



NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

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NRC FINDS OCONEE ELECTRICAL BREAKER PERFORMANCE ISSUE TO BE OF SUBSTANTIAL SAFETY SIGNIFICANCE

The U.S. Nuclear Regulatory Commission staff has determined that electrical breakers installed in a key safety system would not have functioned during certain scenarios at the Oconee nuclear plant, representing a finding of “substantial safety significance” that will result in increased NRC inspection and oversight of the facility.

The three-unit plant is operated by Duke Energy near Seneca, S.C., about 30 miles west of Greenville.

NRC inspection findings are evaluated using a safety significance scale with four levels, ranging from “green” for minor significance, through “white” and “yellow” to “red” for high significance. The NRC concluded that one of two violations at Oconee related to the electrical breakers is “yellow,” having “substantial safety significance,” while the second violation is “green,” having “very low safety significance.”

Oconee plant employees on June 2 identified that pressurizer heater breakers essential to the operation of the plant’s standby shutdown facility would not have functioned if needed. The standby shutdown facility is designed to be used for reactor cooling during certain accident scenarios, including fires and severe storms where other cooling systems might be unavailable or inoperable.

The public was never endangered because no actual event occurred. However, since the system is counted on for core cooling during certain accident scenarios and the electrical breakers would not have functioned as needed, the facility was vulnerable to core damage if an accident involving a series of unlikely events occurred.

A regulatory conference was held on Nov. 16 to discuss the issue. Duke Energy argued that the breaker problem was, at worst, of low to moderate safety significance and did not represent a current performance issue. The NRC review determined that the finding was “yellow,” or of substantial safety significance. The second violation, involving breakers that were installed to replace the original breakers, was classified as “green,” or very low safety significance.

“The breakers were subsequently replaced with fuses that testing shows remain operable,” said Victor McCree, NRC Region II administrator. “Throughout this process, Oconee continued to operate safely. However, this represents a significant problem involving a key safety system and warrants increased NRC inspection and oversight.”

The NRC staff will obtain additional information to determine whether the breaker problem represents a current performance issue. After reviewing this information, NRC will notify Duke Energy of this determination and the associated regulatory response. Duke Energy has 30 days to respond to the NRC’s letter detailing the findings.

The final significance letter issued to Duke Energy with more information on the issue will be available through the Region II office of via the NRC website at www.nrc.gov/reading-rm/adams.html. The number to access the letter is ML11340A139.

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