

UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

Distribution:  
AEC PDR  
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Docket (Enviro)  
EP-4 Reading  
A. Bournia, BWR  
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J. Norris, EP-4  
S. Sheppard, EP-4

Docket No.(s) 50-410

JUN 8 1973

Mr. Tony Stadeker  
Office of Management and Budget  
Executive Office Building  
Washington, D. C. 20503

**ENVIRON, FILE (NEPA)**

Dear Mr. Stadeker:

Enclosed for your information are two copies of the summary sheet for the Final Environmental Statement prepared by the Commission's Regulatory Staff relating to the facility identified in the enclosure to this letter.

The Final Environmental Statement was prepared in accordance with the statement of general policy and procedure on implementation of the National Environmental Policy Act of 1969, as set out in Appendix D of the Commission's regulations, 10 CFR Part 50. A notice of availability of the Final Environmental Statement is being sent to the Office of the Federal Register for filing and publication.

Sincerely,

Daniel R. Muller, Assistant Director  
for Environmental Projects  
Directorate of Licensing

Enclosure:  
List of Documents Transmitted

CONCURRENCE

L:EP-4 *sms*

SMSheppard

6/4/73

*LB*



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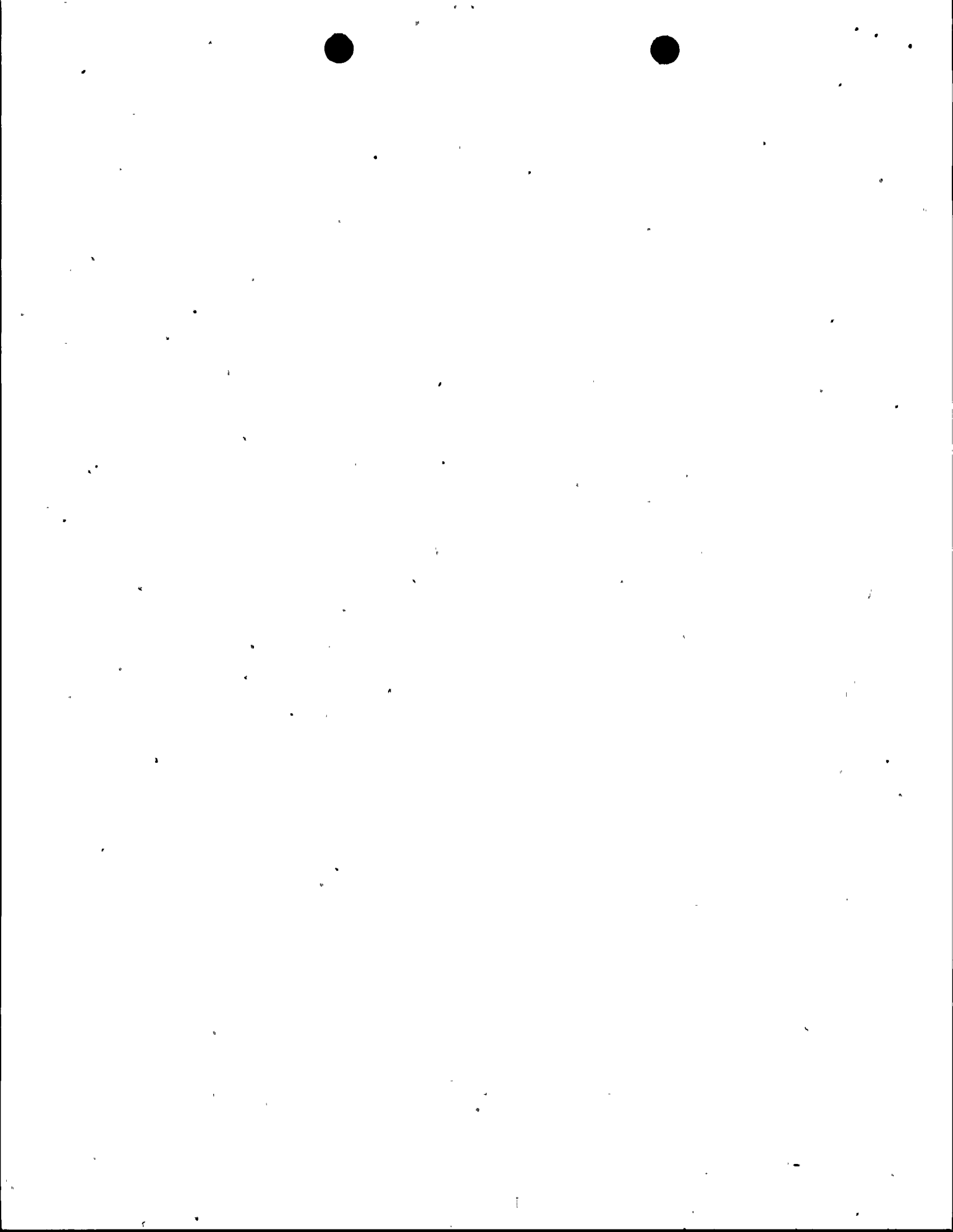
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Name of Facility: Nine Mile Point Nuclear Station Unit 2

Applicant: Niagara Mohawk Power Corporation

Docket Number: 50-410

Document Transmitted: Final Environmental Statement,  
June 1973



### SUMMARY AND CONCLUSIONS

This Final Environmental Statement was prepared by the U. S. Atomic Energy Commission, Directorate of Licensing.

1. This action is administrative.
2. The proposed action is the issuance of a construction permit to the Niagara Mohawk Power Corporation for the construction of Nine Mile Point Nuclear Station Unit 2 located in the Town of Scriba, County of Oswego, State of New York (Docket 50-410). The proposed Unit 2 will share the site with the Applicant's operating Nine Mile Point Nuclear Station Unit 1 which is contiguous to James A. FitzPatrick Nuclear Power Plant site.
3. The Nine Mile Point Station Unit 2 will employ a boiling water reactor which has a nominal rating of 3323 megawatts thermal (Mwt) and a maximum ("stretch") rating of 3489 Mwt to produce 1150 megawatts electrical (MWe). The condenser will be cooled by a once-through system that uses water drawn from and discharged to Lake Ontario. The discharge systems for units 1 and 2 will be combined and will have a total discharge rate of 803,000 gallons per minute.
4. Summary of environmental impact and adverse effects:
  - An existing nine-mile long transmission line corridor will be widened to accommodate a proposed 765-kV transmission line. Four houses will have to be removed, but otherwise land use patterns of the corridor will not be changed. This will result in some aesthetic detraction.
  - Fish will be impinged on the intake screen. Although it should have little or no noticeable effect on the fish population of the lake as a whole, the kill rate at Unit 2, considered in conjunction with the kill rates at Unit 1 and at the FitzPatrick Plant, may be unacceptably high in relation to the fish population in the region of Nine Mile Point. A program of monitoring the kill rate and of determining the local fish population will be required to determine the seriousness and extent of the problem.
  - Small fish eggs and fish larvae are not expected to survive passage through the plant cooling system, which will add an incremental loss of the fish population. Zooplankton are expected to suffer a high mortality rate in the summer. However, even if the rate were 100%, the impact of such mortality among organisms with a short generation time will not be measurable in the area.



- A thermal plume will be present at the discharge. Some juvenile fish may be drawn into it and be killed; however, their numbers are expected to be small. No shifts in algal species from an abundance of diatoms and green algae to blue-green algae are expected. On the whole, the thermal discharge is not expected to have any significant deleterious effect on the biota of the lake.
- If either of the units were to be shut down in the winter, the thermal discharge would decrease. However, the discharge from the other unit through the common discharge structure would continue and would prevent significant fish kills from hot-to-cold thermal shock.
- Chemicals discharged to the lake will be diluted to such low concentrations that they will pose no threat to aquatic life.
- Small amounts of radioactive gaseous and liquid effluents will be released to the environment. The combined gaseous and liquid discharges from the FitzPatrick Plant and Nine Mile Point Units 1 and 2 will meet the requirements given in 10 CFR Parts 20 and 50. The total dose from all effluent pathways received by the approximately 1,000,000 persons (1980 projections) who will live within a 50-mile radius of the FitzPatrick Nuclear Plant and Nine Mile Point Station Units 1 and 2 would be about 47 man-rem per year. By comparison, an annual total dose of about 133,000 man-rem is delivered to the same population as a result of natural radiation background.
- A very low risk of accidental radiation exposure to nearby residents will be created.

##### 5. Principal alternatives considered:

- Abandonment of the facility and construction of another nuclear plant on another site.
- Fossil fuel as an alternative power source at the present site.
- Purchase of power from outside sources.
- Heat dissipation with natural-draft and forced-draft cooling towers, cooling ponds, or spray ponds.





6. The following federal, state, and local agencies were asked to comment on the Draft Environmental Statement:

Federal Agencies

Advisory Council on Historic Preservation  
Environmental Protection Agency  
Department of Agriculture  
Department of the Army, Corps of Engineers  
Department of Commerce  
Department of Health, Education and Welfare  
Department of Housing and Urban Development  
Department of the Interior  
Department of Transportation  
Federal Power Commission

New York State Agencies

Department of Environmental Conservation  
Atomic Energy Council  
State Clearinghouse, Office of Planning Services

Local Agencies

Oswego County Department of Planning

Comments on the Draft Environmental Statement, issued on January 17, 1973, were received from the following Federal, State and local agencies:

Department of Transportation  
Department of Commerce  
Department of Health, Education and Welfare  
Advisory Council on Historic Preservation  
Department of Agriculture  
Department of the Interior  
Federal Power Commission  
Environmental Protection Agency  
State of New York Department of Environmental Conservation  
State University of New York  
Niagara Mohawk Power Corporation  
Central New York Public Interest Research Group

7. This Final Environmental Statement was made available to the public, to the Council on Environmental Quality, and to the agencies noted above in June 1973.



8. On the basis of the analysis set forth in this Statement, after weighing the environmental, economic, technical and other benefits of the Nine Mile Point Nuclear Station Unit 2 against environmental and other costs and considering available alternatives, the Staff concludes that the action called for under NEPA and Appendix D to 10 CFR Part 50 is the issuance of a construction permit for the facility subject to the following conditions for protection of the environment:
- (1) The Applicant will establish a revised and comprehensive biological sampling program to provide a base line of ecological data from which to measure the impact of Station operation on the biota of Lake Ontario. (Sections 5.5, 6.1.)
  - (2) The Applicant will conduct a monitoring and sampling program at the intake structures of Unit 1 and FitzPatrick Plant as outlined in Sections 5.5 and 6.1 to determine the number, species, and size of fish killed at Unit 1 and the FitzPatrick Plant and relate these data to the intake design and field sampling program as outlined in Section 6. When this information is available, the Staff will evaluate the magnitude of the fish-kill problem. As deemed justified, changes in intake design, modification of existing intakes, and/or development and implementation of other preventive methods may be required. (Sections 5.5, 6.1.)
  - (3) The Applicant will conduct a preoperational radiological monitoring program considered by the AEC's Regulatory Staff to be adequate to establish a baseline against which any radiological effects on the environment from operation of the Station can be determined. (Section 6.3.)
  - (4) The Applicant shall implement a surveillance program to determine unanticipated environmental effects which may occur as a result of site preparation and station construction and shall take such corrective action as necessary to alleviate the unanticipated effects.

