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U. S. Nuclear Regulatory Commission
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Subject: Catawba Nuclear Station, Unit 2
Docket No. 50-414
Cathodic Protection System
Special Report

This Special Report is being issued as a result of failure to meet the acceptance criteria of the Cathodic Protection System bi-monthly surveillance within the required time period of ten days. Reference Required Action (B.2) of Catawba Nuclear Station Selected Licensee Commitment 16.8-5.

On September 17, 2002, the bimonthly surveillance for the Cathodic Protection System associated with the Emergency Diesel Generator (EDG) piping was performed. This test verifies that there is a potential difference of greater than 850 mV between the metallic structure/piping being protected and the surrounding soil while the rectifier is energized. The test measurements are taken at a series of test stations located within the area of protection. For the test performed on 9/17/02, all test stations (five on Unit 1 side, and seven on Unit 2) met this first level of test acceptance criteria except Test Station 40. Per the test procedure, which is written based on the National Association of Cathodic Engineering (NACE) standards, a second level of testing to verify acceptable protection is allowed if the 850 mV criteria is not met. This is referred to as the Polarization Decay Test. The Rectifier associated with the anodes in this area of protection (in this case, Rectifier 3) is deenergized and a reading at the test station is recorded

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once the voltage level drops to a Base Voltage value. The rectifier is left deenergized for a period of 24 hours, at which time another reading is taken. If the voltage level has dropped more than 100 mV, then adequate protection is being provided and the test criterion is met. On 9/18/02, when the voltage reading was taken after the 24 hour wait period, it was found that the voltage drop was only 63 mV.

During a site survey of the Cathodic Protection System performed during July 2001, it was recommended that new, direct burial anodes be installed in the Unit 2 EDG piping area to provide instant output current along with a new Test Station 40. This recommendation was based on the fact that the original anodes presently providing protection for this area are near the end of their service life. As a result of Test Station 40 not meeting the testing requirements on 9/18/02, more priority has been placed on this modification and the new scheduled date has been established based on availability of resources. Surveyors, well drillers, and maintenance personnel will be available to perform this modification in June 2003.

Trending has shown that none of the other test stations readings in the Unit 2 EDG piping area have been decreasing over the past several years. Therefore, it is believed that there is still adequate protection in this general area, although it can not be properly verified at the Test Station 40 location until a new test station is installed. Corrosion deterioration of piping is a long term process and the current situation does not pose a concern as long as the modification is completed in a timely manner.

Details of this occurrence are documented in Problem Investigation Process (PIP) C-02-05118. This letter contains one commitment: The site is committing to complete the modification on Test Station 40 and meeting the testing requirements of Station Selected License Commitment 16.8-5 by no later than June 30, 2003.

Any questions concerning this report may be directed to Tony Jackson at 803-831-3742.

Sincerely,

Gary R. Peterson

xc:

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