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U. S. Department of Interior Washington, D. C. 20240 Lawrence E. Lynn	4-23-73	4-24-73	x			
TO: Mr. Muller	ORIG	CC	OTHER	SENT AEC PDR		x
	1	1		SENT LOCAL PDR		x
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**DESCRIPTION:**

Ltr in response to our 1-17-73 ltr...furnish comments on AEC's draft environmental statement dtd January 1973. for Nine Mile Point Unit 2

**PLANT NAMES:** Nine Mile Point Unit 2

**ENCLOSURES:**

**ACKNOWLEDGED  
DO NOT REMOVE**

FOR ACTION/INFORMATION 4-24-73 LB

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# United States Department of the Interior

OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

ER-73/113

APR 23 1973



Dear Mr. Muller:

This is in response to your letter of January 17, 1973, requesting our comments on the Atomic Energy Commission's draft statement, dated January 1973, on environmental considerations for Nine Mile Point Nuclear Station, Unit 2, Oswego County, New York.

Our comments are presented according to the format of the statement or according to specific subjects.

## Topography and Geology

The brief description of the geology and seismology presented on pages 2-7 and 2-8 is inadequate, in regard to the physical properties of the geologic materials on which the station is founded, for an assessment of the geologic environment relevant to the construction of Units 1 and 2.

As a result of procedures previously established between this Department and the Atomic Energy Commission, the Geological Survey is presently reviewing the geologic aspects of the site that are included in the applicant's Preliminary Safety Analysis Report for Unit 2. Since this review is not completed, we are not able at this time to provide an overall assessment of the impact of the geologic environment related to the station. The completed review and assessment will be made part of the public record in the AEC licensing procedures.

We believe that the environmental statement should include an analysis of the geologic and seismologic environments in which the station is cited to provide a basis for independent judgments by others that these aspects have been appropriately considered. A more comprehensive summary of the geologic and seismologic analysis, as presented in the applicant's Preliminary Safety Analysis Report, should be included in the environmental statement.

2691



[The text in this section is extremely faint and illegible due to low contrast and noise. It appears to be several paragraphs of a document.]

The last sentence of this section should be corrected. According to the seismic zoning map of the U.S. Coast and Geodetic Survey, published in 1969, the Nine Mile Point Station is in damage zone 2 (moderate damage).

#### Historical and Natural Landmarks

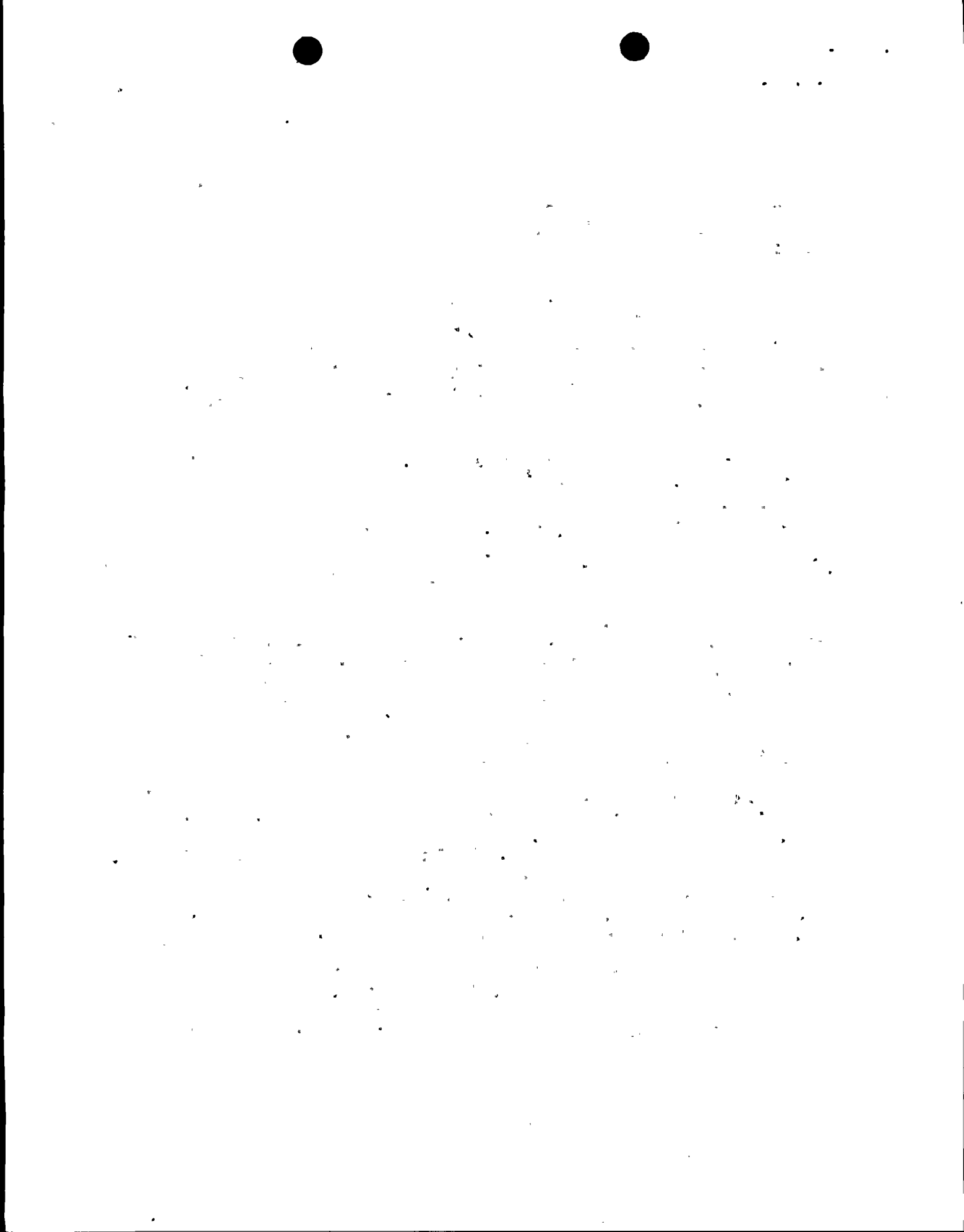
The proposed action will not directly affect any existing or proposed unit of the National Park System or any designated National Historic, Natural, or Environmental Education Landmarks or any site currently being recommended for such status.

Executive Order 11593 of May 15, 1971, directs that Federal plans and programs contribute to the preservation and enhancement of those sites, structures, and objects which are of historical, architectural, or archeological significance. The requirements of this order are not limited to a consideration of sites currently listed on the National Register of Historic Places which was consulted in this case.

An important subsequent step would be a consultation with the State Liaison Officer for Historic Preservation to determine if any properties scheduled for nomination to the National Register of other sites, structures, and objects of significance will be affected by the proposed action. The State Liaison Officer for New York is Mr. Alexander Aldrich, Chairman, New York State Historic Trust, Parks and Recreation, Building 2 - State Campus, Albany, New York 12225.

A professional archeological survey should also be made to establish the presence or absence of archeological resources within the affected area. The results and recommendations from such a survey should be included in the environmental statement in an evaluation of impacts upon cultural resources. Archeological counsel may be obtained from the State Liaison Officer or from Mr. Charles F. Hayes, III, Rochester Museum, 657 East Avenue, Rochester, New York 14607.

We suggest that the final environmental impact statement contain assurances that the previously mentioned consultations have been or will be performed and that it describe measures which will be taken to mitigate impacts or cultural resources.



### Effects on Land Use

According to page 3-1, the station buildings and switch-yards will occupy 10 percent of the site area and that the remaining land will be left in its natural state. Immediately adjacent and east of the site is an estimated additional 600 acres, similar in character, owned by the Power Authority of the State of New York. It appears that the total acreage of lands owned by the applicant and the Power Authority of the State of New York in the natural state is between 1,300 and 1,400 acres. We suggest that the final environmental statement reflect the possible development of an open space multiple use plan for these lands to be oriented towards providing outdoor recreation opportunities.

The plan could be developed by the joint efforts of the applicant, the Power Authority of the State of New York, the New York State Conservation Department, and the County of Oswego. Since the area is only 36 miles from the metropolitan area of Syracuse, an outdoor recreational plan appears to be in the public interest.

### Cumulative Impacts

The five fossil-fueled plants in the area which are in operation or under construction with a total output of 1247MW are not mentioned. We suggest that the combined effects of Nine Mile Point Nuclear Station, James A. Fitzpatrick Nuclear Power Plant, the fossil-fueled plants, and other major waste heat-producing plants be evaluated in the final environmental statement.

The model tests appear to have been very ably performed, with the heat load from Units 1 and 2 and the Fitzpatrick Plant being simulated. However, we recommend that the heat load contributed from the fossil-fueled plants should also be identified and considered in the analysis. The New York State temperature standards state that surface-temperature increases in excess of 3°F shall not occupy an area greater than a radius of 300 feet or an equivalent area. According to the applicant's report, this criterion will be met based on the model tests. However, we don't think that this interpretation can be made.



[The text in this section is extremely faint and illegible due to low contrast and noise. It appears to be a large block of text, possibly a list or a series of paragraphs, but no specific words or structures can be discerned.]



To expedite laboratory testing, the applicant's consultant used a movable test diffuser and manifold for most hydraulic tests. For the final design, a buried model diffuser design was tested and, according to the applicant, showed good correlation between the two model results. Our interpretation of the data does not confirm this opinion. For example, the table on page S4.2-16 of the applicant's report, which compares the tests #1 and #2, indicates a 3°F isotherm area of 15 acres for the fixed diffuser tests as compared with 3.4 acres for the movable diffuser tests.

We are of the opinion that the hydraulic tests would have been better if a smaller scale ratio had been utilized so as to better test the near-field jet effect with no attempt to simulate far-field temperatures.

#### Heat Dissipation System

The draft statement does not discuss the discrepancies we noted in the applicant's report. The general tone of the AEC's review is that only field data can supply a reliable answer concerning potential recirculation among the three nuclear power plants involved and the related thermal build-up. We agree with this assessment, but we have doubts about the likelihood that the plants' discharges will meet New York State temperature standards. A thorough water-temperature monitoring program appears to be of great importance.

Due to our expectation that the State water quality standards cannot be met, we suggest that the applicant present cooling alternatives in the event temperature standards are exceeded. The most viable alternative may be the addition of a separate discharge diffuser for Unit 1. We do not agree with the AEC staff, as stated on page 9-26, that consideration of alternatives is not warranted.

#### Solid Radwaste System

The solid radioactive system is discussed briefly on pages 3-31 through 3-33. Wastes estimated to comprise approximately 900 drums of spent resin, filter sludges, and evaporator bottoms and 600 drums of dry wastes will be shipped offsite annually for disposal. The activity of these wastes is estimated to be 6,300 curies per year. The environmental statement



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should provide more specific information concerning the radionuclides that will be present, such as their physical-chemical states, and their estimated concentrations in the solid wastes that will be shipped offsite for disposal. Such data are necessary to judge the environmental hazard associated with storing or disposing of these wastes. Also, the applicable regulations for their storage onsite and for their disposal offsite should be specified.

#### Radiological Impact on Man

The proposal to dispose of the wastes at offsite locations represents an additional environmental impact, related to the station, that should be evaluated in either the Nine Mile Point environmental statement or a separate environmental statement on the disposal site. It would be appropriate to discuss the licensing provisions and to specify the AEC criteria and responsibilities associated with (1) determination of the suitability of the individual disposal sites to isolate the specific radioactive components of the Nine Mile Point Station wastes from the biosphere for specific periods of time; (2) current and continuing surveillance and monitoring at the sites; and (3) any remedial or regulatory actions that may be necessary at the sites through a specific period of time during which the radioactive components are hazardous.

#### Effect on Terrestrial Environment

The use of herbicides for transmission line maintenance is discussed briefly on page 5-22. We suggest that this discussion be expanded to include the following and corresponding requirements be placed on the applicant.

All pesticides, herbicides, and related chemicals will be applied in a manner fully consistent with the protection of the environment. Use of these chemicals must take into account both known and possible environmental effects. The applicant will consult with the Director of the State Conservation Agency, the County agent, or the nearest office of the Bureau of Sport Fisheries and Wildlife, located in the State where such project-related chemical vegetation control is contemplated. Such contact should be made early in planning so that acceptable chemicals and



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methods of application known to be most desirable can be used with the approval of the concerned agencies.

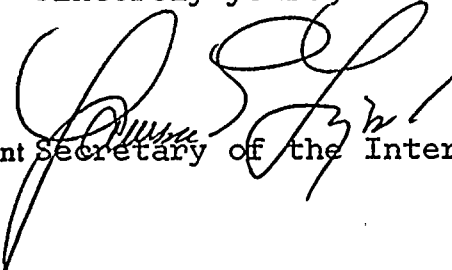
### Plant Accidents

This section contains an adequate evaluation of impacts resulting from plant accidents through Class 8 for airbourne emissions. However, the environmental effects of releases to water is lacking. Many of the postulated accidents listed in Tables 7.1 and 7.2 could result in releases to Lake Ontario and should be evaluated.

We also think that Class 9 accidents resulting in both air and water releases should be described and the impacts on human life and the remaining environment discussed as long as there is a possibility of occurrence. The consequences of an accident of this severity could have far-reaching effects on land and in the Great Lakes which could persist for centuries affecting millions of people.

We hope these comments will be helpful to you in the preparation of the final environmental statement.

Sincerely yours,



Assistant Secretary of the Interior

Mr. Daniel R. Muller  
Assistant Director for  
Environmental Projects  
Directorate of Licensing  
U. S. Atomic Energy Commission  
Washington, D. C. 20545

Regulatory

File cy.

