

UNITED STATES NUCLEAR REGULATORY COMMISSION

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-220

NINE MILE POINT NUCLEAR STATION, UNIT NO. 1

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an exemption from certain requirements of its regulations to Facility Operating License No. DPR-63, issued to Niagara Mohawk Power Corporation (the licensee), for operation of the Nine Mile Point Nuclear Station, Unit No. 1, located in the town of Scriba, Oswego County, New York.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would exempt the licensee from the requirement of 10 CFR 70.24, that requires that the licensee maintain, in each area in which special nuclear material is handled, used, or stored, a monitoring system that will energize clearly by audible alarms if accidental criticality occurs. The proposed action would also exempt the licensee from the requirements to maintain emergency procedures for each area in which this special nuclear material is handled, used, or stored to ensure that all personnel withdraw to an area of safety upon sounding of the alarm, to familiarize personnel with the evacuation plan, to designate responsible individuals for safety upon sounding of the alarm, and to place radiation survey instruments in accessible locations for use in such an emergency. The proposed action is in accordance with the licensee's application for an exemption dated November 6, 1998.

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The Need for the Proposed Action:

The purpose of 10 CFR 70.24 is to ensure, if a criticality were to occur during the handling of special nuclear material, personnel would be alert to the fact and would take appropriate action. At a commercial nuclear power plant, the inadvertent criticality with which 10 CFR 70.24 is concerned could occur during fuel handling operations. The special nuclear material that could be assembled in a critical mass at a commercial nuclear power plant is in the form of nuclear fuel; the quantity of other forms of special nuclear material that is stored onsite at a given location is small enough to preclude achieving a critical mass. Because the fuel is not enriched beyond 5.0 weight percent uranium-235, and because commercial nuclear plant licensees have procedures and features that are designed to prevent inadvertent criticality, the staff has determined that an inadvertent criticality would not likely occur due to the handling of special nuclear material at a commercial power reactor. Therefore, the requirements of 10 CFR 70.24 are not necessary to ensure the safety of personnel during the handling of special nuclear materials at commercial power reactors.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed action and concludes that inadvertent or accidental criticality will be precluded through compliance with Nine Mile Point Nuclear Station, Unit No. 1 Technical Specifications, the design of the fuel storage racks providing geometric spacing of the fuel assemblies in their storage locations, and administrative controls imposed on fuel handling procedures. The proposed action will not increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in



occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential nonradiological impacts, the proposed action does not involve any historic sites. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, there are no significant non-radiological environmental impacts associated with the proposed action. Accordingly, the Commission concludes that there are no significant environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action, (i.e., the "no-action" alternative). Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statements related to the operation of Nine Mile Point Nuclear Station, Unit No. 1, dated January 1974 (39 Federal Register 3309, dated January 25, 1974).

Agencies and Persons Consulted:

In accordance with its stated policy, on November 19, 1998, the staff consulted with the New York State official, Jack Spath of the New York State Research and Development Authority, regarding the environmental impact of the proposed action. The State official had no comments.

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FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated November 6, 1998, which are available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, D.C., and at the local public document room located at the Reference and Documents Department, Penfield Library, State University of New York, Oswego, New York 13126.

Dated at Rockville, Maryland, this 3rd day of December 1998.

FOR THE NUCLEAR REGULATORY COMMISSION



S. Singh Bajwa, Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation



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