

Enclosure 8

Case Study 4: Do we need to clarify what is meant by  
"operational convenience"

Meeting Summary of the January 27 & 28 Meeting with  
NRC/TSTF

**Dated March 9, 2009**

#### **Case Study 4: Do we need to clarify what is meant by "operational convenience"**

The term "operational convenience" appears four times in the Bases of each ISTS NUREG. It does not appear in the Specifications.

The LCO 3.0.2 Bases state:

The Completion Times of the Required Actions are also applicable when a system or component is removed from service intentionally. The reasons for intentionally relying on the ACTIONS include, but are not limited to, performance of Surveillances, preventive maintenance, corrective maintenance, or investigation of operational problems. Entering ACTIONS for these reasons must be done in a manner that does not compromise safety. Intentional entry into ACTIONS should not be made for operational convenience. Additionally, if intentional entry into ACTIONS would result in redundant equipment being inoperable, alternatives should be used instead. Doing so limits the time both subsystems/divisions of a safety function are inoperable and limits the time conditions exist which may result in LCO 3.0.3 being entered. Individual Specifications may specify a time limit for performing an SR when equipment is removed from service or bypassed for testing. In this case, the Completion Times of the Required Actions are applicable when this time limit expires, if the equipment remains removed from service or bypassed.

The LCO 3.0.3 Bases state:

This Specification delineates the time limits for placing the unit in a safe MODE or other specified condition when operation cannot be maintained within the limits for safe operation as defined by the LCO and its ACTIONS. It is not intended to be used as an operational convenience that permits routine voluntary removal of redundant systems or components from service in lieu of other alternatives that would not result in redundant systems or components being inoperable.

The SR 3.0.2 Bases state:

The provisions of SR 3.0.2 are not intended to be used repeatedly merely as an operational convenience to extend Surveillance intervals (other than those consistent with refueling intervals) or periodic Completion Time intervals beyond those specified.

The SR 3.0.3 Bases state:

Failure to comply with specified Frequencies for SRs is expected to be an infrequent occurrence. Use of the delay period established by SR 3.0.3 is a flexibility which is not intended to be used as an operational convenience to extend Surveillance intervals. While up to 24 hours or the limit of the specified Frequency is provided to perform the missed Surveillance, it is expected that the missed Surveillance will be performed at the first reasonable opportunity. The determination of the first reasonable opportunity should ....

The term "operational convenience" is not used in the Standard Review Plan (NUREG-0800), the NRC Enforcement Manual, or NUREG-1022, "Event Reporting Guidelines."

A wide search of the NRC ADAMS system was also performed without discovering any additional information that could be used to support a definition.

The term "operational convenience" first appears in the model Technical Specifications in Generic Letter 87-09, "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Conditions for Operation and Surveillance Requirements." The Model BWR Technical Specifications 3.0 Bases (Generic Letter 87-09, Enclosure 5) only mentioned "operational convenience" in LCO 3.0.3 Bases. However, the PWR 3.0 Bases, Generic Letter 87-09 Enclosure 3, included the "operational convenience" limitation in the LCO 3.0.1 Bases. See the attached pages. In both cases, the term "operational convenience" was equated with "routine voluntary removal of a system(s) or component(s) from service in lieu of other alternatives that would not result in redundant systems or components being inoperable." Also, in both the PWR LCO 3.0.1 Bases and the PWR and BWR LCO 3.0.3 Bases, the discussion of "operational convenience" was in the context of Actions requiring a shutdown.

It appears that during the development of Revision 0 of the ISTS NUREGs, the term "operational convenience" was separated from the concept of "routine voluntary removal of a system(s) or component(s) from service in lieu of other alternatives that would not result in redundant systems or components being inoperable" used in Generic Letter 87-09 and the term was introduced into the SR 3.0.2 and SR 3.0.3 Bases in circumstances in which the Generic letter 87-09 intent was not applicable.

The NRC Inspection Manual, Part 9900 - Technical Guidance, document entitled, "Voluntary Entry into Limiting Conditions for Operation Action Statements to Perform Preventative Maintenance," states:

Performing on-line PM (e.g., emergency diesel generator overhaul at power) requires intentionally entering the technical specifications (TS) limiting conditions for operation (LCO) for the affected system. If a licensee does this, it must complete the PM and restore operability within the time specified in the appropriate action statement of the LCO (i.e., the allowed outage time (AOT)<sup>1</sup>). Intentional entry into an action statement of an LCO is not a violation of the TS (except in certain cases, such as intentionally creating a loss of function situation or entering LCO 3.0.3 simply for operational convenience). For example, TS allow licensees to perform surveillance testing during power operation, even though such testing requires entry into LCO action statements. TS permit entry into LCO action statements to perform surveillance testing for a number of reasons. One reason is that the time needed to perform most surveillances is usually only a small fraction of the AOT associated with the action statement. Another reason is that the benefit to safety (increased level of assurance of reliability and verification of OPERABILITY) derived from meeting surveillance requirements is considered to more than compensate for the risk to safety from operating the facility in an LCO action statement for a small fraction of the AOT.

This discussion is consistent with the Generic Letter 87-09 discussion. The Inspection Manual reference to "intentionally creating a loss of function situation" is comparable to the Generic Letter 87-09 discussion of alternatives that would result in redundant systems or components being inoperable.

Based on the discussion presented above, the definition of entering Actions for "operational convenience" is "routine voluntary removal of a systems or components from service in lieu of other alternatives that would not result in redundant systems or components being inoperable."

#### Recommendation

The Bases should be modified to be consistent with the intent of the phrase "operational convenience" as originally presented in Generic Letter 87-09. The LCO 3.0.1 Bases should be modified to state:

The Completion Times of the Required Actions are also applicable when a system or component is removed from service intentionally. The reasons for intentionally relying on the ACTIONS include, but are not limited to, performance of Surveillances, preventive maintenance, corrective maintenance, or investigation of operational problems. Entering ACTIONS for these reasons must be done in a manner that does not compromise safety. Intentional entry into ACTIONS should not be used for ~~made for operational convenience~~ routine voluntary removal of redundant systems or components from service in lieu of other alternatives that would not result in redundant systems or components being inoperable. Additionally, if intentional entry into ACTIONS would result in redundant equipment being inoperable, alternatives should be used instead. Doing so limits the time both subsystems/divisions of a safety function are inoperable and limits the time conditions exist which may result in LCO 3.0.3 being entered. Individual Specifications may specify a time limit for performing an SR when equipment is removed from service or bypassed for testing. In this case, the Completion Times of the Required Actions are applicable when this time limit expires, if the equipment remains removed from service or bypassed.

The LCO 3.0.3 Bases are correct as written.

The SR 3.0.2 Bases should be revised to state:

The provisions of SR 3.0.2 are not intended to be used repeatedly ~~merely as an operational convenience~~ to extend Surveillance intervals (other than those consistent with refueling intervals) or periodic Completion Time intervals beyond those specified.

The SR 3.0.3 Bases should be revised to state:

Use of the delay period established by SR 3.0.3 is a flexibility which is not intended to be used repeatedly as an operational convenience to extend Surveillance intervals (other than those consistent with refueling intervals).



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-4005

August 9, 2004

Gregg R. Overbeck, Senior Vice  
President, Nuclear  
Arizona Public Service Company  
P. O. Box 52034  
Phoenix, Arizona 85072-2034

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION - NRC INTEGRATED  
INSPECTION REPORT 05000528/2004003, 05000529/2004003,  
05000530/2004003

Dear Mr. Overbeck:

On June 30, 2004, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Palo Verde Nuclear Generating Station, Units 1, 2, and 3, facility. The enclosed integrated report documents the inspection findings, which were discussed on July 8, 2004, with you and other members of your staff.

The inspection examined activities conducted under your licenses as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your licenses. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

This report documents eleven NRC identified and self-revealing findings of very low safety significance (Green). Ten of these findings were determined to involve violations of NRC requirements; however, because of the very low safety significance and because they were entered into your corrective action program, the NRC is treating these findings as noncited violations (NCVs) consistent with Section VI.A of the NRC Enforcement Policy. Additionally, three licensee-identified violations, which were determined to be of very low safety significance, are listed in Section 4OA7 of this report. If you contest the noncited violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington DC 20555-0001; with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011-4005; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001; and the NRC Resident Inspector at Palo Verde Nuclear Generating Station, Units 1, 2, and 3, facility.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, it's enclosure, and your response (if any) will be made available electronically for public inspection

Description. In March 2001, the licensee determined that the 42-inch containment purge isolation Valve CP-UV-2A/3B, had unreliable seals against containment pressure and declared the valves inoperable. On June 15, 2001, the licensee developed an interim strategy for containment purge Penetrations 56 and 57 due to the inability to satisfy Technical Specification Surveillance Requirement 3.6.3.6. The interim strategy involved declaring the inboard and outboard valves inoperable and installing blind flanges to comply with the required actions of Technical Specification 3.6.3, Condition D, in Modes 1-4. This strategy discontinued the performance of leak rate testing of the valves and enable continued operations with the installation of blind flanges on Units 1, 2, and 3. On June 18, 2002, the licensee approved a long-term strategy to make the 42-inch containment purge penetration blind flanges part of the permanent plant configuration.

Technical Specification Bases 3.0.2 states, in part, that intentional entry into ACTIONS should not be made for operational convenience. The inspectors determined that the interim strategy adopted by the licensee inappropriately used Technical Specification actions. Further, the inspectors observed that the licensee planned to use the actions required by Technical Specification 3.6.3, Condition D, to continue plant operations until implementation of a permanent modification in 2005 and 2006. The inspectors concluded that the licensee's schedule to correct the nonconforming condition through permanent plant modification did not meet NRC guidelines. Generic Letter 91-18, "Information to Licensees Regarding NRC Inspection Manual Section on Resolution of Degraded and Nonconforming Conditions," states, in part, that the NRC expects time frames longer than the next refueling outage to be explicitly justified by the licensee as part of the deficiency tracking documentation. The inspectors concluded that a permanent plant modification should have been implemented at the first available opportunity following identification of the degraded and nonconforming condition. This conclusion is based, in part, on the lack of justification for intentional entry into the actions of Technical Specification 3.6.3, Condition D, during Modes 1-4. Timely correction of the nonconforming condition would have identified the need for NRC review of a license amendment through 10 CFR 50.59(c)(1).

Analysis. The failure to correct the nonconforming condition in a timely manner through permanent plant modification is determined to have more than minor significance because the licensee's failure to submit a license amendment impacted the NRC's ability to perform its regulatory function. This finding is associated with the barrier integrity cornerstone. This finding was considered applicable to traditional enforcement. Although the significance determination process is not designed to assess the significance of violations that potentially impact or impede the regulatory process, the finding can be assessed using the significance determination process. Using the Phase 1 worksheet in Manual Chapter 0609, "Significance Determination Process," the finding is determined to have very low safety significance because it only affected the barrier integrity cornerstone and the installation of blind flanges adequately maintained containment integrity.

Enclosure