UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 9, 2023

Mr. Adam C. Heflin
Executive Vice President/
Chief Nuclear Officer
Mail Station 7605
Arizona Public Service Company
P.O. Box 52034
Phoenix, AZ 85072-2034

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 -ISSUANCE OF AMENDMENT NOS. 221, 221, AND 221, TO REVISE TECHNICAL SPECIFICATIONS TO ADOPT TSTF-107-A, "SEPARATE CONTROL RODS THAT ARE UNTRIPPABLE VERSUS INOPERABLE" (EPID L-2022-LLA-0181)

Dear Mr. Heflin:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 221 to Renewed Facility Operating License No. NPF-41, Amendment No. 221 to Renewed Facility Operating License No. NPF-51, and Amendment No. 221 to Renewed Facility Operating License No. NPF-74 for the Palo Verde Nuclear Generating Station, Units 1, 2, and 3, respectively. The amendments consist of changes to the Technical Specifications (TSs) in the above-referenced licenses and are issued in response to your application dated December 7, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22341A613), as supplemented by letter dated April 12, 2023 (ML23102A324).

The amendments revise the TSs to adopt Technical Specifications Task Force (TSTF) Traveler TSTF-107-A, "Separate Control Rods that are Untrippable versus Inoperable," by making various clarifying changes.

The proposed amendments clarify requirements for Limiting Condition for Operation (LCO) 3.1.5, "Control Element Assembly (CEA) Alignment," Conditions A, C and D. Specifically, the proposed changes conform with Revision 4 of TSTF-107-A, and additionally, modify Condition B to provide an action for limited duration loss of some position indication for multiple CEAs, in lieu of LCO 3.0.3 entry.

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's monthly *Federal Register* notice.

Sincerely,

/RA/

Siva P. Lingam, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-528, STN 50-529,
and STN 50-530

Enclosures:
1. Amendment No. 221 to NPF-41
2. Amendment No. 221 to NPF-51
3. Amendment No. 221 to NPF-74
4. Safety Evaluation

cc: Listserv

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

ARIZONA PUBLIC SERVICE COMPANY, ET AL.

DOCKET NO. STN 50-528

PALO VERDE NUCLEAR GENERATING STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 221
License No. NPF-41

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by the Arizona Public Service Company (APS) on behalf of itself and the Salt River Project Agricultural Improvement and Power District, El Paso Electric Company, Southern California Edison Company, Public Service Company of New Mexico, Los Angeles Department of Water and Power, and Southern California Public Power Authority dated December 7, 2022, as supplemented by letter dated April 12, 2023, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Renewed Facility Operating License No. NPF-41 is hereby amended to read as follows:

    (2) Technical Specifications and Environmental Protection Plan

    The Technical Specifications contained in Appendix A, as revised through Amendment No. 221, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this renewed operating license. APS shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

3. This license amendment is effective as of the date of issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jennifer L. Dixon-Herrity

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Date: 2023.08.09 09:15:08 -04'00'

Jennifer L. Dixon-Herrity, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-41
and the Technical Specifications

Date of Issuance: August 9, 2023

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

ARIZONA PUBLIC SERVICE COMPANY, ET AL.

DOCKET NO. STN 50-529

PALO VERDE NUCLEAR GENERATING STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 221
License No. NPF-51

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by the Arizona Public Service Company (APS) on behalf of itself and the Salt River Project Agricultural Improvement and Power District, El Paso Electric Company, Southern California Edison Company, Public Service Company of New Mexico, Los Angeles Department of Water and Power, and Southern California Public Power Authority dated December 7, 2022, as supplemented by letter dated April 12, 2023, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Renewed Facility Operating License No. NPF-51 is hereby amended to read as follows:

    (2) Technical Specifications and Environmental Protection Plan

    The Technical Specifications contained in Appendix A, as revised through Amendment No. 221, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this renewed operating license. APS shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

3. This license amendment is effective as of the date of issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jennifer L. Dixon-Herrity

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Jennifer L. Dixon-Herrity, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-51
and the Technical Specifications

Date of Issuance: August 9, 2023

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

ARIZONA PUBLIC SERVICE COMPANY, ET AL.

DOCKET NO. STN 50-530

PALO VERDE NUCLEAR GENERATING STATION, UNIT 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 221
License No. NPF-74

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by the Arizona Public Service Company (APS) on behalf of itself and the Salt River Project Agricultural Improvement and Power District, El Paso Electric Company, Southern California Edison Company, Public Service Company of New Mexico, Los Angeles Department of Water and Power, and Southern California Public Power Authority dated December 7, 2022, as supplemented by letter dated April 12, 2023, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) of Renewed Facility Operating License No. NPF-74 is hereby amended to read as follows:

    (2) Technical Specifications and Environmental Protection Plan

    The Technical Specifications contained in Appendix A, as revised through Amendment No. 221, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this renewed operating license. APS shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

3. This license amendment is effective as of the date of issuance and shall be implemented within 90 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Jennifer L.
Dixon-Herrity

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Jennifer L. Dixon-Herrity
Date: 2023.08.09
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Jennifer L. Dixon-Herrity, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-74
and the Technical Specifications

Date of Issuance: August 9, 2023

<u>ATTACHMENT TO LICENSE AMENDMENT NOS. 221, 221, AND 221 TO</u>

<u>RENEWED FACILITY OPERATING LICENSE NOS. NPF-41, NPF-51, AND NPF-74</u>

<u>PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3</u>

<u>DOCKET NOS. STN 50-528, STN 50-529, AND STN 50-530</u>

Replace the following pages of Renewed Facility Operating License Nos. NPF-41, NPF-51, and NPF-74, and the Appendix A, Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

<u>Renewed Facility Operating License No. NPF-41</u>

REMOVE	INSERT
5	5

<u>Renewed Facility Operating License No. NPF-51</u>

REMOVE	INSERT
6	6

<u>Renewed Facility Operating License No. NPF-74</u>

REMOVE	INSERT
4	4

<u>Technical Specifications</u>

REMOVE	INSERT
3.1.5-1	3.1.5-1
3.1.5-2	3.1.5-2

(1) Maximum Power Level

Arizona Public Service Company (APS) is authorized to operate the facility at reactor core power levels not in excess of 3990 megawatts thermal (100% power), in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 221, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this renewed operating license. APS shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

(3) Antitrust Conditions

This renewed operating license is subject to the antitrust conditions delineated in Appendix C to this renewed license.

(4) Operating Staff Experience Requirements

Deleted

(5) Post-Fuel-Loading Initial Test Program (Section 14, SER and SSER 2)*

Deleted

(6) Environmental Qualification

Deleted

(7) Fire Protection Program

APS shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility, as supplemented and amended, and as approved in the SER through Supplement 11, subject to the following provision:

APS may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

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* The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

(1) Maximum Power Level

Arizona Public Service Company (APS) is authorized to operate the facility at reactor core power levels not in excess of 3990 megawatts thermal (100% power) in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 221, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this renewed operating license. APS shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

(3) Antitrust Conditions

This renewed operating license is subject to the antitrust conditions delineated in Appendix C to this renewed operating license.

(4) Operating Staff Experience Requirements (Section 13.1.2, SSER 9)*

Deleted

(5) Initial Test Program (Section 14, SER and SSER 2)

Deleted

(6) Fire Protection Program

APS shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility, as supplemented and amended, and as approved in the SER through Supplement 11, subject to the following provision:

APS may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

(7) Inservice Inspection Program (Sections 5.2.4 and 6.6, SER and SSER 9)

Deleted

* The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

(4) Pursuant to the Act and 10 CFR Part 30, 40, and 70, APS to receive, possess, and use in amounts required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

(5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, APS to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Arizona Public Service Company (APS) is authorized to operate the facility at reactor core power levels not in excess of 3990 megawatts thermal (100% power), in accordance with the conditions specified herein.

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 221, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this renewed operating license. APS shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

(3) Antitrust Conditions

This renewed operating license is subject to the antitrust conditions delineated in Appendix C to this renewed operating license.

(4) Initial Test Program (Section 14, SER and SSER 2)

Deleted

(5) Additional Conditions

The Additional Conditions contained in Appendix D, as revised through Amendment No. 212, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Additional Conditions.

3.1 REACTIVITY CONTROL SYSTEMS

3.1.5 Control Element Assembly (CEA) Alignment

LCO 3.1.5 All full strength CEAs shall be OPERABLE.

AND

All full strength and part strength CEAs shall be aligned to within 6.6 inches (indicated position) of all other CEAs in their respective groups

APPLICABILITY: MODES 1 and 2.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more CEAs misaligned from its group by > 6.6 inches and ≤ 9.9 inches. OR One CEA misaligned from its group by > 9.9 inches.	A.1 Reduce THERMAL POWER in accordance with the limits in the COLR. AND A.2 Restore CEA alignment.	1 hour 2 hours

(continued)

ACTIONS (continued)

CONDITION		REQUIRED ACTION		COMPLETION TIME
B.	Only one CEA position indicator channel OPERABLE for one or more CEAs.	B.1	Restore at least two position indicator channels to OPERABLE status.	6 hours
		<u>OR</u>		
		B.2	Verify the CEA Group(s) with the inoperable position indicators are fully withdrawn or fully inserted while maintaining the insertion limits of LCO 3.1.6, LCO 3.1.7 and LCO 3.1.8.	6 hours <u>AND</u> Once per 12 hours thereafter.
C.	Required Action and associated Completion Time of Condition A or B not met <u>OR</u> One or more full strength CEAs inoperable.	C.1	Be in MODE 3.	6 hours
D.	Two or more CEAs misaligned from their group by > 9.9 inches.	D.1	Open the reactor trip breakers.	Immediately

UNITED STATES
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 221, 221, AND 221 TO RENEWED

FACILITY OPERATING LICENSE NOS. NPF-41, NPF-51, AND NPF-74

ARIZONA PUBLIC SERVICE COMPANY, ET AL.

PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3

DOCKET NOS. STN 50-528, STN 50-529, AND STN 50-530

1.0 INTRODUCTION

By application dated December 7, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22341A613), as supplemented by letter dated April 12, 2023 (ML23102A324), Arizona Public Service Company (the licensee) submitted a license amendment request (LAR) to revise the Technical Specifications (TSs) to adopt Technical Specifications Task Force (TSTF) Traveler TSTF-107-A, "Separate Control Rods that are Untrippable versus Inoperable," by making various clarifying changes for Palo Verde Nuclear Generating Station, Units 1, 2, and 3 (Palo Verde).

The proposed TS changes would clarify requirements for Limiting Condition for Operation (LCO) 3.1.5, "Control Element Assembly (CEA) Alignment," and its associated Conditions A, C and D. Specifically, the proposed changes would be made to conform with the corresponding section of Revision 4 of TSTF-107-A. In addition, the TS changes would modify Condition B to provide an action for limited duration loss of some position indication for multiple CEAs, in lieu of LCO 3.0.3 entry.

2.0 REGULATORY EVALUATION

The regulatory requirements and guidance on which the U.S. Nuclear Regulatory Commission (NRC, the Commission) staff based its review are:

- The regulation under Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36, "Technical specifications," which specifies the required content in the TSs. Specifically, the regulation, 10 CFR 50.36(c)(2) requires that the TSs contain LCOs, which the regulation defines as "the lowest functional capability or performance levels of equipment required for safe operation of facility." The regulation also states, in part, that "[w]hen a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met."

- TSTF-107-A, Revision 4, provides guidance on changes correcting an ambiguity regarding control rods that are inoperable versus out of alignment.

- NUREG-1432, Revision 5, “Standard Technical Specifications [STS] Combustion Engineering [CE] Plants” (STS-CE), Volume 1, “Specifications,” dated March 2021 (ML21258A421), TS 3.1.4, “Control Element Assembly (CEA) Alignment (Digital),” reflects the changes in TSTF-107-A, Revision 4.

3.0 TECHNICAL EVALUATION

Palo Verde TS Basis 3.1.5, “Control Element Assembly (CEA) Alignment,” indicates that the specific criterion applicable to LCO 3.1.5 is that CEA alignment and CEA OPERABILITY satisfy Criteria 2 and 3 of 10 CFR 50.36(c)(2)(ii). Criterion 2 requires an LCO that is “[a] process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis…” Criterion 3 requires an LCO that is “…part of the primary success path … to mitigate a design basis accident.” The proposed TS would clarify requirements for LCO 3.1.5, and its associated Conditions A, C and D. Specifically, the changes would be made to conform with Revision 4 of TSTF-107-A,

The NRC staff discusses its evaluation of the changes to LCO 3.1.5, and the corresponding Conditions A, C, and D against the guidance in the corresponding sections of TSTF-107-A, Revision 4 and NUREG-1432, Revision 5 in the following safety evaluation sections.

3.1 LCO 3.1.5, CEA Alignment

As stated in the current Palo Verde TS, LCO 3.1.5 contains two requirements: (1) a requirement of rod OPERABILITY (defined in the Bases as the ability to insert CEAs on a reactor trip system trip signal within the required insertion time assumed in the safety analysis), and (2) a requirement for the indicated position of each rod to be correctly positioned as assumed in the safety analysis. The proposed change provides clarification of the current LCO 3.1.5, by separating the LCO description into two parts (OPERABILITY and correctly positioned). The proposed change is editorial in nature and does not change TS requirements. Also, the change is consistent with LCO 3.1.5 (Digital) of the STS-CE in TSTF-107-A, Revision 4 and LCO 3.1.4 (Digital) of the STS-CE in NUREG-1432, Revision 5. Therefore, the NRC staff finds the proposed change to be acceptable.

3.2 LCO 3.1.5 Condition A

The current 3.1.5 Condition A uses the wording “trippable and misaligned,” which is ambiguous for rods that, for instance, have drop times longer than that required by Surveillance Requirement (SR) 3.1.5.5 but are still trippable. Since the power reduction of Required Action (RA) A.1 is to address the misalignment regardless of whether the CEA is “trippable” or “untrippable”, the proposed change removes the words “trippable and” and clarifies that misaligned CEAs require entry into Condition A and completion of its RA within the required time of 1 hour. This change is consistent with LCO 3.1.5 (Digital) Condition A of STS-CE in TSTF-107-A, Revision 4, and LCO 3.1.4 (Digital) Condition A of the STS-CE in NUREG-1432, Revision 5. Therefore, the NRC staff finds the proposed change to be acceptable.

3.3 LCO 3.1.5 Condition B

The Palo Verde design includes three CEA position indicators. They are the CEA Reed Switch Position Transmitter (RSPT) 1 channel, CEA RSPT 2 channel, and the CEA pulse counting position channel. In the unlikely event of a loss of specific vital instrument buses, this would reduce CEAs position indication from three channels to one operable channel for multiple groups. The current Condition B is not applicable to this event since the loss of indication impacts multiple groups and entry into LCO 3.0.3 would be required causing unit shutdown. The proposed change modifies the wording of the existing Condition B to expand the scope to include the situation where more than one CEA per group has only one method of position indication. The proposed change does not revise any Actions or Completion Times (CTs).

The NRC staff reviewed the proposed change to TS 3.1.5 Condition B to expand the scope to apply when more than one CEA in a group has only one OPERABLE position indicator. The proposed change clarifies Condition B and addresses the lack of existing Action for this specific condition and avoids entry into LCO 3.0.3. With the expanded scope, the licensee, per Action B.1 has 6 hours to restore at least two indicator channels to OPERABLE while operating with only one CEA position indicator channel for one or more CEA(s). The 6-hour CT is unchanged in this LAR and provides a reasonable amount of time to restore CEA indication while there is one position indicator channel operable, instead of taking immediate actions for unit shutdown under LCO 3.0.3. Alternatively, the licensee, per Action B.2, within 6 hours and once per 12 hours, shall verify that the CEA group with the inoperable position indications are either fully withdrawn or fully inserted, while maintaining other TS insertion limits. The NRC staff notes the Upper Electrical Limit CEA reed switches provide indication for fully withdrawn condition and other TS 3.1.5 conditions address CEA alignment and OPERABILITY (i.e., trippability). With no concurrent signs of CEA misalignment, which would require entry into other TSs conditions, the change in scope to Condition B to allow 6 hours to restore CEA indication with one operable position indicator channel does not significantly increase risk and is technically appropriate. Based on this evaluation, the NRC staff finds that this change clarifies Condition B and meets the regulatory requirements of 10 CFR 50.36(c)(2) to provide appropriate remedial actions when LCOs are not met and is, therefore, acceptable.

3.4 LCO 3.1.5 Condition C

The proposed change to Condition C replaces the word “untrippable” with the word “inoperable.” This change addresses CEAs that may be trippable but have drop times longer than that required by SR 3.1.5.5 and are thus inoperable. The change is consistent with the first condition of Condition D and Condition E in LCO 3.1.5 (Digital) of the STS-CE in TSTF-107-A, Revision 4. The change is also consistent with the first two conditions of LCO 3.1.4 (Digital) Condition B of the STS-CE in NUREG-1432, Revision 5. Therefore, the NRC staff finds the proposed TS change to be acceptable.

3.5 LCO 3.1.5 Condition D

The current LCO 3.1.5 Condition D use the wording ‘trippable and misaligned’ which is imprecise since the power reduction of RA D.1 is to address the misalignment regardless of whether the CEA is trippable or untrippable. The proposed change removes the words “trippable and” and clarifies that misaligned CEAs require entry into Condition D and completion of its RA. The proposed TS does not change the specific CEA misalignment values. It is consistent with the second condition of Condition D in LCO 3.1.5 (Digital) of the STS-CE in TSTF-107-A, Revision 4 and the third condition of Condition B in LCO 3.1.4 (Digital) of the STS-CE in

NUREG-1432, Revision 5. The current LCO 3.1.5 RA D.1, requiring opening of the reactor trip breakers if two or more CEAs are misaligned by more than the specified limit, is more restrictive than LCO 3.1.5 (Digital) RA D.1 of the STS-CE in TSTF-107-A, Revision 4 and LCO 3.1.4 (Digital) RA B.1 of the STS-CE in NUREG-1432, Revision 5 that require the operator to align the plant in Mode 3. The proposed TS revision does not change this more restrictive RA D.1. Therefore, the NRC staff finds the proposed TS change to be acceptable.

3.6 Technical Evaluation Conclusion

The NRC staff has reviewed the proposed TS LCO 3.1.5, its Conditions A, B, C, and D, and found that the TS changes provide clarification and remove ambiguity by deleting the words "trippable" and "untrippable," and the changes are consistent with the corresponding LCO 3.1.5 (Digital) Conditions of STS-CE in TSTF-107-A, Revision 4 and LCO 3.1.4 (Digital) Conditions of the STS-CE in NUREG-1432, Revision 5. The proposed changes to TS LCO 3.1.5 and its Conditions A, B, C, and D are acceptable. Therefore, the NRC staff concludes that the modified TSs satisfy the 10 CFR 50.36 requirements and are acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Arizona State officials were notified of the proposed issuance of the amendments on July 17, 2023. The State officials had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, published in the *Federal Register* on May 16, 2023 (88 FR 31284), and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: S. Sun, NRR
C. Cheung, NRR

Date: August 9, 2023

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 -ISSUANCE OF AMENDMENT NOS. 221, 221, AND 221, TO REVISE TECHNICAL SPECIFICATIONS TO ADOPT TSTF-107-A, “SEPARATE CONTROL RODS THAT ARE UNTRIPPABLE VERSUS INOPERABLE” (EPID L-2022-LLA-0181) DATED AUGUST 9, 2023

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OFFICE	NRR/DORL/LPL4/PM*	NRR/DORL/LPL4/LA*	NRR/DSS/SNSB/BC*	NRR/DEX/EICB/BC*
NAME	SLingam	PBlechman	PSahd	MWaters
DATE	7/17/2023	7/19/2023	6/29/2023	6/20/2023
OFFICE	NRR/DSS/STSB/BC*	NRR/DEX/EEEB/BC*	OGC (NLO)*	NRR/DORL/LPL4/BC*
NAME	VCusumano	WMorton	MWright	JDixon-Herrity
DATE	8/7/2023	8/7/2023	7/31/2023	8/9/2023
OFFICE	NRR/DORL/LPL4/PM*			
NAME	SLingam			
DATE	8/9/2023			

OFFICIAL RECORD COPY