



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

July 26, 2022

EA-2022-072

Mr. Jim Barstow  
Vice President Nuclear Regulatory Affairs Support Services  
Tennessee Valley Authority  
1101 Market Street, LP 4A-C  
Chattanooga, TN 37402-2801

SUBJECT: NOTICE OF ENFORCEMENT DISCRETION (NOED) FOR SEQUOYAH  
NUCLEAR PLANT, UNIT 1 (EPID: I-2022-003-0027 AND EPID: L-2022-LLD-0005)

Dear Mr. Barstow:

By letter dated July 22, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22203A177), Tennessee Valley Authority (TVA) requested that the U.S. Nuclear Regulatory Commission (NRC) exercise discretion for compliance with the actions required in Sequoyah Nuclear Plant (SQN), Unit 1, Technical Specifications (TS) Limiting Condition for Operation (LCO) 3.5.2, Emergency Core Cooling System (ECCS) - Operating, Action A.

This letter documented information previously discussed with the NRC in a telephone conference on July 21, 5:30 p.m. Eastern Daylight Time (EDT). The principal NRC staff members who participated in the telephone conference are listed in the Enclosure. The staff determined that the information in your letter requesting the NOED was consistent with your oral request.

On July 20, 2022, at approximately 8:13 a.m. EDT, you notified the senior resident inspector of the potential request for this NOED. On July 21, 2022, at 5:30 p.m. EDT, you orally requested that a Notice of Enforcement Discretion (NOED) be issued pursuant to the NRC's policy regarding the exercise of enforcement discretion for an operating power reactor, set out in the NRC Enforcement Manual, Appendix F, "Notices of Enforcement Discretion," dated October 1, 2019. You requested that the NOED be effective for 69 hours past the TS 3.5.2, (LCO) Action A expiration, i.e., until 7:30 p.m. EDT on Sunday, July 24, 2022. This letter documents the event and our telephone conversation on July 21, at 5:30 p.m. EDT, during which NRC staff granted this NOED request.

On July 18, 2022, operators in the main control room (MCR) noticed that the pressurizer level was slowly declining with the downstream flow control valve near 100 percent open. Thereafter, operators received an unexpected alarm for low flow to the number 1 reactor coolant pump (RCP) seal. Operators dispatched auxiliary unit operators (AUO) to the field to validate MCR indications. Subsequently, operators received an alarm indicating a lowering pressurizer level with level indicating 54 percent and declining.

Operators placed the 1A-A centrifugal charging pump (CCP) in service and pressurizer level began to recover. On July 18, 2022, at 10:30 p.m. EDT, operators determined reasonable assurance no longer existed for 1B-B CCP to perform its specified safety functions and the above LCO 3.5.2, Action A was entered. Based upon additional pump and system parameters gathered by the station, TVA has determined that the direct cause of the 1B-B CCP degradation is most likely pump element wear associated with cyclic fatigue requiring replacement of the rotating element assembly.

During the teleconference on July 21, 2022, and as further elaborated in your July 22, 2022, letter, TVA requested enforcement discretion to avoid an unnecessary shutdown of SQN unit 1 without a corresponding public health and safety benefit. The proposed enforcement discretion would provide an extension period of 69 hours to remain in Mode 1 rather than progressing to Mode 3 by 4:30 a.m. EDT on July 22 and Mode 4 by 10:30 a.m. The requested extension was needed to allow time to complete the repair and return 1B-B CCP to an operable status. TVA requested that the NOED be in effect from 10:30 p.m. EDT, the end of the TS allowed outage time, on July 21, 2022, until the restoration of the 1B-B CCP, but not to exceed 7:30 p.m. EDT on July 24, 2022.

You indicated that the incremental conditional core damage probability (ICCDP) for SQN Unit 1 associated with 5 days of unavailability was  $2.15E-07$ . The incremental conditional large early release probability (ICLERP) for SQN Unit 1 was  $3.05E-09$ . These values were less than the  $5E-7$  ICCDP and  $5E-8$  ICLERP guidance thresholds specified in the NRC Enforcement Manual, Appendix F, "Notices of Enforcement Discretion."

Some of the compensatory measures that the licensee took to reduce the risk were:

- No work that jeopardizes plant operation, such as alignment changes, balance of-plant function testing, or switchyard work will be allowed except as needed in response to emergent failures or conditions that develop.
- The following equipment was protected:
  - 1A-A CCP
  - 1A-A RHR pump
  - 1A-A SI pump
  - 1A-A emergency diesel generator
  - 1A-A 6.9kV shutdown board
- Continuous fire watches, beyond recommended roving watches, and no hot work in areas as discussed in Section 7.E of TVA letter dated July 22, 2022 (ADAMS Accession No. ML22203A177).
- AUO walkdowns of flood significant areas three times per shift as discussed in Section 7.C of TVA letter dated July 22, 2022 (ADAMS Accession No. ML22203A177).

The SQN Plant Operations Review Committee reviewed and approved submission of the NOED request on July 21, 2022, prior to the verbal request for an NOED.

Based on the NRC staff's evaluation of your request, the staff determined that granting this NOED was consistent with the NRC's Enforcement Policy and staff guidance. The NOED request met the criteria specified in Section 2.5 of Appendix F, "Notices of Enforcement Discretion," of the NRC's Enforcement Manual.

Granting this NOED avoided an unnecessary shutdown of a reactor without a corresponding benefit to public health and safety or the environment. Therefore, as communicated orally to your staff at 7:37 p.m. EDT on July 21, 2022, the NRC staff exercised discretion not to enforce compliance with TS LCO 3.5.2, Action A for an additional period of 69 hours, which extended expiration from 10:30 p.m. EDT on July 21, 2022, to 7:30 p.m. EDT on July 24, 2022.

The NRC staff noted, subsequent to its verbal approval for enforcement discretion, that the condition causing the need for this NOED was corrected and SQN Unit 1 exited from TS LCO 3.5.2, Action A at approximately 4:35 pm EDT on July 24, 2022. As a result, this NOED terminated at 4:35 p.m. EDT on July 24, 2022, within the period of the enforcement discretion. In addition, as discussed during the telephone conference on July 21, 2022, the NRC staff agreed with your determination that a follow-up TS amendment was not necessary.

As stated in the NRC Enforcement Policy, action will be taken, to the extent that any violation was involved, for the root cause that led to the noncompliance for which this NOED was necessary.

In accordance with Title 10 of the Code of Federal Regulations (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be 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). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,



Signed by Miller, Mark  
on 07/26/22

Mark Miller, Director  
Division of Reactor Projects

Docket No. 05000327  
License No. DPR-77

Enclosure:  
As stated

cc w/encl: Distribution via LISTSERV

SUBJECT: NOTICE OF ENFORCEMENT DISCRETION (NOED) FOR SEQUOYAH NUCLEAR PLANT, UNIT 1 (EPID: I-2022-003-0027, EPID: L-2022-LLD-0005)

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## **LIST OF KEY NRC PERSONNEL**

### NRC REGION II

Mark Miller, Director, Division of Reactor Projects (DRP), RII  
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Geoffrey Ottenberg, Senior Reactor Inspector, Engineering Branch 1, Division of Reactor Safety, RII

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