Docket No. 50-410

DEC 6 1972

Niagara Mohawk Power Corporation
ATTN: Mr. Thomas J. Brosnan
Vice President & Chief Engineer
300 Erie Boulevard West
Syracuse, New York 13202

Gentlemen:

In order that we may continue our review of your application for a license to construct the Nine Mile Point Nuclear Station Unit 2, additional information is required. The questions in the enclosure have been grouped by sections that correspond to the relevant sections of the Preliminary Safety Analysis Report and are numbered in seriatim with previous requests for information. Exceptions to this rule are in Section 9, question 9.6 transmitted to you on November 10, 1972 is being replaced with an enclosed question. This is noted with the question.

In order to maintain our licensing review sbhedule, we will need a completely adequate response to all enclosed questions by February 2, 1973. Please inform us within 7 days after receipt of this letter of your confirmation of the schedule date or the date you will be able to meet. If you cannot meet our specified date or if your reply is not fully responsive to our request, it is highly likely that the overall schedule for completing the licensing review for the project will have to be extended. Since reassignment of the Staff's efforts will require completion of the new assignment prior to returning to this project, the extent of the extension will most likely be greater than the delay in your response.

LB

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DATE ▷						

[illegible]

Please contact us if you have any questions regarding the information requested.

Sincerely,

Original signed by
Robert A. Clark

Robert A. Clark, Chief
Gas Cooled Reactors Branch
Directorate of Licensing

Enclosure:
Request for Additional
Information

cc: LeBoeuf, Lamb, Leiby
& MacRae
ATTN: Arvine E. Upton, Esq.
1821 Jefferson Place, N. W.
Washington, D. C. 20036

DISTRIBUTION:
AEC PDR
Local PDR
Docket
RP Reading
S. Hanauer
R. S. Boyd
D. Skovholt
F. Schroeder
R. Maccary
D. Knuth
R. Tedesco
H. Denton
BWR Branch Chiefs
W. Haass
OGC
RO (3)
A. Bournia
H. Gearin
J. Kastner
F. Congel
V. Benaroya
B. Grimes
K. Cooper

OFFICE ►	L:GCR	L:GCR				
SURNAME ►	ABournia:jkm	RClark				
DATE ►	12/6/72	12/6/72				

J. Bruce MacDonald, Esq.
Deputy Commissioner and Counsel
New York State Department of
Commerce
112 State Street
Albany, New York 12207

Ms. Suzanne Weber
78 West Seneca Street
Oswego, New York 13126

Ecology Action
c/o Mr. Richard Goldsmith
Syracuse University College
of Law
E. I. White Hall, Campus
Syracuse, New York 13210

Daniel M. Head, Esq., Chairman
Atomic Safety and Licensing Board
U. S. Atomic Energy Commission
Washington, D. C. 20545

OFFICE ►						
SURNAME ►						
DATE ►						

cc: Dr. Marvin M. Mann
Atomic Safety and Licensing
Board
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dr. William E. Martin
Senior Ecologist
Battelle Memorial Institute
Columbus, Ohio 43201

Joseph F. Tubridy, Esq.
Alternate Chairman
Atomic Safety and Licensing
Board
4100 Cathedral Avenue, N. W.
Washington, D. C. 20016

Mr. Gustave A. Linenberger
Atomic Safety and Licensing
Board
U. S. Atomic Energy Commission
Washington, D. C. 20545

Chairman, Atomic Safety and
Licensing Appeal Board
U. S. Atomic Energy Commission
Washington, D. C. 20545

OFFICE ►						
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DATE ►						

REQUEST FOR ADDITIONAL INFORMATION

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION-2

DOCKET NO. 50-410

2.0 SITE

2.19 Provide figures depicting the distribution of dairy cattle similar to your population distribution shown in Figures 2.1-5 and 2.1-10.

2.20 The Environmental Radiological Monitoring Program described in Section 2.6 refers to the existing monitoring programs for the Nine Mile Point-1 and J. A. Fitzpatrick Stations. Since these programs are now being reviewed by the AEC staff, it is assumed that all modifications will also apply to the Nine Mile Point-2 program.

9.0 RADIOACTIVE WASTE SYSTEM

In accordance to the telecon, please replace Question No. 9.6 transmitted in the question list on November 10, 1972 by the following question:

"Demonstrate that the radwaste components meet the quality standards of Quality Group C and that all radwaste components whose failure would result in calculated potential exposures in excess of 0.5 rem whole body at the site boundary are Class I seismic. Further provide the results of an evaluation that shows that the failure of non Class I radwaste components would not adversely affect Class I safety features."

9.8 In Section 9.5, various doses resulting from the estimated radioactive discharges are given. Provide the models and assumptions for these dose calculations.

10.0 AUXILIARY SYSTEMS

10.49 In order to determine whether or not the Control Room ventilation system complies with Criterion 19, the following information is required:

(a) Physical location of fresh air inlets to the Control Room.

(b) Clarify layout diagram (Figure 12.1-7) of the Control Room for the following:

(i) all openings, corridors, stairwells, etc.
(ii) location and shielding of charcoal filters
(iii) placement and type of equipment within Control Room boundary

(c) Description and placement of devices which are used to automatically activate the emergency ventilation system.

(d) Description of air filtration system including:

(i) components
(ii) seismic classification
(iii) filter flow and residence time
(iv) amount and type of charcoal, impregnants, etc.
(v) accessibility, maintainability, and testability
(vi) single failure criterion
(vii) iodine removal efficiency

10.50 Describe the initial verification test program for the Control Room filtration system and periodic surveillance tests necessary to assure system availability and proper operation.

10.51 To evaluate the possibility of Control Room contaminations from activity released within the Auxiliary Building or the Turbine Building, the duct work, corridors, doorways, elevator wells, etc., which are potential paths for activity from these buildings, should be described.

10.52 Describe the administrative controls necessary to assure all entrance ways to the Control Room are normally closed. Indicate other steps required to assure that the pressure differential within the control room is maintained.

12.0 STATION STRUCTURES AND SHIELDING

12.18 Provide individual dose estimates for all plant personnel from all sources during routine operation in Section 12.7. Integrated doses (man-rem) can thus be calculated. This information is necessary to assure that plant designs meet the "as low as practicable" requirement. Describe calculational methods and assumptions.

14.0 UNIT 2 SAFETY ANALYSIS

14.4 Indicate the distances between the points of activity release for each design basis accident and from each source of toxic material such as chlorine from the air intake to the Control Room. Accidents considered should be selected on the basis of potential significance. Normally, it is sufficient to consider one or more of the following: a main steam line break accident, a loss of coolant accident, waste gas storage tank rupture, and a fuel handling accident.

14.5 Indicate the source term used for each point of release. Consider all potential sources of activity for each accident including containment leakage and exfiltration, vent and stack releases, penetration leakage, and any activity which may be transported through the Auxiliary Building directly to the Control Room.

14.6 Identify toxic material, such as chlorine, which may be stored in containers on site and any of these containers rupturing may interfere with Control Room operation. Provide the severity of such accidents and discuss the steps to mitigate their consequences.

14.7 When the Control Room is in its emergency mode, provide the amount of filtered make-up air that is required to maintain the Control Room at a 1/4 inch water gauge pressure differential.

14.8 Indicate the expected dilution factors between the expected release points and the Control Room air intake for all accidents. Give assumptions such as wind speed and exposure frequency made during the course of the accidents. Provide technical references and/or experimental data to justify the factors used in your analysis.

14.9 Show the thyroid dose computed for Control Room operators. Report the dose contributions from each of the separate activity sources. In a similar manner, report the beta skin dose and the gamma dose to the Control Room operators. Describe or reference the methods used to calculate these doses. As a minimum, calculate the doses received by the Control Room operators from a main steam line break accident, a loss of coolant accident, and a fuel handling accident.