

**DESCRIPTION AND SIGNIFICANT HAZARDS CONSIDERATION OF  
PROPOSED CHANGE NO. 258 TO APPENDIX A OF  
FULL TERM OPERATING LICENSE NO. DPR-13**

This is a request to revise the following sections of the Administrative Controls Technical Specifications for San Onofre Nuclear Generating Station, Unit 1:

- Specification 6.1, "RESPONSIBILITY"
- Specification 6.2, "ORGANIZATION"
- Specification 6.3, "UNIT STAFF QUALIFICATIONS"
- Specification 6.4, "TRAINING"
- Specification 6.8, "PROCEDURES AND PROGRAMS"

**DESCRIPTION**

Described below are the existing specifications, the change needed and reason, and how the proposed change will accomplish the objective.

**EXISTING TECHNICAL SPECIFICATIONS**

Existing Technical Specifications in section 6.2 require the use of 10CFR55 licensed Reactor Operators (ROs) and Senior Reactor Operators (SROs) to operate the facility. These specifications delineate the number and type of licensed operator positions required on-shift and in the control room for the various plant operating modes, from power operation through refueling. The existing specifications are consistent with the requirements of 10CFR50.54, Sections (i) through (m).

These operator qualification and staffing requirements are reflected in other administrative control specifications in sections 6.1, 6.2, 6.3, 6.4, and 6.8. These other specifications indicate the operator position assigned the Control Room Command function, the requirements for operator control of core alterations, the operator positions to be excluded from the fire brigade, the operator positions which are subject to overtime guidelines, the license requirements for certain management positions, the licensed operator retraining and replacement standards, and the license requirements for personnel who approve temporary procedure changes.

**CHANGE NEEDED AND REASON**

A Technical Specification change eliminating requirements for the use of licensed operators is needed to allow discontinuing licensed operator qualification and requalification programs following defueling of the SONGS 1 reactor. These programs are required by 10CFR55 to include extensive training and evaluation on the events which are credible at operating facilities.

This training and evaluation must be conducted both in the class room and on a site specific plant simulator. As a result, licensed operator training and requalification programs require a significant expenditure of resources, but have little relevance to a shut down and defueled facility.

#### HOW THE PROPOSED CHANGE ACCOMPLISHES THIS OBJECTIVE

The proposed change eliminates Technical Specification requirements to use licensed operators following defueling, since the 10CFR50.54(i) through (m) requirements will no longer apply. The change establishes new operating positions with qualifications appropriate to the plant's defueled condition. The position of Certified Fuel Handler is established as the highest defueled operator qualification level, analogous to an SRO at an operational plant. A description of the qualification program for this position, designated as the Fuel Handler Certification (FHC) program, is provided for NRC approval. The qualification programs for subordinate positions will be prepared and approved in accordance with established site procedures.

The proposed change also requires one less operator than the existing specifications require during cold shutdown and refueling, since operations are much less complex with the reactor defueled. For consistency with the proposed operator qualification and staffing requirements, changes are also proposed to the specifications governing the Control Room Command function, core alteration control, fire brigade manning, overtime guidelines, management licenses, operator training and retraining standards, and approval of temporary procedure changes.

#### EXISTING TECHNICAL SPECIFICATIONS

The existing Technical Specifications affected by the proposed change are provided as Attachment 1.

#### PROPOSED TECHNICAL SPECIFICATIONS

The pages showing the revised Technical Specifications are provided as Attachment 2. Bars in the right margin indicate the changed sections.

#### DISCUSSION

As a result of an agreement with the California Public Utilities Commission, SONGS 1 was permanently shut down on November 30, 1992. The reactor will be defueled and the fuel stored in the spent fuel pool. An amendment has been issued which will change the facility license to a "Possession Only License" following defueling, thus prohibiting subsequent operation of the plant. In this condition, the only credible accidents evaluated in Chapter 15 of the UFSAR will be a loss of electrical power and a fuel handling accident. The only plant systems required to be operational will be those needed for spent fuel pool cooling, those needed to conduct any fuel movement that may be required, and those needed to mitigate the consequences of the credible accidents and abnormal occurrences.

With the plant in this condition, the operator licensing and requalification programs required by 10CFR55 will be largely irrelevant. We have reviewed the 10CFR50.54 requirements to use licensed operators and concluded that Technical Specification changes may be proposed which allow use of non-licensed operators, and which allow a reduction in staffing (the number of operators on-shift) below that currently required during cold shutdown and refueling.

#### REQUIREMENTS TO USE LICENSED OPERATORS

The requirements to use 10CFR55 licensed operators are contained in 10CFR50.54 and in the Technical Specifications. The 10CFR50.54 requirements indicate that licensed operators are needed for conditions and activities which only occur at operational facilities, such as manipulation of apparatus which affects the reactivity or power level of a reactor, during power operation, when there is fuel in the unit, and during core alterations.

The conditions and activities identified in 10CFR50.54 as requiring licensed operators will not occur at a nuclear power plant in which the reactor has been defueled, and in which criticality is no longer possible. The facility licensees for such plants may therefore propose Technical Specification changes such that non-licensed defueled plant operators, qualified in accordance with alternative programs are required, rather than operators licensed per 10CFR55.

The alternative qualification programs may be site specific programs formulated by the facility licensee, since the qualifications for defueled utilization facility operators are not defined in any regulation. Although regulations do not require NRC approval of qualification programs for non-licensed operators, it is appropriate for the facility licensee to submit a description of the qualification program for the senior defueled plant operating position to the NRC for approval, since the individuals in this position will have direct responsibility for the safe storage and handling of irradiated fuel.

#### REQUIREMENTS FOR OPERATOR STAFFING

Subpart 10CFR50.54 also addresses shift staffing requirements. Paragraph 10CFR50.54(i) provides a table indicating the quantity and type of licensed operators required, depending on the number of units operating and the number of units on site. The requirements of this table are not directly applicable to the conditions planned for SONGS 1, since the table does not consider defueled reactors, and since licensed operators will not be required as discussed above. However the table may be used as guidance in determining how many non-licensed operators should be specified for a defueled reactor plant.

Since SONGS 1 is of a different design and is physically separated from SONGS 2 and 3, the requirements in the table for a single unit site provide the appropriate guidance. For single unit sites, the table requires two operators with the plant in cold shutdown or refueling.

## PROPOSED TECHNICAL SPECIFICATION CHANGES

Described below are the proposed changes to the SONGS 1 Technical Specifications which replace requirements for licensed operators with requirements for non-licensed operators qualified in accordance with site specific defueled plant operator qualification programs, and the proposed changes which provide shift staffing requirements appropriate to the defueled condition of the plant. Also described below are other requested changes which will provide consistency with the proposed qualification and staffing requirements.

The intent of the proposed change is to modify operator qualification and staffing requirements. Therefore, only the specifications or portions of specifications which directly affect these requirements have been addressed. Since the Possession Only License will clearly prohibit plant operation, the proposed change does not alter other wording which refers to operating conditions or which may imply the unit is still operational. Changes to this type of wording will be addressed in our proposed Permanently Defueled Technical Specifications which will replace the existing Technical Specifications with an entirely new set of specifications applicable to the plant's defueled condition.

### Technical Specification 6.1.2 (Control Room Command Function)

The existing specification assigns the Control Room Command function to the Shift Superintendent. The proposed change assigns this function to a new position title, the Shift Supervisor. By establishing this new position, the Control Room Command function can be fulfilled by either the Shift Superintendent as is currently done, or by a Control Room Supervisor if the Shift Superintendent title is eliminated as is currently planned. The qualifications for the Shift Supervisor are specified in the proposed changes to Table 6.2-1 as discussed below.

The existing specification also references a footnote which defines the control room area as the control room and Shift Superintendent's office. The proposed change redefines the control room area to be that interior to the control room security doors. This change allows operating personnel access to the areas behind the control boards without being considered out of the control room area. The UFSAR Chapter 15 accidents which are credible with the reactor defueled do not require the immediate operator responses necessary for an operational plant. The time it would take an operator to return to the main control boards (less than 1 minute) would not be significant in the mitigation of a loss of offsite power or a fuel handling accident.

### Technical Specification 6.2.2.a and Table 6.2-1 (Operator Qualifications and Staffing)

The existing specification 6.2.2.a requirement that each on duty shift be composed of at least the minimum shift crew composition shown in Table 6.2-1 is unchanged. The proposed change to Table 6.2-1 eliminates the minimum crew requirements for Modes 1 through 6, since these modes will be prohibited. The proposed change specifies a single set of minimum crew requirements, since the

defueled status of the reactor will not change. The qualification and staffing of the minimum shift crew is discussed below.

### Operator Qualifications

The proposed change to Table 6.2-1 replaces the requirements for ROs and SROs in the minimum shift crew, with requirements for operators qualified in accordance with site specific defueled plant operator qualification programs. A description of the qualification program for the senior defueled plant operating position, designated as the Fuel Handler Certification (FHC) program, is provided for NRC approval in Attachment 3 to this letter.

The FHC program will provide the training and periodic retraining necessary for the Certified Fuel Handlers to operate or direct the operation of the plant equipment and control room apparatus essential for the safe storage and handling of irradiated fuel during normal conditions, and during the accidents which are credible with the reactor defueled and fuel in the spent fuel pool.

Fuel Handler Certification will be analogous to an SRO license at an operational plant in that both are the highest operator qualification for the facility, and both qualify the holder to perform all functions assigned to subordinate qualification levels. Following initial NRC approval of the FHC program, proposed changes to the program will also be submitted for approval if required by 10CFR50.59.

An operating qualification subordinate to the Certified Fuel Handler, the Shutdown Control Room Operator, will also be established. The Shutdown Control Room Operator will receive the training necessary to operate or direct the operation of the plant equipment and control room apparatus essential for the safe storage of irradiated fuel during normal and accident conditions. The Shutdown Control Room Operator will not be qualified to direct the movement of irradiated fuel.

### Operator Staffing

The minimum shift crew proposed in Table 6.2-1 consists of two operators: a Shift Supervisor who is a Certified Fuel Handler, and a Shutdown Control Room Operator, rather than the three operators (2 licensed, 1 non-licensed) required in Modes 5 and 6 by the existing Table 6.2-1. Unlike Modes 5 and 6, the reactor will remain defueled, and the reactor coolant and most other primary and secondary systems will be permanently deactivated. The only equipment required to be operational will be that necessary for spent fuel handling, spent fuel pool cooling, support functions such as electric power, ventilation, etc., and that needed to mitigate the consequences of the credible accidents.

In this condition two operators will be adequate. One operator can monitor and/or manipulate control room indicators, alarms and apparatus, and the other operator will be available to monitor and/or manipulate the spent fuel pool cooling and support equipment in the plant. Both of

these functions can be performed by either the Certified Fuel Handler or the Shutdown Control Room Operator. The proposed staffing of two operators on shift is consistent with 10CFR50.54(i) requirements for licensed operator staffing of units in cold shutdown or refueling.

The existing instructions in Table 6.2-1 concerning fulfillment of the Control Room Command function in the Shift Superintendent's absence during Modes 1 through 6 have been eliminated, since operation in these modes will be prohibited. The existing instructions concerning fulfillment of the Control Room Command function in the Shift Superintendent's absence during Mode 5 and 6 have been modified to eliminate reference to these modes, and to reflect the change from "Shift Superintendent" to "Shift Supervisor". The proposed change requires that either another Certified Fuel Handler or a Shutdown Control Room Operator assume the Control Room Command function, rather than an SRO or an RO. This change is consistent with the replacement of licensed operators with operators qualified in accordance with our defueled plant operator programs.

The existing Table 6.2-1 contains a footnote which defines the control room area as the control room and Shift Superintendent's office. The proposed change redefines the control room area to be that interior to the control room security doors. This change is consistent with the proposed change to an identical footnote in Specification 6.1.2.

#### Technical Specification 6.2.2.b (Control Room Manning)

The existing specification requires that a licensed operator be at the controls when there is fuel in the reactor, provides an exception for updating the refueling status board, and references a footnote defining "the controls". Since there will be no fuel in the reactor, the requirement for an operator at the controls, the provisions for updating the status board, and the footnote have been eliminated in the proposed change. The existing requirement to have an SRO in the control room during Modes 1 through 4 has also been eliminated in the proposed change, since operation in these modes will be prohibited.

In lieu of the existing requirements, the proposed change specifies that the control room be manned by either a Shutdown Control Room Operator or a Certified Fuel Handler. This assures that the control room will be manned by an operator qualified to perform the actions necessary during normal conditions and during the credible accidents.

The existing specification also references a footnote which defines the control room area as the control room and Shift Superintendent's office. The proposed change redefines the control room area to be that interior to the control room security doors. This change is consistent with the proposed change to an identical footnote in Specification 6.1.2.

#### Technical Specification 6.2.2.d (Core Alterations)

The existing specification requires that core alterations be observed and directly supervised by an SRO, or an SRO licensed in fuel handling. These requirements have been deleted in the proposed change since core alterations will not be conducted after the reactor is defueled. The proposed change

requires that fuel handling operations be observed and directly supervised by a Certified Fuel Handler, since the FHC program will qualify individuals to perform or direct the fuel movement activities allowed by the Possession Only License.

#### Technical Specification 6.2.2.e (Fire Brigade Manning)

The existing specification requires that the Shift Superintendent and the two other members of the minimum shift crew necessary for the safe shutdown of the unit be excluded from fire brigade duties. However, the proposed changes to Table 6.2-1 will result in a minimum shift crew composed of the Shift Supervisor and one other operator, and safe shutdown will not be a concern with the reactor defueled. Therefore, the proposed change requires that the Shift Supervisor and the one other member of the minimum shift crew be excluded from the fire brigade.

This change and those proposed for Table 6.2-1 will not affect the number of personnel available for Fire Brigade manning, since a dedicated site Fire Department is maintained which fulfills fire brigade requirements for all three units at SONGS.

#### Technical Specification 6.2.2.f (Overtime Guidelines)

Job Classification (1) of the existing specification lists the operator positions which are subject to overtime guidelines. The position titles of the on-shift operators may change or be eliminated (within the limitations of Table 6.2-1) as deactivation of unnecessary plant systems is accomplished and long term plant conditions are established. Therefore, the proposed change utilizes a functional description of which operations personnel are subject to overtime limitations, rather than listing specific positions.

Job classification (6) of the existing specification references footnote (i) which exempts Shift Technical Advisors from the overtime guidelines. The reference and the footnote have been deleted in the proposed change since Shift Technical Advisors are not included in the proposed minimum shift crew of Table 6.2-1. Also, the existing footnote (ii) on page 6.2-3 has been moved to page 6.2-2 due to a change in the page break in the associated specification.

#### Technical Specification 6.2.2.g (Management Qualifications)

The existing specification requires that the Plant Superintendent (at the time of appointment), the Assistant Plant Superintendent, the Shift Superintendent, and the Control Room Supervisors hold SRO licenses. The existing specification also requires that Control Operators and Assistant Control Operators hold RO licenses.

Since SRO licenses will be terminated when this amendment becomes effective following defueling, the proposed change requires the Plant Superintendent to be a Certified Fuel Handler at the time of appointment, or to have previously held an SRO license. The Certified Fuel Handler qualification or the prior SRO license assure that the individual has the technical expertise necessary to provide overall direction of defueled plant operations.

The proposed change does not specify qualification requirements for the Assistant Plant Superintendent since the provisions of 10CFR50.54(1) will not be applicable, and this position will be eliminated. The proposed change does not specify the qualification requirements for Shift Superintendents, Control Room Supervisors, Control Operators, or Assistant Control Operators, since these positions are not included in the minimum shift crew composition specified in the proposed changes to Table 6.2-1. The proposed change does not specify the qualification requirements for the positions which are included in the minimum shift crew composition specified in the proposed Table 6.2-1 since these qualifications are specified within the table.

#### Technical Specification 6.3.1 (Staff Qualifications)

The existing specification requires that the unit staff meet or exceed the qualifications specified in ANSI N18.1-1971. Section 4.2.2 of this standard states that the "Operations Manager" shall hold an SRO license at the time of appointment to the position. Since SRO licenses will be terminated when this amendment becomes effective following defueling, this requirement will not be applicable. The "Operations Manager" function at SONGS is fulfilled by the Plant Superintendent. Therefore, the proposed change exempts the Plant Superintendent from the ANSI N18.1 requirement to hold an SRO license at the time of appointment. New qualification requirements for the Plant Superintendent are provided by the proposed change to Specification 6.2.2.g.

The existing specification also indicates the qualification requirements for Shift Technical Advisors. These qualification requirements have been deleted in the proposed change since Shift Technical Advisors are not included in the proposed minimum shift crew of Table 6.2-1.

#### Technical Specification 6.4.1 (Training)

The existing specification requires that the unit staff retraining and replacement training program meet or exceed certain requirements and recommendations, including those contained in Appendix A of 10CFR55, and Sections A and C of Enclosure 1 to a March 28, 1980 NRC letter. Reference to these two documents has been eliminated in the proposed change since they apply to licensed operators. Operator licenses will be terminated after this amendment becomes effective following defueling, and operators will be trained and qualified in accordance with our defueled operator qualification programs. Accordingly, the proposed change requires that our NRC approved program be used for the training and retraining of Certified Fuel Handlers.

#### Technical Specification 6.8.3.b (Approval of Temporary Procedure Changes)

The existing specification requires that at least one of the two management staff members approving a temporary procedure change must hold an SRO license. The proposed change will require that one of these two individuals be a Certified Fuel Handler rather than an SRO. The SRO licenses will be terminated when this amendment becomes effective following defueling, and the Fuel Handler Certification will assure that the individual has the expertise necessary to adequately review procedure changes for effect on the safe storage and handling of irradiated fuel.

## SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS

As required by 10CFR50.91(a)(1) this analysis is provided to demonstrate that the proposed license amendment to provide operator qualification and staffing requirements appropriate to the defueled condition does not represent a significant hazards consideration. According to the three factor test of 10CFR50.92(c):

1. Will operation of the facility according to this proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed change will not become effective until the reactor has been defueled and a license change prohibiting subsequent plant operation has been made effective. In this condition the only credible accidents evaluated in Chapter 15 of the UFSAR are a fuel handling accident and a loss of electrical power. Since the defueled plant operator training and qualification programs will provide the expertise needed to mitigate the consequences of these accidents, the proposed change in operator qualification requirements will not increase the consequences of a previously evaluated accident:

The shift staffing levels specified by the proposed change will provide adequate manpower to respond to a loss of electrical power or fuel handling accident. Thus the minimum shift crew will be able to mitigate the consequences of the credible accidents evaluated in Chapter 15 of the UFSAR, and the proposed change in manning levels will not increase the consequences of a previously evaluated accident.

The proposed change affects only operator qualifications and staffing, and does not affect any hardware. Therefore, only the probability of an operator error causing a previously evaluated accident need be considered. The defueled plant operator qualification programs will provide operator expertise on the systems and procedures for fuel handling and electrical power distribution which is at least equivalent to that provided prior to implementing the proposed change. Also, the manning levels specified by the proposed minimum shift crew are adequate to operate these systems. Thus the potential for operator errors is not increased, and the probability of an accident previously evaluated in Chapter 15 of the UFSAR resulting from operator error is not increased.

Therefore the proposed change will not involve an increase in the consequences or probability of a previously evaluated accident.

2. Will operation of the facility according to this proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed change affects only operator qualification and staffing. The proposed change does not affect any systems, components, or structures, or the manner in which they function. The types of accidents possible will not change. Therefore, the proposed change will not create the possibility of a new or different kind of accident.

3. Will operation of the facility according to this proposed change involve a significant reduction in a margin of safety?

Response: No

The margin of safety is the difference between the value of a critical design, operating, or post accident parameter, and the value of the parameter which would produce unacceptable results. The proposed change affects only operator qualification and staffing and does not affect any hardware. The ability of the operating staff to control the critical parameters affecting the margin of safety will not be changed.

The proposed changes in operator qualification will not reduce the level of expertise in the normal and post-accident operation of the systems which can affect these parameters. The staffing specified in the proposed change provides adequate manpower to operate these systems during normal and accident conditions. Thus the ability of the minimum shift crew to control these parameters will not be reduced. Therefore, the proposed change will not involve a reduction in any margin of safety.

#### SAFETY AND SIGNIFICANT HAZARDS DETERMINATION

Based on the Safety Evaluation, it is concluded that: (1) the proposed change does not constitute a significant hazards consideration as defined by 10CFR50.92; and (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed change.