Site
Waterford, Connecticut

The detailed analysis of the geology of the Millstone Nuclear Power Station presented in A.E.C. Docket No. 50-245, was carefully reviewed and compared with the available geological literature. The analysis appears to be carefully derived and to present an adequate appraisal of those aspects of the geology which would be pertinent to an engineering evaluation of the site.

Although it may be anticipated that earthquakes within the general region will continue with approximately the same frequency and with approximately the same intensity with which they have been reported during the past several hundred years, there are no demonstrable geologic controls which could be expected to concentrate such events in the immediate vicinity of the site.

Several confusing or misleading statements in A.E.C. Docket No. 50-245 concerning the seismicity of the site were noted.

In respect to Figure 24, entitled: "Compilation of Earthquakes 1668-1964, Southern New England-New York Area", it is stated that "all earthquakes of record are shown on the map." Comparison of this map with that of W.E.T. Smith¹ indicates that such is not the case. It is further stated that "The only area near Millstone Point recording more than one earthquake is the East Haddam-Moodus area of Connecticut." Records show, however, a cluster of three earthquakes in the New London-Groton area considerably closer to the Millstone site than East Haddam.

¹/Smith, W.E.T., 1962, Publications of the Dominion Observatory, Ottawa, v. 24, no. 5.

Henry W. Coulter

DEPARTMENT OF THE INTERIOR
 (Geological Survey)
 Wash --D. R. Nichols

2-11-66 2-14-66 483
 LTR MEMO REPORT OTHER
 X

TO: Case

ORIG: X & CC: lcc OTHER: 8 cys. reproduced
 ACTION NECESSARY CONCURRENCE DATE ANSWERED
 NO ACTION NECESSARY COMMENT BY:

CLASSIF: U POST OFFICE REG. NO.

FILE CODE: DOCKETS 50-245, (247) (SUPPL ONLY)

DESCRIPTION: (Must Be Unclassified)
 Ltr. trans the following in response to requests of 11-22-65 and 12-10:

REFERRED TO	DATE	RECEIVED BY	DATE
Case w/orig & 3 extras --FOR ACTION	2/14		

ENCLOSURES: (orig & cc --8 each reproduced)
 DRAFT (2-66) Report --on Geological features relating to Indian Point 2
 DRAFT (2-66) Report --on Geological featuresMillstone Site.

H. Price (w/info cy.)			
Boyd (w/3 info cys)			

REMARKS: 1 complete cy in each Docket File

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DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
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WASHINGTON 25, D. C.

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Henry W. Coulter

FROM: DEPARTMENT OF THE INTERIOR
 Geological Survey
 Wash -- D. R. Nichols

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OR: MEMO: REPORT: OTHER:

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DRAFT (2-66) Report --on Geological features

Millstone Site.

REMARKS: 1 complete cy in each Docket File

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