JAN 21 1974

Docket No. 50-220

Niagara Mohawk Power Corporation
ATTN: Mr. Philip D. Raymond
Vice President - Engineering
300 Erie Boulevard West
Syracuse, New York 13202

Gentlemen:

Your letter dated January 11, 1973, with additional information dated August 27, 1973, described the design of and included a safety analysis for the proposed installation of an access platform to the refueling bridge at your Nine Mile Point Unit 1 facility.

We have reviewed the information you provided and have concluded that the proposed change to the facility does not present a significant hazards consideration and that there is reasonable assurance that the health and safety of the public will not be endangered. Accordingly, you may install the proposed access platform as you describe in your letters and in accordance with paragraph 50.59(a) of 10 CFR Part 50. The results of our review are given in the enclosed Safety Evaluation.

Sincerely,

Original signed by
Dennis L. Ziemann

for Donald J. Skovholt
Assistant Director for
Operating Reactors
Directorate of Licensing

Enclosure:
Safety Evaluation

cc: See next page

Appl.

JAN 21 1974

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cc w/enclosure and cy of NMP ltrs
dtd 1/11/73 & 8/27/73:
Mr. Hans L. Hamester
ATTN: Joan Sause
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Environmental Protection Agency
Room 647A East Tower, Waterside Mall
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Washington, D. C. 20460

Mr. Paul Arbesman
Environmental Protection Agency
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DATE	1/18/74	1/18/74	1/21/74	1/21/74		

UNITED STATES ATOMIC ENERGY COMMISSION

SAFETY EVALUATION BY THE DIRECTORATE OF LICENSING

DOCKET NO. 50-220

NIAGARA MOHAWK POWER CORPORATION

PROPOSED INSTALLATION OF AN ACCESS PLATFORM TO THE REFUELING BRIDGE AT NINE MILE POINT UNIT 1

By letter dated January 11, 1973, Niagara Mohawk proposed a change to that described in the FSAR involving the installation of an access platform to the refueling bridge at Nine Mile Point Unit 1 (NMP-1). The platform will be used to aid in the removal and replacement of the drywell and reactor vessel heads and in the cleaning of the reactor refueling cavity walls.

We requested additional information by letter dated July 26, 1973, concerning the structural design methods, loading criteria, hoist and bridge drive design basis, control systems and safety interlocks, and an overall failure analysis. By letter dated August 27, 1973, Niagara Mohawk provided the requested additional information to enable us to complete our review.

The access platform, consisting of a safety platform attached to two telescoping tube assemblies which are secured to the extended top of the refueling bridge structure, provides a movable working platform in the reactor refueling cavity. High pressure spray nozzles are mounted on a vertical manifold assembly and attached to the platform. The nozzle manifold maintains the spray nozzles perpendicular to the cavity wall to provide for suitable cleaning action.

The use of the platform will simplify access to the reactor cavity and reduce the time required to clean the cavity and reduce personnel residence time in the cavity, thereby resulting in reduction of personnel radiation exposure.

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To accommodate the addition of the platform, the gantry refueling bridge structure will be modified to provide additional leg spread and stiffer structure, extended cantilever overhang for the support of the platform, and replacement of the mechanical drive assemblies for the bridge. Two hoisting winches will be added to raise and lower the platform telescoping supports. Thus, the proposed platform and modified bridge assembly will be provided with redundant hoists to assure raising and lowering capability even if one hoist failed. The control system will be designed such that inadvertent operation of the system is precluded. The platform will be locked to the refueling bridge when not in use at an elevation above the operating floor thereby removing the load from the hoist cables.

The licensee used the working stress method of design and finite element methods of analysis. The structures have been analyzed for operating, seismic, and accident conditions. The stresses computed by the licensee are below the allowables as defined in applicable codes. The licensee concluded, and we agree, that the structures are adequate to carry the operating, seismic, and accident loads.

The proposed modification will be accomplished using acceptable design and fabrication standards and codes. The quality assurance program proposed meets the intent of our regulations, 10 CFR 50, Appendix B.

The licensee has described a testing program that is to be accomplished in the fabricators shop and after installation in the facility. Visual inspection of the complete system will be made after the preoperation tests and the first period of operation. Additional visual inspections will be made prior to each refueling outage.

Based on our review of the proposed modification, we have determined that the design is acceptable for the operation as described. Therefore, we have concluded that the proposed change to the NMP-1 facility from that described in the FSAR does not present a significant hazards consideration and that there is reasonable assurance that the health and safety of the public will not be endangered.

/s/

C. J. DeBevec
Operating Reactors Branch #2
Directorate of Licensing

Original signed by.
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Directorate of Licensing

Date: JAN 21 1974

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SURNAME ➤						
DATE ➤						