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# Sequoyah Nuclear Plant, Unit 1

Pre-Submittal Meeting for Request for Exemption  
from the Requirements of 10 CFR 26.205

April 20, 2026

# Agenda

- **Introduction**
- **Affected Regulations**
- **Proposed Exemption**
- **Basis for Proposed Exemption**
- **Mitigating Actions**
- **Precedents**
- **Summary**
- **Proposed Schedule**

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# Introduction

- The purpose of this meeting is to provide information for a one-time exemption proposed by Tennessee Valley Authority (TVA) pursuant to 10 CFR 26.9, “Specific exemptions,” for Sequoyah Nuclear Plant (SQN), Unit 1.
- This will be a request for exemption from the requirements of 10 CFR 26.205, “Fitness for Duty Programs – Work Hours.”
- The proposed exemption would allow the use of the less restrictive work hour limitations described in 10 CFR 26.205(d)(4) – outage work hour rules – to support activities required for the extended SQN Unit 1 spring 2027 refueling outage (U1R28).
- The SQN U1R28 outage (planned 100+ days) is extended due to a rewind and restack of the main generator and full melt out and replenishment of the ice condenser.
- While the main generator activities are not covered work under the Fatigue Management Program, it is the critical path activity for U1R28.

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## Introduction (cont.)

- Covered work for SQN U1R28 includes the ice condenser melt/rebuild early in the outage and the primary side activities (“bulk work”) in the second half of the outage.
- Additionally, Browns Ferry Nuclear Plant (BFN), Unit 2 has a spring 2027 refueling outage (U2R24) that is completely eclipsed by SQN U1R28.
- There are shared outage resources that will be supporting both outages. They will start SQN U1R28, transition to BFN for U2R24, and then return to SQN for U1R28 bulk work.
- TVA is working on outage planning to balance the resources and work activities for the spring 2027 outage overlap.

# Affected Regulations

- 10 CFR 26.4(a) defines the categories of individuals that are subject to the work hour controls specified in 10 CFR 26.205. These categories include:
  - 1) *Operating or onsite directing of the operation of systems and components that a risk-informed evaluation process has shown to be significant to public health and safety;*
  - 2) *Performing health physics or chemistry duties required as a member of the onsite emergency response organization minimum shift complement;*
  - 3) *Performing the duties of a fire brigade member who is responsible for understanding the effects of fire and fire suppressants on safe shutdown capability;*
  - 4) *Performing maintenance or onsite directing of the maintenance of SSCs that a risk-informed evaluation process has shown to be significant to public health and safety; and*
  - 5) *Performing security duties as an armed security force officer, alarm station operator, response team leader, or watchman, hereinafter referred to as security personnel.*
- The proposed exemption to 10 CFR 26.205(d)(4) applies to individuals in categories (1), (2), and (4) above.

## Affected Regulations (cont.)

- 10 CFR 26.9, “Specific exemptions,” states:

*Upon application of any interested person or on its own initiative, the Commission may grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property or the common defense and security, and are otherwise in the public interest.*

- 10 CFR 26.205(d)(4) provides the following requirements:

*During the first 60 days of a unit outage, licensees need not meet the requirements of § 26.205(d)(3) or (d)(7) for individuals specified in § 26.4(a)(1) through (a)(4), while those individuals are working on outage activities. However, the licensee shall ensure that the individuals specified in § 26.4(a)(1) through (a)(3) have at least 3 days off in each successive (i.e., non-rolling) 15-day period and that the individuals specified in § 26.4(a)(4) have at least 1 day off in any 7-day period.*

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# Proposed Exemption

- Given that the 60-day period in 10 CFR 26.205(d)(4) will expire for SQN U1R28 prior to the beginning of bulk outage work, TVA requests to apply the less restrictive work hour limitations described in 10 CFR 26.205(d)(4) to individuals in the categories of 10 CFR 26.4(a) items (1), (2), and (4):
  - (1) Operations
  - (2) Radiation Protection (RP) or Chemistry
  - (4) Maintenance
- The period of the proposed exemption would commence on a date/time noted in the Certrec fatigue rule management system, commencing no earlier than April 12, 2027, and no later than April 26, 2027, applicable for a period not to exceed 60 days.

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# Basis for Proposed Exemption

- For the purposes of this proposed exemption, TVA is distinguishing the covered work activities into three categories of personnel:

**Category A Personnel** – SQN Unit 1 ice condenser melt and replenishment

- 10 CFR 26.4(a)(4) Maintenance

**Category B Personnel** – SQN craft and non-shared personnel (non-ice condenser)

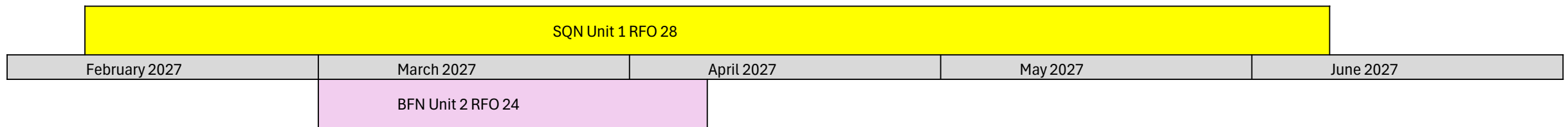
- 10 CFR 26.4(a)(1) Operations
- 10 CFR 26.4(a)(2) RP or Chemistry
- 10 CFR 26.4(a)(4) Maintenance

**Category C Personnel** – SQN/BFN shared outage resources (non-ice condenser)

- 10 CFR 26.4(a)(1) Operations
- 10 CFR 26.4(a)(2) RP or Chemistry
- 10 CFR 26.4(a)(4) Maintenance

## Basis for Proposed Exemption (cont.)

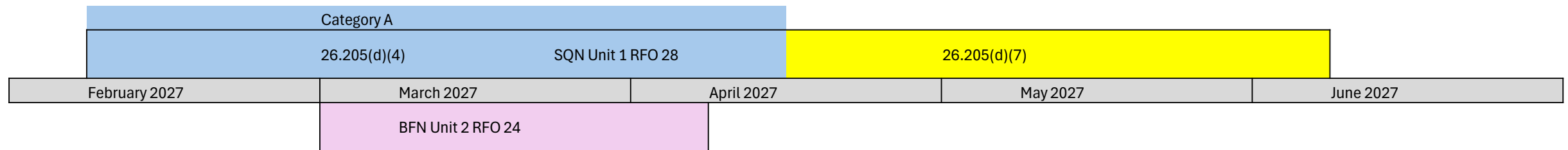
SQN U1R28 is planned to commence in mid-February 2027. Due to a rewind and restack of the main generator and full melt and replenishment of the ice condenser, SQN U1R28 is extended to 100+ days with completion planned by early June 2027.



However, this timeframe fully eclipses the BFN U2R24 outage scheduled from early March 2027 to early April 2027. The additional 60-day extension will allow shared resources to support both SQN and BFN spring 2027 refueling outages, and it will provide flexibility to “bank hours” to extend the 60-day period, in accordance with 10 CFR 26.205(d)(6), during the bulk of SQN U1R28 activities beginning mid-April 2027.

# Basis for Proposed Exemption (cont.)

Category A personnel are those individuals directly related to performing or supporting the SQN Unit 1 ice condenser melt and rebuild activities.

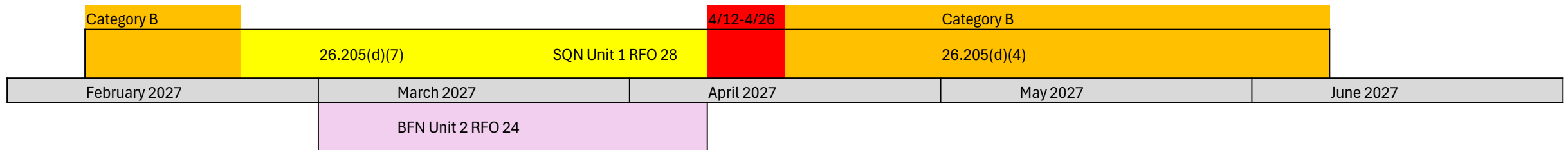


- First 60 days – 10 CFR 26.205(d)(4) outage work hours (i.e., 72 hours/week)
- Remainder of SQN U1R28 – 10 CFR 26.205(d)(7) online averaging work hours (i.e., rolling 6-week average  $\leq$  54 hours/week)

TVA is not seeking exemption for Category A personnel.

# Basis for Proposed Exemption (cont.)

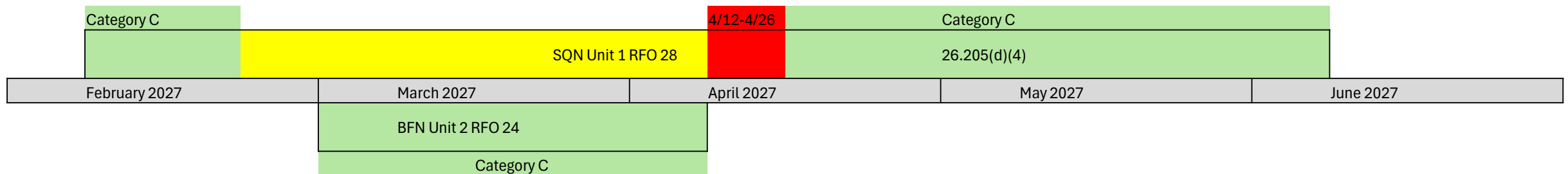
Category B personnel are those individuals that perform normal outage shutdown, startup, maintenance, fuel handling, and modification activities at SQN, which are not related to the Unit 1 ice condenser.



- First ~10 days – 10 CFR 26.205(d)(4) outage work hours
- Next ~6 weeks – 10 CFR 26.205(d)(7) online averaging work hours
- *April 12-April 26 – Commencement window of exemption period*
- Exemption Period ( $\leq 60$  days) – 10 CFR 26.205(d)(4) outage work hours

# Basis for Proposed Exemption (cont.)

Category C personnel are a TVA fleet outage support group (including contractors/vendors) that is a shared resource between SQN and BFN performing activities that may include normal outage shutdown, startup, maintenance, fuel handling, and modification activities, which are not related to the Unit 1 ice condenser.



- First ~10 days – 10 CFR 26.205(d)(4) outage work hours [SQN U1R28]
  - SQN to BFN transfer – minimum 34-hour break
- Next ~5 weeks – 10 CFR 26.205(d)(4) outage work hours [BFN U2R24]
  - BFN to SQN transfer – minimum 34-hour break
- **April 12-April 26 – Commencement window of exemption period**
- Exemption Period (≤ 60 days) – 10 CFR 26.205(d)(4) outage work hours [SQN U1R28]

# Mitigating Actions

- TVA will ensure that an adequate rest interval is provided to covered workers prior to the administrative reset of the less restrictive work hours allowed by 10 CFR 26.205(d)(4):
  - Category B personnel – these workers will receive an extended period of online average work hours (average 54 hours/week or less) for approximately 6 weeks [10 CFR 26.205(d)(7)]
  - Category C personnel – these workers will receive a minimum of 34 hours off before transitioning from BFN U2R24 back to SQN U1R28 (Regulatory Guide 5.73)
- During the period of the proposed exemption, the cognizant supervisors will assess each assigned supervised employee for fatigue and mental alertness prior to conducting work covered by the Fatigue Rule.

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# Precedents

- **Watts Bar Nuclear Plant, Unit 2 (ML22117A195)**  
On April 29, 2022, the NRC approved a similar exemption request from 10 CFR 26.205 for an extended outage. The exemption allowed the use of the less restrictive working hour limitations of 10 CFR 26.205(d)(4) to support activities for a period not to exceed 60 days.
- **Sequoyah Nuclear Plant, Unit 2 (ML24341A213 and ML25070A298)**  
On December 23, 2024, and March 20, 2025, the NRC approved similar exemption requests from 10 CFR 26.205 for extended outages. The exemptions allowed the use of the less restrictive working hour limitations of 10 CFR 26.205(d)(4) to support activities for a period not to exceed 21 days.
- **Palisades Nuclear Plant (ML25293A007)**  
On October 24, 2025, the NRC approved a similar exemption request from 10 CFR 26.205 for a future outage. The exemption allowed the use of the less restrictive working hour limitations of 10 CFR 26.205(d)(4) to support activities for a period not to exceed 60 days.

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# Summary

- TVA is requesting a one-time exemption pursuant to 10 CFR 26.9, for SQN Unit 1, to allow the use of the less restrictive work hour limitations described in 10 CFR 26.205(d)(4) for workers in categories 10 CFR 26.4(a)(1), (2), and (4) to support activities required for the extended SQN Unit 1 spring 2027 refueling outage.
- TVA is seeking exemption for the purpose of administratively separating fatigue management for SQN U1R28 into two outages. This will allow resources to be balanced between the distinct work activities at SQN and BFN during spring 2027.
- The period of the proposed exemption would commence on a date/time noted in the Certrec fatigue rule management system, commencing no earlier than April 12, 2027, and no later than April 26, 2027, applicable for a period not to exceed 60 days.
- The proposed exemption will not endanger life or property or the common defense and security, and is otherwise in the public interest.

# Summary (cont.)

	Category A	Category B	Category C	
February 2027	SQN 72 hrs/wk 26.205(d)(4)	SQN 72 hrs/wk	SQN 72 hrs/wk ≥ 34-hr Break	Mid-Feb: SQN U1R28 breaker open
March 2027		Online Average 54 hrs/wk 26.205(d)(7)	BFN 72 hrs/wk 26.205(d)(4)	Early March: BFN U2R24 breaker open
April 2027	Online Average 54 hrs/wk 26.205(d)(7)	SQN 72 hrs/wk 26.205(d)(4)	≥ 34-hr Break	Early April: BFN U2R24 breaker close 4/12: Exemption commencement window begins
May 2027			SQN 72 hrs/wk 26.205(d)(4)	SQN 72 hrs/wk 26.205(d)(4)
June 2027				Early June: SQN U1R28 breaker close

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# Proposed Schedule

- The schedule for this extended SQN Unit 1 refueling outage (and concurrent BFN Unit 2 refueling outage) was developed using a deliberate decision-making process.
- TVA plans to submit this exemption request to the NRC by May 8, 2026.
- To allow for update of applicable procedures, workhour control systems, and finalization of vendor contracts in advance of the spring 2027 outages, TVA requests NRC approval by June 30, 2026.

**TVA**

**TENNESSEE  
VALLEY  
AUTHORITY**