

November 4, 2008

EA-08-197

Mr. Charles G. Pardee  
Chief Nuclear Officer and  
Senior Vice President  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: FINAL SIGNIFICANCE DETERMINATION FOR A GREEN FINDING;  
NRC INTEGRATED INSPECTION REPORT NO. 05000455/2008-003;  
BYRON STATION, UNIT 2

Dear Mr. Pardee:

The purpose of this letter is to provide you the final results of our significance determination of a finding preliminarily assessed as having low to moderate importance to safety (White). As documented in Section 1R13 of inspection report 05000454/2008-003 05000455/2008-003, issued August 14, 2008, your staff inadvertently entered an elevated risk condition for Unit 2 in April 2008 when the two Unit 1 essential service water train cross-tie isolation valves were out of service for maintenance. These two valves were opened locally to support emergency diesel generator testing and could not be closed from the main control room. Your staff later determined that this configuration represented an elevated risk condition for Unit 2, due to a degraded internal flood mitigation capability. For Unit 1, the NRC determined that the issue was a licensee-identified violation having very low risk significance (Green), as documented in Section 4OA7 of the above report.

At your request, a Regulatory Conference was held on September 16, 2008, to further discuss your views on this issue. During the conference, your staff described their assessment of the significance of the issue and the corrective actions taken to resolve it, including the root cause evaluation of the finding. Specifically, your staff disagreed with the proposed significance of the issue and described why it was appropriate to give recovery credit for manual actions, in accordance with the criteria specified in NRC Manual Chapter 0609, Appendix A, "Determining the Significance of Reactor Inspection Findings for At-Power Situations." Your staff asserted that: (1) there was sufficient time for the action to occur; (2) the environmental conditions allowed access; and (3) equipment needed to perform these actions was available and ready to use. Your staff noted that the operators would need to use a recently issued recovery procedure in conjunction with the piping and instrumentation diagrams (P&IDs) to identify possible valves which could be used to isolate the leak. Your staff also acknowledged that not all operators had been trained on the procedure being credited. Finally, your staff mentioned that actions could be taken to isolate the source of makeup water to the essential service water basin; however, your staff did not elaborate on what steps would actually need to be taken.

The NRC staff evaluated the information provided and determined that, given the ample and sufficient time available and the extra staff on site because of the Unit 1 outage, there was a strong likelihood that operator actions to identify and isolate the leak would be successful.

Therefore, after considering the information developed during the inspection and the additional information your staff provided at the conference, the NRC has concluded that the Unit 2 issue should be characterized as Green, a finding having very low safety significance. The finding is associated with a violation of NRC requirements (10 CFR 50.65(a)(4)); however, because of its very low safety significance, and because it was entered into your corrective action program, the NRC is treating the issue as a licensee-identified Non-Cited Violation, in accordance with Section VI.A.1 of the NRC Enforcement Policy.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

*/RA/*

Cynthia D. Pederson, Director  
Division of Reactor Projects

Docket No. 50-455  
License No. NPF-66

cc: Site Vice President - Byron Station  
Plant Manager - Byron Station  
Regulatory Assurance Manager - Byron Station  
Chief Operating Officer and Senior Vice President  
Senior Vice President - Midwest Operations  
Senior Vice President - Operations Support  
Vice President - Licensing and Regulatory Affairs  
Director - Licensing and Regulatory Affairs  
Manager Licensing - Braidwood, Byron, and LaSalle  
Associate General Counsel  
Document Control Desk - Licensing  
Assistant Attorney General  
Illinois Emergency Management Agency  
J. Klinger, State Liaison Officer,  
Illinois Emergency Management Agency  
P. Schmidt, State Liaison Officer, State of Wisconsin  
Chairman, Illinois Commerce Commission  
B. Quigley, Byron Station

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*/RA/*

Cynthia D. Pederson, Director  
Division of Reactor Projects

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Director - Licensing and Regulatory Affairs  
Manager Licensing - Braidwood, Byron, and LaSalle  
Associate General Counsel  
Document Control Desk - Licensing  
Assistant Attorney General  
Illinois Emergency Management Agency  
J. Klinger, State Liaison Officer,  
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P. Schmidt, State Liaison Officer, State of Wisconsin  
Chairman, Illinois Commerce Commission  
B. Quigley, Byron Station

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Letter to Charles G. Pardee from Cynthia D. Pederson dated November 4, 2008

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