January 3, 2017

MEMORANDUM TO: Robert J. Pascarelli, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: Jacob I. Zimmerman, Chief ***/RA/***
Electrical Engineering Branch
Division of Engineering
Office of Nuclear Reactor Regulation

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNIT 3 – SAFETY EVALUATION INPUT REGARDING CHANGES TO TECHNICAL SPECIFICATIONS FOR ONE-TIME EXTENSION OF COMPLETION TIME FOR EMERGENCY DIESEL GENERATOR (TAC NO. MF9019)

By letter dated December 30, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16365A240), Arizona Public Service Company (APS) (the licensee) submitted an emergency license amendment request (LAR) for a one-time extension of the emergency diesel generator (DG) completion time (CT) described in the Technical Specifications (TS) for Palo Verde Nuclear Generating Station (PVNGS) Unit 3. Specifically, the emergency LAR would extend the TS required action 3.8.1.B.4 completion time from 21 days to 62 days for the purpose of completing repairs and testing to re-establish operability of the 3B DG. In response to the staff's request, the licensee provided supplemental information in its letter dated January 2, 2017 (ADAMS Accession No. ML17002A001).

The Electrical Engineering Branch (EEEB) has reviewed the information provided by the licensee. The staff concludes that the proposed one-time DG CT extension request is acceptable based on the deterministic perspective as discussed in the enclosed safety evaluation input. This memorandum and the enclosed safety evaluation input complete our review and evaluation efforts for TAC No. MF9019.

Enclosure:
Safety Evaluation

CONTACT: Vijay Goel, NRR/EEEB
(301) 415-3730

January 3, 2017

MEMORANDUM TO: Robert J. Pascarelli, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: Jacob I. Zimmerman, Chief ***/RA/***
Electrical Engineering Branch
Division of Engineering
Office of Nuclear Reactor Regulation

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNIT 3 - SAFETY EVALUATION INPUT REGARDING CHANGES TO TECHNICAL SPECIFICATIONS FOR ONE-TIME EXTENSION OF COMPLETION TIME FOR EMERGENCY DIESEL GENERATOR (TAC NO. MF9019)

By letter dated December 30, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16365A240), Arizona Public Service Company (APS) (the licensee) submitted an emergency license amendment request (LAR) for a one-time extension of the emergency diesel generator (DG) completion time (CT) described in the Technical Specifications (TS) for Palo Verde Nuclear Generating Station (PVNGS) Unit 3. Specifically, the emergency LAR would extend the TS required action 3.8.1.B.4 completion time from 21 days to 62 days for the purpose of completing repairs and testing to re-establish operability of the 3B DG. In response to the staff's request, the licensee provided supplemental information in its letter dated January 2, 2017 (ADAMS Accession No. ML17002A001).

The Electrical Engineering Branch (EEEB) has reviewed the information provided by the licensee. The staff concludes that the proposed one-time DG CT extension request is acceptable based on the deterministic perspective as discussed in the enclosed safety evaluation input. This memorandum and the enclosed safety evaluation input complete our review and evaluation efforts for TAC No. MF9019.

Enclosure:
Safety Evaluation

CONTACT: Vijay Goel, NRR/EEEB
(301) 415-3730

DISTRIBUTION: SLingam RidsNrrDeEeeb RidsNrrPMPaloVerde

ADAMS ACCESSION NO: ML17003A083

OFFICE	NRR:DE:EEEB	NRR:DE:EEEB	NRR:DE:EEEB BC
NAME	VGoel	SSom	JZimmerman
DATE	01/03/2017	01/03/2017	01/03/2017

OFFICIAL RECORD COPY

PALO VERDE NUCLEAR GNERATING STATION, UNIT 3 - SAFETY EVALUATION INPUT REGARDING CHANGES TO TECHNICAL SPECIFICATIONS FOR ONE-TIME EXTENSION OF COMPLETION TIME FOR EMERGENCY DIESEL GENERATOR (TAC NO. MF9019)

1.0 INTRODUCTION

By letter dated December 30, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16365A240), Arizona Public Service Company (APS) (the licensee) submitted an emergency license amendment request (LAR) for a one-time extension of the emergency diesel generator (DG) completion time (CT) described in the Technical Specifications (TS) for Palo Verde Nuclear Generating Station (PVNGS) Unit 3. Specifically, the emergency LAR would extend the TS required action 3.8.1.B.4 completion time from 21 days to 62 days for the purpose of completing repairs and testing to re-establish operability of the 3B DG. In response to the staff's request, the licensee provided supplemental information in its letter dated January 2, 2017 (ADAMS Accession No. ML17002A001). This safety evaluation input is based on the deterministic perspective.

2.0 REGULATORY EVALUATION

The staff of U.S. Nuclear Regulatory Commission (NRC) reviewed the LAR based on the following regulatory requirements:

- General Design Criteria (GDC) 17, "Electric power systems," of Appendix A, to Title 10, Part 50, of the *Code of Federal Regulations* (CFR) requires, in part, that nuclear power plants have onsite and offsite electric power systems to permit the functioning of structures, systems, and components that are important safety. The onsite system is required to have sufficient independence, redundancy, and testability to perform its safety function, assuming a single failure. The offsite power system is required to be supplied by two physically independent circuits that are designed and located so as to minimize, to the extent practical, the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions.

- GDC 18, "Inspection and testing of electric power systems," of Appendix A, to Title 10, Part 50, of the CFR requires, in part, that electric power systems that are important to safety must be designed to permit appropriate periodic inspection and testing of important areas and features, such as wiring, insulation, connections, and switchboards to assess the continuity of the systems and the condition of their components.

- 10 CFR 50.36, "Technical Specifications," requires, in part, that the TS shall be included by applicants for a license authorizing operation of a production or utilization facility. 10 CFR 50.36(c) requires that TS include items in five specific categories related to station operation. These categories are (1) Safety limits, limiting safety system settings, and limiting control settings, (2) Limiting conditions for operation (LCOs), (3) Surveillance requirements (SRs), (4) Design features, and (5) Administrative controls. The proposed change to the PVNGS TS relates to the LCO category.

- 10 CFR 50.63, “Loss of all alternating current power,” requires, in part, that a nuclear power plant shall be able to withstand for a specified duration, and recover from a complete loss of offsite and onsite alternate current (AC) sources, i.e., a station blackout (SBO).

- 10 CFR 50.65, “Requirements for monitoring the effectiveness of maintenance at nuclear power plants,” requires, in part, that performing maintenance activities shall not reduce the overall availability of the systems, structures and components, which are important to safety of the plant.

The staff also reviewed the LAR based on the following regulatory guidance documents:

- Regulatory Guide (RG) 1.93, “Availability of Electric Power Sources,” provides guidance with respect to operating restrictions or CT if the number of available AC sources is less than that required by the TS LCO. In particular, this guide recommends a maximum CT of 72 hours for an inoperable onsite or offsite AC source.

- RG 1.155, "Station Blackout," provides guidance for complying with the 10 CFR 50.63 that requires nuclear power plants to be capable of coping with a SBO event for a specified duration.

- RG 1.177, “An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications,” dated May 2011, describes an acceptable risk-informed approach for assessing proposed changes to TS AOTs, or termed henceforth as Completion Time.

- NUREG-0800, Branch Technical Position (BTP) 8-8, “Onsite (Emergency Diesel Generators) and Offsite Power Sources Allowed Outage Time Extensions,” dated February 2012 (ADAMS Accession No. ML113640138) provides guidance to the NRC staff in reviewing LARs for licensees proposing a one-time or permanent TS change to extend an DG Allowed Outage Time (AOT) beyond 72 hours. The BTP 8-8 emphasizes that more defense-in-depth is needed for SBO scenarios which are more likely to occur as compared to the likely occurrence of the large and medium size loss-of-coolant accident (LOCA) scenarios (which requires a fast start DG).

3.0 TECHNICAL EVALUATION

3.1 Description of the PVNGS, AC Power System

In the LAR, the licensee explained that seven physically independent 525 kilovolt (kV) transmission lines of the Western Interconnection are connected to the PVNGS 525 kV switchyard. Three 525 kV tie lines supply power from the switchyard to three startup transformers, which supply power to six 13.8 kV intermediate buses (two per unit). Two physically independent circuits supply offsite (preferred) power to the onsite power system of each PVNGS unit.

The three startup transformers connect to the PVNGS 525 kV switchyard, and feed six 13.8 kV intermediate buses (two per unit). These buses are arranged in three pairs, each pair feeding only one unit. The intermediate buses for PVNGS Units 1, 2, and 3 are interconnected to the startup transformers so that each unit's buses can access a primary and backup startup transformer winding when all startup transformers are connected to the switchyard. The intermediate buses are connected to the onsite power system by one 13.8 kV transmission line per bus (two per unit).

The safety-related equipment is divided into two load groups per unit. For each unit, either of the associated load groups is capable of providing power for safely shutting down the unit. Each ac load group consists of one 4.16 kV bus, three 480 V load centers, and four 480 V motor control centers (MCCs). Two non-Class 1E MCCs are connected to each load group and are tripped on a safety injection actuation signal (SIAS).

The standby power supply for each safety-related load group consists of one DG complete with its accessories, fuel storage and transfer systems. The standby power supply functions as a source of AC power for safe plant shutdown in the event of loss of preferred power and for post-accident operation of engineered safety feature (ESF) loads. Each DG is rated at 5500 kW for continuous operation and 6050 kW for 2 hours out of 24 hours. Each generator is driven by a turbocharged, four-cycle, 20-cylinder diesel engine.

Each DG is normally connected to a single 4.16 kV safety features bus of a load group. However, there are provisions for connecting both ESF buses to a single diesel generator during emergency conditions. Each load group is independently capable of safely shutting down the unit or mitigating the consequences of a design basis accident. The components of the standby power supply system, including related controls, required to supply power to ESF and cold shutdown loads conform to the requirements of General Design Criterion 17.

3.2 Station Blackout

In the LAR, the licensee explained that to meet 10 CFR 50.63 requirements, the PVNGS has analyzed a SBO coping duration of 16 hours. The analysis was submitted to NRC in October 28, 2005 and approved by the NRC in a Safety Evaluation dated October 31, 2006.

The 16-hour coping strategy analysis assumes that one of the two Station Blackout Generators (SBOG), which serves as the Alternate AC (AAC) for PVNGS, is started and connected to the AC distribution system to supply loads in the respective unit during the first hour to allow the analyzed SBO loads to be powered in accordance with administrative or emergency procedures. Should a SBO occur in any one unit, i.e., a loss of offsite power [LOOP] coincident with the unavailability of both DGs in that unit, an AAC power source is available to provide the power necessary to cope with a SBO for a minimum of 16 hours.

The non-safety related AAC power source consists of two 100 percent capacity SBOGs that can be connected to each unit via the primary winding of the ESF transformer that is normally aligned to the train A 4.16kV bus. One SBOG is analyzed to supply all required SBO loads, which are located on the A train. Each SBOG has a minimum continuous output rating of 3400 kW at 13.8 kV under worst case anticipated site environmental conditions. This rating is

sufficient to provide power to the loads identified as being important for coping with the SBO. Starting and loading of the AAC power system is performed manually; no autostart or automatic loading capability is provided.

Although the SBOGs are able to be aligned to Unit 3 train B from a defense-in-depth perspective, for this emergency LAR, the PVNGS SBOGs are not credited to provide power to the 3B Class 1E 4.16 kV bus. The licensee has deployed three portable diesel generators at Unit 3 connected to the 4.16 kV AC FLEX connection box that can supply the train B 4.16 kV AC class bus to maintain the same level of defense-in-depth as of SBOGs for safe shutdown of the plant. Based on discussion provided in LAR, Enclosure (Attachment 16), it takes less than 30 minutes to connect the portable DGs to a safety-related bus which has lost power.

3.3 Proposed TS Changes

The licensee proposed the following specific changes to TS 3.8.1, *Electrical Power Systems, AC Sources – Operating*, to extend the completion time on a one-time basis for the PVNGS Unit 3 B train DG.

> Modify NOTE in the Completion Time column, associated with Required Action B.4 of the TS 3.8.1 Action Table, to read as follows:
>
> NOTE
>
> -
>
> For the Unit 3 Train B DG failure on December 15, 2016, restore the inoperable DG to OPERABLE status within 62 days.
>
> -

In the LAR, the licensee provided the following basis for the proposed change and duration of the CT Extension request:

> Need for Proposed Change
>
> During routine scheduled surveillance testing on December 15, 2016, the PVNGS Unit 3 B train DG was operating partially loaded when the load suddenly decreased and a low lube oil pressure trip occurred. The physical damage was readily apparent to plant operators when responding to the event. Oil and metal debris were observed on the engine room floor and the number nine right cylinder (9R) crankcase cover was deformed. Physical damage was extensive, including but not limited to the number nine master and articulating rod separating and impacting internal areas of the engine base and block. Both the 9R and 9L pistons, sleeves and associated components were damaged and will require replacement. The counterbalance was also fractured and the crankshaft damaged at this number nine location. There was damage to the number eight master and articulating rod, including the physical fracture of two studs on the rod cap. A counterbalance at the number eight location was also fractured and damaged. The number three bearing seating surface was discovered to be cracked.
>
> Current plans to repair the DG will exceed the TS required action completion time of 21 days approved by license amendment 199. APS has determined the cause of the 3B

DG failure does not represent a common mode failure potential for the Unit 3 train 'A' DG, and has evaluated the operational risk and is requesting an emergency LAR to extend the completion time to allow completion of repair and testing, and restoring to operable status.

Basis for Duration of CT Extension for Repair and Testing Schedule

The 3B DG sustained extensive damage as a result of the recent failure. The repairs will require substantial disassembly, investigation, repair and/or replacement of damaged components, reassembly and retests. The requested completion time extension will allow for completion of repairs and testing of the 3B DG. Completed activities include initial visual inspection, damage assessment, parts recovery, removal of the generator, flywheel, and crankshaft, precision alignment checks of the DG internals, removal of pistons, liners and connecting rods, line bore measurements, and block inspection.

Continued repair activities include block repairs and machining, foundation inspection and repairs, installation of a new crankshaft followed by engine, generator, and flywheel re-assemblies, system flushes, startup checks, and retests.

Retest of the 3B DG diesel will begin with several short maintenance runs which include integral monitoring and inspection activities. Then, an over-speed test will be performed followed by a 24-hour loaded run with a 100 percent load reject and a hot restart.

Finally, isochronous load testing will be performed to verify appropriate voltage and frequency response to sequenced loads. The retest activities are scheduled to take approximately 4.5 days.

In Attachment 18 of LAR, the licensee provided further detail of DG repair activities, which reflect a 56-day duration. The requested CT extension reflects 6 additional days for contingency to address unknowns. The staff finds the need for the proposed TS change, and the duration of CT extension as reasonable, and therefore, acceptable.

[Common Cause Evaluation by EPNB can be added here.]

3.4 Deterministic Evaluation

3.4.1 Defense-in-depth for onsite and offsite power sources

In license amendment number 199 for PVNGS Unit 3 (approved by NRC on December 23, 2016) (ADAMS Accession Number ML16358A676), the staff evaluated the defense-in-depth aspects for onsite and offsite power sources. The staff determined that there are multiple, diverse means of supplying electrical power to the safety buses to safely shutdown Unit 3 and maintain the plant in a cold shutdown condition. In addition, the portable DGs have the capacity and capability to support the loads necessary to mitigate a LOOP event and bring the unit to cold shutdown in case of an extended LOOP concurrent with a single failure of the train A DG

during plant operation, and meet the intent of BTP 8-8 in achieving a cold shutdown. In the LAR, Attachment 17, the licensee stated that three portable DGs are provided with the load sharing control equipment/features to ensure real and reactive power are equally shared across each running generator. Based on the staff's request for additional information, the licensee in its letter dated January 2, 2017, also provided details of the protection devices associated with each portable DG. The licensee stated that the protection devices of the portable DGs have been appropriately coordinated with the downstream protection relays/devices. Based on review of the additional information, the staff finds additional assurance that the portable DGs are suitable for the required additional source of power, if needed.

3.4.2 Safety Margin

In the LAR, the licensee stated: "The proposed one-time extension of the Unit 3 train B DG completion time remains consistent with the codes and standards applicable to the PVNGS onsite AC sources and electrical distribution system. A loss of all AC power event would require a loss of all offsite power sources, failure of the train A DG, failure of both SBOGs, and failure of the portable DGs. In addition, with deployment of the diesel-driven FLEX SG Makeup Pump at Unit 3, another backup supply of SG makeup independent of offsite power or the 4.16 kV AC buses is provided to mitigate the most likely scenarios associated with a loss of offsite power event. Also, PVNGS has installed a cross-connection which allows make-up to SGs from the station fire protection system which provides additional defense-in-depth for the heat removal safety function. Based on realistic thermal hydraulic analysis, PVNGS design now includes six 100 percent capacity steam generator (SG) makeup pumps each supplied by onsite power sources. Only one of these sources is powered by the 3B DG if offsite power is lost. Therefore, there is no significant reduction in the margin of safety."

The staff reviewed whether the proposed TS changes will have any impact on the licensee's compliance with GDC 17, GDC 18, 10 CFR 50.36, 10 CFR 50.63, and 10 CFR 50.65. The staff did not find any adverse impact on continued compliance with these regulatory requirements. Due to defense-in-depth of onsite and offsite power source, and other supporting FLEX equipment, the staff finds for the more likely scenarios of LOOP, and SBO, the reduction in safety margin will be minimal. Offsite power sources, and one train of onsite power source would continue to be available for the scenario of a LOCA.

3.4.3 Risk Management and Compensatory Measures

The licensee stated that risk would be managed during the extended completion time via the Maintenance Rule 10 CFR 50.65(a)(4) Configuration Risk Management Program, which has been reviewed by NRC in prior risk-informed TS change requests.

In the Attachment 3 of the LAR, the licensee provided following list of Compensatory Measures (also as Regulatory Commitments), which will be implemented in accordance with the PVNGS Configuration Risk Management Program:

1. The redundant train A DG (along with all of its required systems, subsystems, trains, components, and devices) will be verified OPERABLE (as required by Technical Specification) and no discretionary maintenance activities will be scheduled on the redundant (OPERABLE) DG.

2. No discretionary maintenance activities will be scheduled on the SBOGs.

3. No discretionary maintenance activities will be scheduled on the startup transformers.

4. No discretionary maintenance activities will be scheduled in the Salt River Project (SRP) switchyard or the unit's 13.8 kV power supply lines and transformers which could cause a line outage or challenge offsite power availability to the unit utilizing the extended DG completion time.

5. All activity, including access, in the SRP switchyard shall be closely monitored and controlled.

6. The SBOGs will not be used for non-safety functions (i.e., power peaking to the grid).

7. All maintenance activities associated with Unit 3 will be assessed and managed per 10 CFR 50.65(a)(4) (Maintenance Rule). Planned work will be controlled during the extended completion time so that Unit 3 does not voluntarily enter a YELLOW Risk Management Action Level.

8. The OPERABILITY of the steam driven auxiliary feedwater pump will be verified before entering the extended DG completion time.

9. The system dispatcher will be contacted once per day and informed of the DG status, along with the power needs of the facility.

10. Should a severe weather warning be issued for the local area that could affect the SRP switchyard or the offsite power supply during the extended DG completion time, an operator will be available locally at the SBOG should local operation of the SBOG be required as a result of on-site weather related damage.

11. No discretionary maintenance will be allowed on the main and unit auxiliary transformers associated with the unit.

12. APS has provided three portable diesel generators to ensure the ability to bring Unit 3 to cold shutdown in the event of a LOOP during the extended time period that the Unit 3 train B DG is inoperable. The three portable diesel generators operate in parallel as a set. The result is that the three portable diesel generators are sufficient to enable a cold shutdown of Unit 3 in the event of a LOOP with a single failure during the extended time period while the Unit 3 train B DG is inoperable. The three portable diesel generators are deployed and physically connected to the Unit 3 train B 4.16 kV AC FLEX connection box for the duration of the extended DG completion time.

13. The portable DGs will be verified available and functional by the completion of a test run prior to the period of the extended allowable outage time.

14. A diesel-driven FLEX SG Makeup Pump is deployed to its FLEX pad at Unit 3 for the duration of the extended DG completion time.

15. The following equipment will be protected by signage/chains for the duration of the extended completion time to prevent inadvertent impact from walkdowns, inspections, maintenance and potential for transient combustible fires:

    a. Both SBOGs

    b. Unit 3 train A DG

    c. Unit 3 train A Engineered Safety Features (ESF) Switchgear, DC equipment and DC Battery Rooms

    d. Three AC portable diesel generators deployed at Unit 3 and their connections to the train B FLEX 4.16 kV AC connection box

    e. Diesel-driven FLEX SG Makeup Pump deployed at Unit 3

    f. Turbine-driven auxiliary feedwater pump

    g. Fire pumps, diesel and electric

16. Establish transient combustible and hot work exclusion zones by procedure and using barriers/signage in the following compartments, and conducting shifty walkdowns of these zones by the Fire Marshal or his designee:

    a. Fire zones FCCOR2 (120' Corridor Building) and FCCOR2A (120' Corridor Riser Shaft)

    b. Fire zones FCTB04 (upper level only, non-class DC Equipment, [FCTB04-TRAN1])

    c. Fire zone FC86A (train 'A' Seismic Gap, make part of train 'A' Electrical Protected Equipment)

    d. Fire zone FCTB100 zone ZT1G (SW corner, south half of 100' Turbine between columns TA and TC)

17. An additional dedicated auxiliary operator will be added to each shift to implement the auxiliary feedwater cross-tie.

18. A continuous fire watch with a fire extinguisher and training to utilize the extinguisher will be posted in fire zone FCCOR2 (120' Corridor Building).

19. The system load dispatcher will be contacted once per day to ensure no significant grid perturbations (high grid loading unable to withstand a single contingency of line or generation outage) are expected during the extended allowed outage time.

20. Component testing or maintenance of safety systems and important non- safety equipment in the offsite power systems that can increase the likelihood of a plant transient (unit trip) or LOOP will be avoided.

21. Discretionary work will be prohibited in the SRP switchyard during the extended Unit 3 train B DG TS 3.8.1 Condition B required action completion time.

22. TS required systems, subsystems, trains, components, and devices that depend on the remaining power sources will be verified to be operable and positive measures will be provided to preclude subsequent testing or maintenance activities on these systems, subsystems, trains, components, and devices.

23. Steam-driven emergency feed water pump will be controlled as protected equipment.

24. Within 24 hours following unavailability of a portable DG, Unit 3 will enter TS condition 3.8.1.H to place the unit in Mode 3 within 6 hours.

25. Availability of the portable DGs will be verified once per shift.

26. Approval of transient combustibles and hot work in Unit 3 will be controlled by the outage control center (OCC).

27. There will be an OCC position responsible for oversight and monitoring of the compensatory measures of Attachment 3 and the actions described in this attachment.

28. In case APS determines prior to expiration of the extended completion time, a common failure mode does exist, then APS will shut down the plant.

29. An auxiliary operator (AO) on each shift will be dedicated to perform pre-start checks of the portable generators each shift. This dedicated AO will perform the emergency start of the portable generators when directed and monitor their operation. The dedicated AO will have no other assigned duties during the extended completion time.

30. In the event of a reactor trip with a loss of off-site power, the Area 4 (Control Building) AO, will perform the required electrical system alignments, as directed by the control room, to restore power to the 'B' train Class 1E 4.16 kV bus using the portable generators, in accordance with station procedures.

31. In the event of a reactor trip with a loss of off-site power, one of the on-shift reactor operators will be assigned to perform and direct actions to restore power to the 'B' train Class 1E 4.16 kV bus using the portable generators. During the event, this reactor operator will not be assigned other duties until completion of power restoration.

The staff finds that the above compensatory measures (and Regulatory Commitment) provide adequate Risk Management for the safety of the plant, and enhance the defense-in-depth aspects of the plant.

3.4.5 Operator Training

In the LAR, the licensee stated: "Operators are trained on the strategies and hierarchy of procedures for LOOP that specify use of alternate power sources, including the portable DGs.

Training, briefings, and walkdowns are provided to the Operators responsible for operating the portable DGs as part of the preparation for use of the generators. Operations crews are briefed on the implementing procedure. Designated operators will be familiar with instructions for starting and operating the portable DGs. Operations staff has received classroom training for FLEX strategies, which included the use of the portable DGs."

The staff finds that the licensee has taken adequate steps to train operators as part of FLEX strategies for which the NRC staff issued a safety evaluation on July 20, 2016 (ADAMS Accession No. ML16088A261).

[Evaluation by EPNB can be added here by DORL.]

4.0 CONCLUSION

The staff has reviewed the licensee's proposed temporary, one-time change to TS 3.8.1.B.4 to extend the Completion Time for an inoperable DG from the current 21 days to 62 days. Based on the above deterministic evaluation, **[and PRA evaluation provided separately by APLA]** the staff concludes that the proposed change will not impact the licensee's continuous compliance with the applicable regulatory requirements identified in Section 2.0 (such as GDCs 17, 18, and 10 CFR Sections 50.36, 50.63, 50.65), and will continue to provide reasonable assurance of adequate protection to public health and safety.