

DRAFT
REQUEST FOR ADDITIONAL INFORMATION
OFFICE OF NUCLEAR REACTOR REGULATION
PROPOSED ALTERNATIVE REQUEST FOR RELIEF NO. 1RR05
FOURTH 10-YEAR INSERVICE TESTING INTERVAL
PPL SUSQUEHANNA, LLC
ALLEGHENY ELECTRIC COOPERATIVE, INC.
SUSQUEHANNA STEAM ELECTRIC STATION, UNIT 1
DOCKET NO. 50-387

By letter dated October 8, 2013,¹ as supplemented by letter dated December 12, 2013,² PPL Susquehanna, LLC (the licensee), submitted relief request 1RR05 for Susquehanna Steam Electric Station, Unit 1 (SSES-1). The proposed relief request is associated with the Fourth 10-Year Inservice Testing Interval. Specifically, pursuant to Title 10 of the *Code of Federal Regulations* Part 50.55a(a)(3), the licensee is requesting the use of an alternative for four (4) check valves (086018, 086118, 086241, and 086341) from certain requirements of the American Society of Mechanical Engineers Operation and Maintenance Code (ASME OM Code) Section ISTC-3522(c) on the basis that the proposed alternative would provide an acceptable level of quality and safety.

Background

ASME OM Code ISTC-3522(c) "Category C Check Valves", states "If exercising is not practicable during operation at power and cold shutdowns, it shall be performed during refueling outages."

ASME OM Code ISTC-3522(a) states, in part, that "During operation at power, each check valve shall be exercised or examined in a manner that verifies obturator travel by using the methods in ISTC-5221. Each check valve exercise test shall include open and close tests. Open and close tests need only be performed at an interval when it is practicable to perform both tests."

Relief valves 086018 and 086118 have an open safety function only. They will continue to be tested for the open function quarterly. ASME OM Code ISTC-5221(a)(2) states that "Check valves that have a safety function in only the open direction shall be exercised by initiating flow and observing that the obturator has traveled either the full open position or to the position required to perform its intended function(s) (see ISTA-1100), and verify closure." To verify

¹ Agencywide Documents Access and Management System (ADAMS) Accession No. ML13282A554.

² ADAMS Accession No. ML13347B233.

closure, it has been determined that leak testing is the only method available. Relief alternative 1RR05 requests to perform a leak test during the operating fuel cycle for close verification. It is desired to test on line where it will be necessary to enter a limiting condition for operation (LCO) instead of during refueling outages. Justification for only doing this once per operating cycle is that the leak test presents a hardship due to LCO duration being 4 to 6 hours long.

Relief valves 086241 and 086341 have a close safety function only. These valves are keep fill valves that continuously demonstrate the open function. Like check valves 086018 and 086118, it has been determined that the close verification requires a leak test and relief alternative 1RR05 requests to perform a leak test once during the operating fuel cycle for close verification. It is desired to test on line where it will necessary to enter a LCO instead of refueling outages. Justification for only doing this once per operating cycle is that the leak test presents a hardship due to LCO duration being 4 to 6 hours long.

RAI 1 It appears that this relief request is for SSES-1 only. However, section 5 "Proposed Alternate Testing" states, in part, that:

Pursuant to 10CFR50.55a(a)(3)(i), SSES 1 and 2 proposes an alternative testing frequency for performing inservice testing of the valves identified above.

Please verify that this relief request is only for SSES-1.

RAI 2 This is the fourth IST test interval and after a search through previous relief requests requested by the licensee, it appears that this type of request has never been made for these check valves. Please explain this change.

RAI 3 If these valves have been tested at refueling outage intervals in the past, is it documented in the IST program refueling outage justifications?

RAI 4 Do check valves 086241 and 086341 have a leakage criteria? If not, can the valve close verification be accomplished using non-intrusive techniques such as an accelerometer verifying the disk hits the seat?

RAI 5 As requested, the proposed alternative requests to verify the close function once during the operating fuel cycle instead of during refueling outages. This method has the potential of testing a valve at the end of a cycle and then again at the beginning of the next cycle. This could lead to a situation where the close verify test will not be performed for almost 4 years. Please verify that the maximum interval between tests will be less than 24 months.