



Constellation Energy

• Nine Mile Point Nuclear Station

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October 07, 2005
NMP1L 1988

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Nine Mile Point Unit 1
 Docket No. 50-220
 Facility Operating License No. DPR-63

Clarification of Information Provided in Response to Generic Letter 88-20, Individual Plant Examination for Severe Accident Vulnerabilities – 10 CFR §50.54(f)

Gentlemen:

This letter clarifies certain information provided in the Nine Mile Point Unit 1 (NMP1) response to Generic Letter 88-20, Supplement 1.

By letter NMP1L 0773 dated July 27, 1993, Niagara Mohawk Power Corporation (now doing business as Nine Mile Point Nuclear Station, LLC (NMPNS)) submitted the NMP1 Individual Plant Examination (IPE) final report in response to Generic Letter 88-20, Supplement 1. In Section 4.6.2.3 of the IPE, an assessment of equipment survivability when subjected to harsh environmental conditions was provided. Specifically, the following was stated:

“In general, components located in the reactor building have a fairly high reliability rate. The reactor building is estimated to experience temperatures of 100 - 200°F in worst cases, and most components can survive in this type of environment for tens of hours. Cable connections (specifically terminal blocks) appear to be the weakest links, exhibiting high failure rates in steam environments of approximately 200°F. However, plants such as NMP1 have removed terminal blocks (as a result of Information Notice 84-47) from safety systems and selected systems that may see harsh environments.”

The NRC Staff's evaluation of the NMP1 IPE submittal is documented in a letter dated April 2, 1996. Enclosure 3 to this letter was a technical evaluation report prepared by SCIENTECH, Inc. titled “Nine Mile Point Unit 1 Technical Evaluation Report on the Individual Plant Examination Back-End Analysis.” Section 2.3.4 of the SCIENTECH, Inc. report, “Impact on Equipment Behavior,” included the following discussion:

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"According to the submittal, equipment located in the reactor building is fairly reliable in general, and could survive the 100° to 200°F worst-case temperatures for tens of hours. It appears that the cable connections (specifically, the terminal blocks) are the weakest links, having high failure rates under temperatures of about 200°F. However, in response to Information Notice 84-47, NMP1 has removed the terminal blocks from the safety systems as well as other selected systems that may be exposed to a harsh environment. Of remaining concern is individual component susceptibility which was not modeled, for example, the susceptibility of the CRD pumps to fail from exposure to high temperatures and steam. However, it appears that the issue of equipment survivability received adequate attention during the NMP1 IPE in accordance with the level of detail requested in NUREG-1335."

During a recent review of NMP1 equipment qualification configurations and documentation, NMPNS recognized that the IPE statement regarding removal of terminal blocks was misleading. NMP1 did not remove the terminal blocks from systems that may be exposed to a harsh environment. Such terminal blocks still exist in NMP1 circuits, and they have been qualified in accordance with the NMP1 Environmental Qualification Program.

Section 4.6.2.3 of the NMP1 IPE noted that susceptibility of individual components to harsh environments was not modeled; for example, injection systems were grouped into a single basic event that considered failure due to harsh environment. Due to like components among systems, the assumption was made that if components failed in one system due to harsh environment then so did components in other injection systems. Thus, conservative assumptions were made concerning equipment failures without detailed consideration of actual spatial impacts. Based on this conservative approach, the existence of terminal blocks that could be exposed to harsh post-accident environments would not adversely affect the results or conclusions of the NMP1 IPE, and the concluding statement in Section 2.3.4 of the SCIENTECH, Inc. report cited above (i.e., that the issue of equipment survivability received adequate attention during the NMP1 IPE in accordance with the level of detail requested in NUREG-1335) should likewise be unaffected.

If you have any questions regarding this letter, please contact James A. Hutton, Director Licensing, at (315) 349-1041.

Very truly yours,



William C. Holston
Manager Engineering Services

WCH/DEV/sac

cc: Mr. S. J. Collins, NRC Regional Administrator, Region I
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