

PUBLIC NOTICE

NRC STAFF PROPOSES TO AMEND RENEWED FACILITY OPERATING LICENSE FOR SEQUOYAH NUCLEAR PLANT, UNIT 2

The U.S. Nuclear Regulatory Commission (NRC or the Commission) staff has received an application dated October 22, 2021 (available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML21296A000), from the Tennessee Valley Authority (TVA or the licensee), for an exigent amendment to Renewed Facility Operating License No. DPR-79 for Sequoyah Nuclear Plant (Sequoyah), Unit 2, located in Hamilton County, Tennessee.

The proposed one-time amendment would amend the Sequoyah, Unit 2, Technical Specifications (TS) 3.4.12, "Low Temperature Overpressure Protection (LTOP) System," to allow testing of the 2A-A safety injection pump in a configuration other than currently allowed by TS. This change would only be applicable for Sequoyah, Unit 2, during the Cycle 24 Refueling Outage, until the Unit ascends into MODE 4 from MODE 5.

The licensee requested that the proposed amendment be processed on an exigent basis in accordance with the provisions in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.91(a)(6). Under 10 CFR 50.91(a)(6)(i), where the Commission finds that exigent circumstances exist in that a licensee and the Commission must act quickly and that time does not permit the Commission to publish a *Federal Register* notice allowing 30 days for prior public comment, and it also determines that the amendment involves no significant hazards consideration, the Commission will either (A) issue a *Federal Register* notice providing notice of an opportunity for hearing and allowing at least 2 weeks from the date of the notice for prior public comment; or (B) use local media to provide reasonable notice to the public in the area surrounding a licensee's facility of the licensee's amendment and of its proposed determination that no significant hazards consideration is involved, consulting with the licensee on the

proposed media release and on the geographical area of its coverage. Due to the timing of the amendment request, the NRC staff is providing this notice in local media pursuant to 10 CFR 50.91(a)(6)(i)(B) and has consulted with the licensee and the NRC regional office on the proposed media release.

TVA's claim of exigent circumstances is based on the following considerations.

During the Sequoyah, Unit 2, Refueling Outage 24, which began on October 1, 2021, TVA performed planned testing and maintenance of the 2A-A safety injection pump on October 8, 2021. The testing and inspection revealed damage to the pump shaft. TVA immediately began detailed causal analysis and condition evaluation in coordination with Sequoyah site and fleet resources, industry expertise, and the pump vendor, FlowServe. Following revelation of the shaft damage, three repair paths were initiated in close coordination between TVA and FlowServe, including a bearing change with evaluation, shaft repair, and fabrication of a replacement shaft at the vendor's facility. Based on extensive analysis and remediation attempts up through October 21, 2021, TVA and FlowServe decided shaft replacement was the only remaining viable repair. The replacement shaft was delivered on October 22, 2021, and pump re-build is expected to be completed by October 26, 2021.

Based on the nature of the pump maintenance, both a pre-service and comprehensive flow test are required to meet post maintenance, in-service, and surveillance testing requirements. TS 3.4.12 governs the applicable MODE and plant conditions to conduct these tests for the low temperature overpressure protection conditions with one centrifugal charging pump and no safety injection pump permitted. With these needed plant conditions, the contract and vendor service resources supporting the primary/reactor portion of the Sequoyah, Unit 2, outage activities have been unable to transition to the Watts Bar, Unit 1, Refueling Outage 17, thereby inducing reactive planning risk to the Watts Bar, Unit 1, refueling outage and uncertainty regarding retaining the planned contract resources in this COVID-19 stressed resource

environment. This outage planning risk impact has a corollary impact to reliable critical infrastructure grid generation as well, in that, while Sequoyah, Unit 2, will delay in providing reliable power to the grid, the commensurate impact to Watts Bar, Unit 1, will result in an unplanned shift into later November 2021 and early December 2021 for Watts Bar, Unit 1's ability to provide reliable power to the grid during the region's winter reliability period.

Based on this information, the NRC staff finds that exigent circumstances exist in that the licensee and the NRC must act quickly and that time does not permit the NRC staff to publish a *Federal Register* notice allowing 30 days for prior public comment.

As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration using the standards in 10 CFR 50.92. The NRC staff has (preliminarily) evaluated this proposed change with regard to the determination of whether or not a significant hazards consideration is involved.

Testing of the 2A-A safety injection pump will not involve a significant increase in the probability or consequences of an accident previously evaluated. The safety analysis of the plant is unaffected by the proposed change. Because the safety analysis is unaffected, the calculated radiological releases associated with the analysis are not affected. Additionally, removing the pressurizer manway while a safety injection pump is capable of injecting into the reactor coolant system (RCS) has been shown to provide adequate low-temperature over-pressure protection. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Testing of the 2A-A safety injection pump will not create the possibility of a new or different kind of accident from any accident previously evaluated. The proposed change does not adversely alter the design assumptions, conditions, or configuration of the facility or the manner in which the plant is operated. No new accident scenarios, failure mechanisms, or limiting single failures are introduced as a result of allowing operation of one safety injection

pump capable of injecting into the RCS with the RCS depressurized and the pressurizer manway cover removed. The proposed change does not challenge the performance or integrity of any safety-related systems or components. Therefore, the proposed change does not create the possibility of a new or different kind of accident.

Testing of the 2A-A safety injection pump will not involve a significant reduction in a margin of safety. The margin of safety is related to the ability of the fission product barriers to perform their design functions during and following an accident. These barriers include the fuel cladding, the reactor coolant system, and the containment. Removing the pressurizer manway during the post-maintenance testing of the safety injection pump has been shown to provide adequate protection against low-temperature over-pressure of the RCS. Thus, the performance of the reactor vessel and the reactor coolant system is unaffected by the proposed change.

The margin of safety associated with the acceptance criteria of any accident is unchanged. The proposed change will have no effect on the availability, operability, or performance of safety-related systems and components. Therefore, the proposed change does not significantly reduce a margin of safety.

Following an initial review of this application, the requested amendment has been evaluated against the standards in 10 CFR 50.92, and the NRC staff has made a proposed (preliminary) determination that the requested amendment involves no significant hazards consideration. The changes do not significantly increase the probability or consequences of any accident previously considered, nor create the possibility of an accident of a different kind, nor significantly decrease any margin of safety.

If the proposed determination that the requested license amendment involves no significant hazards consideration becomes final, the NRC staff will issue the amendment without first offering an opportunity for a public hearing. An opportunity for a hearing will be published in

the *Federal Register* at a later date and any hearing request will not delay the effective date of the amendment.

If the NRC staff decides in its final determination that the amendment does involve a significant hazards consideration, a notice of opportunity for a prior hearing will be published in the *Federal Register* and, if a hearing is granted, it will be held before the amendment is issued.

Comments on the proposed determination of no significant hazards consideration may be (1) telephoned to David Wrona, Chief, Plant Licensing Branch 2-2, by collect call to 301-415-2292 or (2) e-mailed to David.Wrona@nrc.gov. All comments received by 4:00 p.m. Eastern Daylight Time on October 27, 2021, will be considered in reaching a final determination. A copy of the application may be examined electronically through the NRC's ADAMS in the NRC Library at <https://www.nrc.gov/reading-rm/adams.html>. Persons who do not have access to ADAMS or who encounter problems in accessing the documents located in ADAMS should contact the NRC Public Document Room Reference staff by telephone at 1-800-397-4209, or 301-415-4737, or by e-mail to pdr.resource@nrc.gov.