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10 CFR 50.90

April 3, 2001

Docket Nos. 50-277
50-278

License Nos. DPR-44
DPR-56

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Subject: Peach Bottom Atomic Power Station, Units 2 & 3
License Amendment Request 01-00208
Proposed Changes to Technical Specifications Section 5.0
"Administrative Controls"

Dear Sir/Madam:

Exelon Generation Company, LLC (Exelon) hereby submits License Amendment Request (LAR) 01-00208 in accordance with 10 CFR 50.90 requesting changes to the Technical Specifications (TS) for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3.

The proposed changes will revise PBAPS Technical Specifications in accordance with Technical Specifications Task Force (TSTF) item TSTF-258, Revision 4. The Subject TSTF was approved by the Boiling Water Reactor Owner's Group Technical Specifications Issues Coordination Committee, which reviews and endorses proposed generic changes to the BWR/4 Standard Technical Specifications, NUREG-1433, Revision 1. The subject TSTF has been reviewed and approved by the NRC.

Information supporting this License Amendment Request is contained in Attachment 1 to this letter, and copies of the "marked-up" and "camera-ready" Technical Specifications pages are contained in Attachments 2 and 3, respectively. This information is being submitted under affirmation, and the required affidavit is enclosed. This change is needed to support the upcoming PBAPS Unit 3 refueling outage. As such, we request your approval of this change on or before September 28, 2001.

A001

There are no commitments contained within this letter.

We request that, if approved, the changes become effective within 30 days of issuance.

If you have any questions, please do not hesitate to contact us.

Sincerely,

D. G. Helker /For

James A. Hutton
Director - Licensing

Attachments
Enclosure

cc: H. J. Miller, Administrator, Region I, USNRC
A. C. McMurtray, USNRC Senior Resident Inspector, PBAPS
J. Boska, Senior Project Manager, USNRC (by FedEx)
R. R. Janati, Commonwealth of Pennsylvania

COMMONWEALTH OF PENNSYLVANIA :

: ss.

COUNTY OF CHESTER :

J. J. Hagan, being first duly sworn, deposes and says:

That he is Senior Vice President of Exelon Generation Company, LLC, the Applicant herein; that he has read the attached License Amendment Request 01-00208 for Peach Bottom Atomic Power Station, Facility Operating License Nos. DPR-44 and DPR-56, and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.

Senior Vice President

Subscribed and sworn to

before me this 23rd day

of March 2001.

Notary Public

Notarial Seal
Carol A. Walton, Notary Public
Penn Twp., Chester County
My Commission Expires May 28, 2002
Member, Pennsylvania Association of Notaries

ATTACHMENT 1

PEACH BOTTOM ATOMIC POWER STATION
UNITS 2 AND 3

Docket Nos. 50-277
50-278

License Nos. DPR-44
DPR-56

"Administrative Changes to TS Section 5.0"

Supporting Information for Changes - 7 Pages

INTRODUCTION

Exelon Generation Company, LLC, Licensee under Facility Operating License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station (PBAPS), Units 2 and 3, requests that the Technical Specifications (TS) contained in Appendix A to the Operating Licenses be amended as proposed below to incorporate TS Task Force (TSTF) item TSTF-258, Revision 4.

This License Amendment Request provides a discussion and description of the proposed TS changes, a safety assessment of the proposed TS changes, information supporting a finding of No Significant Hazards Consideration, and information supporting an Environmental Assessment.

DISCUSSION AND DESCRIPTION OF THE PROPOSED CHANGES

TSTF-258, Revision 4, groups a number of changes to Section 5.0, "Administrative Controls." These changes were previously spread out amongst various, independent TSTFs and then grouped into one TSTF for convenience. TSTF-258 revises TS Section 5.0 "Administrative Controls", to delete details of staffing requirements, eliminate specific details for working hour limits, clarify requirements for the Shift Technical Advisor position, add regulatory definitions for Senior Reactor Operators and Reactor Operators, revise the Radioactive Effluents Control Program to be consistent with the intent of 10CFR Part 20, delete periodic reporting requirements for main steam relief valve openings, and revise radiological control requirements for radiation areas to be consistent with those specified in 10CFR20.1601(c).

A brief description of each of the proposed changes is as follows:

Change 1

TS Section 5.2.2.b regarding staffing requirements for SRO and RO presence is being deleted. The remaining portions of TS Section 5.2.2 have been re-numbered accordingly.

Change 2

Specific working hour limits in existing TS Section 5.2.2.e are being modified to reference administrative procedures as the means to control working hours. Also, titles within TS Section 5.2.2.e are being revised to match TSTF-258, Revision 4, and the title 'auxiliary operators' is being replaced with 'non-licensed operators' to align with existing PBAPS TS 5.2.2.a.

Change 3

TS Section 5.2.2.g is being revised to eliminate the position title of "Shift Technical Advisor (STA)" and to match TSTF-258, Revision 4.

Change 4

A new TS Section 5.3.2 is being added which incorporates the regulatory definitions for the SRO and RO positions for the purpose of applying 10CFR55.4.

Change 5

TS Sections 5.5.4.h and 5.5.4.k are being modified regarding the site boundary and doses for consistency with TSTF-258, Revision 4. Also, a provision to TS Section 5.5.4 is being added to allow the application of Surveillance Requirements (SRs) provisions 3.0.2 and 3.0.3 to the Radioactive Effluent Controls Program surveillance frequencies.

Change 6

TS Section 5.7.1.a is being revised to match the TSTF by deleting the word 'accessible'.

Change 7

TS Sections 5.7.1.c and 5.7.2.c are being revised to add the word "otherwise" as follows: "... provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas."

Change 8

TS Section 5.7.1.d.4 is being revised to change direct-reading dosimeter to self-reading dosimeter, and to add examples of such devices. TS 5.7.1.d.4.a and TS 5.7.1.d.4.b is being revised to adopt the TSTF wording. TS 5.7.1.d.4.a and TS 5.7.1.d.4.b are being re-numbered as TS 5.7.1.d.4.i and 5.7.1.d.4.ii, respectively, to match the TSTF.

Change 9

TS Sections 5.7.1.e and 5.7.2.e are being revised to add words allowing any individual or group of individuals to enter high radiation areas (dose rates > 1 Rem/hour at 30cm) when accompanied by an individual qualified in radiation protection procedures. Furthermore, these continuously escorted personnel shall receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry into such areas.

Change 10

TS Section 5.7.2.a is being revised to state, "Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate..." TS 5.7.2.a.1 is being revised to ensure that door and gate keys are maintained under the control of specified individuals. TS 5.7.2.a.2 is being revised to delete the words 'or guarded' to match the TSTF.

Change 11

TS Section 5.7.2.d.1 is being rewritten to be, "A radiation monitoring device that continuously integrates radiation rates in the area and alarms when the device's dose alarm

setpoint is reached, with an appropriate alarm setpoint, or..."

Change 12

TS Section 5.7.2.d.3 is being revised to change direct-reading dosimeter to self-reading dosimeter, and to add examples of such devices. TS 5.7.2.d.3.a and TS 5.7.2.d.3.b are being revised to adopt the TSTF wording. Also, TS 5.7.2.d.3.a and TS 5.7.2.d.3.b are being re-numbered as TS 5.7.2.d.3.i and 5.7.2.d.3.ii, respectively, to match the TSTF.

Change 13

TS Section 5.7.2.d.4 is being revised to reword the TS in accordance with the TSTF.

Change 14

TS Section 5.7.2.f is being revised to delete the words "that is controlled as a high radiation area." This section is also being revised to add the words, "nor continuously guarded," clarifying those individual areas within a larger area where no enclosure exists or can be constructed "need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated..."

Comparison to TSTF

TSTF-258, Revision 4, is adopted with the following minor variances:

- Existing PBAPS TS Section 5.7.1.d.1 contains the phrase '("radiation monitoring and indicating device")', which is not contained in the TSTF. This is being retained in the PBAPS TS to provide a description of the required radiation monitoring device.
- Existing PBAPS TS Section 5.7.1.d.2 contains the phrase '("alarming dosimeter")', which is not contained in the TSTF. This is being retained in the PBAPS TS to provide a description of the required radiation monitoring device.

TSTF-258, Revision 4, changes related to TS Sections 5.5.4.b and 5.6.4 are already incorporated into the existing PBAPS TS, and therefore are not part of this submittal.

SAFETY ASSESSMENT

As part of a continuing effort to maintain and improve use of the Improved Standard TS, generic changes to NUREG-1433, Revision 1, BWR/4, STS, are initiated by the reactor owners. These proposed changes to the BWR STS are submitted to the BWR Owner's Group (BWROG) Technical Specifications Issues Coordination Committee (TSICC), which reviews and endorses generic changes to NUREG-1433, Revision 1, STS for BWR/4s. Following approval by the owners' group TS committees, the proposed changes to STS are issued as TSTFs and submitted to NRC for comment, review, and approval. The TSTF in this submittal package (i.e., TSTF-258, Revision 4) has been previously reviewed and approved by NRC.

1. Changes to Section 5.2, Organization

- TS Section 5.2.2.b is being revised to delete the staffing requirements for SRO and RO presence. The requirements of 10 CFR 50.54(m)(2)(iii) and 50.54(k) adequately provide for shift manning. These regulations, 50.54(m)(2)(iii), require "when a nuclear power unit is in an operational mode other than cold shutdown or refueling, as defined by the unit's technical specifications, each licensee shall have a person holding a senior operator license for the nuclear power unit in the control room at all times. In addition to this senior operator, for each fueled nuclear power unit, a licensed operator or senior operator shall be present at the controls at all times." Further, 50.54(k) requires "An operator or senior operator licensed pursuant to part 55 of this chapter shall be present at the controls at all times during the operation of the facility." The TS 5.2.2.b requirements will be met through compliance with these regulations and are not required to be reiterated in the TS.

- Specific working hour limits in existing TS Section 5.2.2.e are being modified to reference administrative procedures as the means to control working hours. The proposed changes will provide reasonable assurance that impaired performance caused by excessive working hours will not jeopardize safe plant operation. Specific working hour limits are not otherwise required to be in the technical specifications under 10 CFR 50.36(c)(5). Specific controls for working hours of reactor plant staff are described in procedures that require a deliberate decision making process to minimize the potential for impaired personnel performance, and that established procedure control processes will provide sufficient control for changes to that procedure. Additionally, the statement "Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Plant Manager or his designee to ensure that excessive hours have not been assigned." is being deleted. There is no guidance in Generic Letter 82-12 that discusses these additional controls. The additional requirement to have the Plant Manager (or his designee) review individual overtime on a monthly basis is unnecessary since sufficient administrative controls and policies exist, as well as the role of the individuals' supervisors in supervising personnel to prevent excessive or abuse of overtime.

- Section 5.2.2.g is being revised to eliminate the title of "Shift Technical Advisor (STA)." STAs are not used at all plants (the function may be fulfilled by one of the other on-shift individuals). Therefore, 5.2.2.g is revised so that it does not imply that the STA and the Shift Supervisor must be different individuals. Option I of the Commission Policy Statement on Engineering Expertise on Shift is satisfied by assigning an individual with specified educational qualifications to each operating crew as one of the SROs (preferably the shift supervisor) required by 10 CFR 50.54(m)(2)(i) to provide the technical expertise on shift. However, the 5.2.2.g wording of, "the STA shall provide ... support to the Shift Supervisor...", is considered to be easily misinterpreted to require separate individuals. Therefore, the wording is revised so that the STA function may be provided by either a separate individual or the individual who also fulfills another role in the shift command structure.

2. Changes to 5.3, Unit Staff Qualifications.

- Definitions in 10 CFR 55.4 state: "Actively performing the functions of an operator or senior operator means that an individual has a position on the shift crew that requires the individual to be licensed as defined in the facility's technical specifications, and that ...." Adding paragraph 5.3.2 ensures that there is no misunderstanding when complying with 10 CFR 55.4 requirements.

3. Changes to 5.5.4, Radioactive Effluent Controls Program.

- The provisions of SR 3.0.2 are applied to the Radioactive Effluent Controls Program surveillance frequencies (5.5.4.e) to allow for scheduling flexibility. SR 3.0.2 permits a 25% extension of the interval specified in the Frequency (31 days). Allowing a 25% extension in the frequency of performing the monthly cumulative dose and projected dose calculation for the current quarter/year will have no affect on outcome of the calculations. SR 3.0.3 is added in association with SR 3.0.2 to maintain consistency of TS application. The proposed TS changes maintain the same overall level of effluent control program controls while providing operational flexibility.

4. Changes to 5.7, High Radiation Areas.

- Section 5.7 is revised in accordance with 10 CFR 20.1601 (c) and updates the acceptable alternate controls to those given in 10 CFR 20.1601. This includes changes made to TS Sections 5.7.1.a, 5.7.1.c, 5.7.1.d.4, 5.7.2.a.2, 5.7.2.c, 5.7.2.d.1, 5.7.2.d.3, 5.7.2.d.3.a, 5.7.2.d.3.b, and 5.7.2.d.4, as well as the other Section 5.7 changes discussed below.

- Sections 5.7.1.e and 5.7.2.e are revised to allow any individual or group of individuals to enter a high-high radiation area (dose rates > 1 Rem/hr at 30 cm) when accompanied by an individual qualified in radiation protection procedures with a radiation dose rate monitoring device. The qualified individual is responsible for providing positive control and shall perform periodic radiation surveillances at the frequency specified in the RWP. Furthermore, these continuously escorted personnel will receive a pre job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry. This option would provide adequate protection while (keeping with ALARA practices) minimizing exposure to the qualified individual.

- Changes to 5.7.2.a: Section 5.7.2.a is revised to state "Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate ..." This change is consistent with RG 8.38 Section 2.5 which indicates that the use of a locked door or one control point where positive control over personnel entry is exercised. Posting an individual to monitor a door provides positive controls over a high radiation area.

- Changes to 5.7.2.a.1: There are many possible operations shift management positions who may be designated for the key control function. This change is similar to the wording of the NRC 7-28-95 letter to the Owner's Groups' Chairmen which identifies key

control responsibility with the "shift supervisor, radiation protection manager, or his or her designee."

- Changes to 5.7.2.f (deleting "that is controlled as a high radiation area"): The 5.7.2.f provision has been applied (in previous STS as well as ISTS NUREGs) without the added constraint of having the larger area controlled as a high radiation area. It is not always practical to control such areas as a High Radiation Area (outside of these High-High Radiation Areas).

INFORMATION SUPPORTING A FINDING OF NO SIGNIFICANT HAZARDS CONSIDERATION

Exelon Generation Company, LLC, is submitting a request for an amendment to the Peach Bottom Atomic Power Station, Units 2 and 3, Technical Specifications (TS) to adopt NRC-approved generic change TS Task Force (TSTF) item TSTF-258, Revision 4. This TSTF revises TS Section 5.0, "Administrative Controls," to delete details of staffing requirements, eliminate specific details for working hour limits, clarify requirements for the Shift Technical Advisor position, add regulatory definitions for Senior Reactor Operators and Reactor Operators, revise the Radioactive Effluents Control Program to be consistent with the intent of 10CFR Part 20, delete periodic reporting requirements for main steam relief valve openings, and revise radiological control requirements for radiation areas to be consistent with those specified in 10CFR20.1601(c).

We have concluded that the proposed changes to the Peach Bottom Atomic Power Station, Units 2 and 3, Technical Specifications (TS) Section 5.0, "Administrative Controls," do not involve a Significant Hazards Consideration. In support of this determination an evaluation of each of the three (3) standards set forth in 10 CFR 50.92 is provided below.

1. <u>The proposed TS changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.</u>

   The proposed TS changes are administrative in nature and do not impact the operation, physical configuration, or function of plant equipment or systems. The changes do not impact the initiators or assumptions of analyzed events, nor do they impact mitigation of accidents or transient events. Therefore, these proposed changes do not increase the probability of occurrence or consequences of an accident previously evaluated.

2. <u>The proposed TS changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.</u>

   The proposed TS changes are administrative in nature and do not alter plant configuration, require that new equipment be installed, alter assumptions made about accidents previously evaluated, or impact the operation or function of plant equipment. The proposed changes do not introduce any new modes of plant operation or make any changes to system setpoints. Therefore, these proposed changes do not create the possibility of a new or different kind of accident than previously evaluated.

3. The proposed TS changes do not involve a significant reduction in a margin of safety.

   The proposed TS changes are administrative in nature and do not involve physical changes to plant structures, systems, or components (SSCs), or the manner in which these SSCs are operated, maintained, modified, tested, or inspected. The proposed changes do not involve a change to any safety limits, limiting safety system settings, limiting conditions for operation, or design parameters for any SSC. The proposed changes do not impact any safety analysis assumptions and do not involve a change in initial conditions, system response times, or other parameters affecting any accident analysis. Therefore, these changes do not involve any reduction in a margin of safety.

INFORMATION SUPPORTING AN ENVIRONMENTAL ASSESSMENT

In accordance with 10 CFR 51.41, a review was performed to determine the impact of the proposed changes on the conclusions of the NRC's Final Environmental Statement for PBAPS. The considerations included in 10 CFR 51.45(b) were used in this review with the following conclusions. Since the proposed changes are administrative only, and there is no impact on the operation of the facility, implementation of the proposed changes has no impact on the environment. Since there is no impact on the environment, there are no adverse environmental effects that cannot be avoided. Since these changes are required to eliminate errors and provide clarification, and there is no impact on the operation of the facility nor on the environment, there are no alternatives to the proposed changes. Since the operation of the facility is not affected by the proposed changes, there is no impact on the original assessment of the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity. Since the operation of the facility is unaffected by the proposed changes, there is no change to the commitment of resources and therefore, no irreversible nor irretrievable commitment of resources involved.

CONCLUSION

The Plant Operations Review Committee and the Nuclear Safety Review Board have reviewed these proposed changes to the Peach Bottom Atomic Power Station, Units 2 & 3, Technical Specifications and have concluded that they do not involve a Significant Hazards Consideration and they will not endanger the health and safety of the public.

ATTACHMENT 2

PEACH BOTTOM ATOMIC POWER STATION
UNITS 2 AND 3

Docket Nos. 50-277
50-278

License Nos. DPR-44
DPR-56

"Administrative Changes to TS Section 5.0"

AFFECTED PAGES
(Mark-ups)

UNIT 2	UNIT 3
5.0-3	5.0-3
5.0-4	5.0-4
5.0-5	5.0-5
5.0-10	5.0-10
5.0-23	5.0-23
5.0-24	5.0-24
5.0-25	5.0-25
5.0-26	5.0-26

Peach Bottom Atomic Power Station, Units 2 & 3
License Amendment Request 01-00208

TS Inserts

Insert A

The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime.

Insert B

5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed Reactor Operator (RO) are those individuals who, in addition to meeting the requirements of TS 5.3.1, perform the functions described in 10 CFR 50.54(m).

Insert C

(Insert C is N/A to this submittal)

Insert D

(Insert D is N/A to this submittal)

Insert E

The provisions of SR 3.0.2 and 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

Insert F

(Insert F is N/A to this submittal)

Insert G

Controls shall be included in the procedures to require a periodic independent review be conducted to ensure that excessive hours have not been assigned.

Peach Bottom Atomic Power Station, Units 2 & 3
License Amendment Request 01-00208

TS Inserts

Insert H

Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel shall receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

Insert I

Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:

Insert J

A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or

Insert K

1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designee.

5.2 Organization

5.2.2 Unit Staff (continued)

a. A total of five non-licensed Operators shall be assigned for PBAPS Units 2 and 3 at all times.

b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, or 3, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.

b. → ~~c.~~ Each on-duty shift crew composition may be less than the minimum requirements of 10 CFR 50.54(m)(2)(i) and and 5.2.2.f Specification 5.2.2.a for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

c. → ~~d.~~ An individual qualified in radiation protection procedures shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

d. → ~~e.~~ Administrative procedures shall be developed and implemented to limit the working hours of ~~unit staff~~ personnel who perform safety related functions (e.g., licensed ~~SROs~~ Senior Reactor Operators (SROs), licensed ~~ROs~~ Reactor Operators (ROs), health physicists, ~~auxiliary~~ NON-LICENSED operators, and key maintenance personnel).

~~Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a nominal 40 hour week while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modifications, on a temporary basis the following guidelines shall be followed:~~

~~1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;~~

~~2. An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 24 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;~~

(continued)

5.2 Organization

5.2.2 Unit Staff (continued)

3. A break of at least 8 hours should be allowed between work periods, including shift turnover time;

4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

INSERT A

Any deviation from the above guidelines shall be authorized in advance by the Plant Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

INSERT G

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Plant Manager or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

e. f. The Senior Manager—Operations or an Operations Manager shall hold an SRO license.

f. g. The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Supervisor in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. When the STA position is filled by an on-shift SRO, the minimum shift crew composition shall include a minimum of 3 SROs. In addition, the STA or the individual filling the STA position shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions described in the UFSAR, except for the Manager-Radiation Protection who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

INSERT B →

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

h. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the site boundary shall be ~~limited to~~ the following:

IN ACCORDANCE WITH

1. For noble gases: less than or equal to a dose rate of 500 mrems/yr to the total body and less than or equal to a dose rate of 3000 mrems/yr to the skin, and

2. For iodine-131, iodine-133, tritium, and for all radionuclides in particulate form with half lives > 8 days: less than or equal to a dose rate of 1500 mrems/yr to any organ;

i. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;

j. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and

k. Limitations on the annual dose or dose commitment to any member of the public, BEYOND THE SITE BOUNDARY, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

INSERT E

5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the UFSAR, Table 4.2.4, cyclic and transient occurrences to ensure that components are maintained within the design limits.

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Areas

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

5.7.1 High Radiation Areas with Dose Rates not Exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation):

a. Each ~~access/ble~~ entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.

b. Access to, and activities in, each such area shall be controlled by means of a Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are OTHERWISE following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual or group entering such an area shall possess:

1. A radiation monitoring device that continuously displays radiation dose rates in the area ("radiation monitoring and indicating device"), or

2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached ("alarming dosimeter"), with an appropriate alarm setpoint, or

3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or

(continued)

5.7 High Radiation Areas

5.7.1 High Radiation Areas with Dose Rates not Exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation): (continued)

SELF

4. A ~~direct~~-reading dosimeter (e.g., POCKET ION CHAMBER OR ELECTRONIC DOSIMETER) and,

   ~~(a)~~ i Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual ~~at the work site,~~ qualified in radiation protection procedures, equipped with a radiation monitoring ~~and indicating~~ device THAT CONTINUOUSLY DISPLAYS RADIATION DOSE RATES IN THE AREA; who is responsible for controlling personnel radiation exposure within the area, or

   ~~(b)~~ ii Be under the surveillance, as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, AND WITH THE MEANS TO COMMUNICATE WITH INDIVIDUALS IN THE AREA WHO ARE COVERED BY SUCH SURVEILLANCE.

~~e. Except for individuals qualified in radiation protection procedures, entry into such areas shall be made only after dose rates in the area have been established and entry personnel are knowledgeable of them.~~

Replace with Insert H

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation)

Replace with Insert I

~~a. Each accessible entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked door, gate, or guard that prevents unauthorized entry, and in addition:~~

Replace with Insert K

~~1. All such door and gate keys shall be maintained under the administrative control of radiation protection personnel.~~

2. Doors and gates shall remain locked ~~or guarded~~ except during periods of personnel or equipment entry or exit.

(continued)

5.7 High Radiation Areas

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation) (continued)

b. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

Insert J

c. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual (whether alone or in a group) entering such an area shall possess:

Replace with Insert J

1. ~~An alarming dosimeter with an appropriate alarm setpoint, or~~

2. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or

SELF

3. A ~~direct~~-reading dosimeter (e.g., POCKET ION CHAMBER OR ELECTRONIC DOSIMETER) and,

~~(a)~~ i Be under the surveillance, as specified in the RWP or equivalent, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring ~~and indicating~~ device THAT CONTINUOUSLY DISPLAYS RADIATION DOSE RATES IN THE AREA; who is responsible for controlling personnel exposure within the area, or WHILE IN THE AREA,

(continued)

5.7 High Radiation Areas

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation) (continued)

INSERT A RADIATION MONITORING DEVICE THAT CONTINUOUSLY DISPLAYS RADIATION DOSE RATES IN THE AREA.

INSERT WHILE IN THE AREA,

(~~b~~) Be under the surveillance, as specified in the RWP or equivalent, in by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area.

4. ~~A radiation monitoring and indicating device~~ DELETE In those cases where the options of Specifications 5.7.2.d.2 and 5.7.2.d.3, above, are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle,

REPLACE WITH INSERT H

e. ~~Except for individuals qualified in radiation protection procedures, entry into such areas shall be made only after dose rates in the area have been established and entry personnel are knowledgeable of them.~~

f. Such individual areas that are within a larger area ~~that is~~ DELETE ~~controlled as a high radiation area,~~ where no enclosure exists for purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, but shall be barricaded ~~and~~ conspicuously posted ~~as a high radiation area~~ DELETE, and a ~~conspicuous~~ clearly visible flashing light shall be activated at the area as a warning device.

DELETE THE

INSERT DELETE

NOR CONTINUOUSLY GUARDED, INSERT

5.2 Organization

5.2.2 Unit Staff (continued)

a. A total of five non-licensed Operators shall be assigned for PBAPS Units 2 and 3 at all times.

b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, or 3, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.

b. ~~c.~~ Each on-duty shift crew composition may be less than the minimum requirements of 10 CFR 50.54(m)(2)(i) and Specification 5.2.2.a and 5.2.2.f for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

c. ~~d.~~ An individual qualified in radiation protection procedures shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

d. ~~e.~~ Administrative procedures shall be developed and implemented to limit the working hours of ~~unit staff~~ personnel who perform safety related functions (e.g., licensed ~~SROs~~ Senior Reactor Operators (SROs), licensed ~~ROs~~ Reactor Operators (ROs), health physicists, ~~auxiliary~~ NON-LICENSED operators, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a nominal 40 hour week while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modifications, on a temporary basis the following guidelines shall be followed:

1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;

2. An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 24 hours in any 48 hour period, nor more than 72 hours in any 7 day period, all excluding shift turnover time;

(continued)

5.2 Organization

5.2.2 Unit Staff (continued)

3. A break of at least 8 hours should be allowed between work periods, including shift turnover time;

4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

INSERT A

Any deviation from the above guidelines shall be authorized in advance by the Plant Manager or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

INSERT G

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Plant Manager or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

e. The Senior Manager-Operations or an Operations Manager shall hold an SRO license.

f. The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Supervisor in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. When the STA position is filled by an on-shift SRO, the minimum shift crew composition shall include a minimum of 3 SROs. In addition, the STA or the individual filling the STA position shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions described in the UFSAR, except for the Manager-Radiation Protection who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

INSERT B

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

h. Limitations on the dose rate resulting from the site from radioactive material released in gaseous effluents to areas at or beyond the site boundary shall be ~~limited to~~ IN ACCORDANCE WITH the following:

1. For noble gases: less than or equal to a dose rate of 500 mrems/yr to the total body and less than or equal to a dose rate of 3000 mrems/yr to the skin, and

2. For iodine-131, iodine-133, tritium, and for all radionuclides in particulate form with half lives > 8 days: less than or equal to a dose rate of 1500 mrems/yr to any organ;

i. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;

j. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and

k. Limitations on the annual, BEYOND THE SITE BOUNDARY, dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

INSERT E

5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the UFSAR, Table 4.2.4, cyclic and transient occurrences to ensure that components are maintained within the design limits.

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Areas

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

5.7.1 High Radiation Areas with Dose Rates not Exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation):

a. Each ~~accessible~~ entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.

b. Access to, and activities in, each such area shall be controlled by means of a Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are following plant radiation protection procedures for entry to, exit from, and work in such areas.

OTHERWISE

d. Each individual or group entering such an area shall possess:

1. A radiation monitoring device that continuously displays radiation dose rates in the area ("radiation monitoring and indicating device"), or

2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached ("alarming dosimeter"), with an appropriate alarm setpoint, or

3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or

(continued)

5.7 High Radiation Areas

5.7.1 High Radiation Areas with Dose Rates not Exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation): (continued)

SELF

4. A ~~direct~~-reading dosimeter (e.g., POCKET ION CHAMBER OR ELECTRONIC DOSIMETER) and,

(a) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual ~~at the work site~~ qualified in radiation protection procedures, equipped with a radiation monitoring ~~and indicating~~ device THAT CONTINUOUSLY DISPLAYS RADIATION DOSE RATES IN THE AREA; who is responsible for controlling personnel radiation exposure within the area, or

(b) Be under the surveillance, as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, AND WITH THE MEANS TO COMMUNICATE WITH INDIVIDUALS IN THE AREA WHO ARE COVERED BY SUCH SURVEILLANCE.

Replace with Insert H

e. ~~Except for individuals qualified in radiation protection procedures, entry into such areas shall be made only after dose rates in the area have been established and entry personnel are knowledgeable of them.~~

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation)

Replace with Insert I

a. ~~Each accessible entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked door, gate, or guard that prevents unauthorized entry, and in addition:~~

Replace with Insert K

1. ~~All such door and gate keys shall be maintained under the administrative control of radiation protection personnel.~~

2. Doors and gates shall remain locked ~~or guarded~~ except during periods of personnel or equipment entry or exit.

(continued)

5.7 High Radiation Areas

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation) (continued)

b. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

INSERT otherwise

c. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual (whether alone or in a group) entering such an area shall possess:

Replace with Insert J

1. ~~An alarming dosimeter with an appropriate alarm setpoint, or~~

2. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or

SELF

3. A ~~direct~~-reading dosimeter (e.g., POCKET ION CHAMBER OR ELECTRONIC DOSIMETER) and,

(a) Be under the surveillance, as specified in the RWP or equivalent, WHILE IN THE AREA, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring ~~and indicating~~ device THAT CONTINUOUSLY DISPLAYS RADIATION DOSE RATES IN THE AREA; who is responsible for controlling personnel exposure within the area, or

(continued)

5.7 High Radiation Areas

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation) (continued)

INSERT A RADIATION MONITORING DEVICE THAT CONTINUOUSLY DISPLAYS RADIATION DOSE RATES IN THE AREA.

INSERT WHILE IN THE AREA,

(~~b~~) Be under the surveillance, as specified in the RWP or equivalent, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area.

4. ~~A radiation monitoring and indicating device~~ In those cases where the options of Specifications 5.7.2.d.2 and 5.7.2.d.3, above, are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle

DELETE

e. ~~Except for individuals qualified in radiation protection procedures, entry into such areas shall be made only after dose rates in the area have been established and entry personnel are knowledgeable of them.~~

REPLACE WITH INSERT H

f. Such individual areas that are within a larger area ~~that is controlled as a high radiation area,~~ where no enclosure exists for purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, but shall be barricaded, ~~and~~ conspicuously posted ~~as a high radiation area~~, and a ~~conspicuous~~ clearly visible flashing light shall be activated at the area as a warning device.

DELETE

DELETE

THE

INSERT

DELETE

NOR CONTINUOUSLY GUARDED,

INSERT

ATTACHMENT 3

PEACH BOTTOM ATOMIC POWER STATION
UNITS 2 AND 3

Docket Nos. 50-277
50-278

License Nos. DPR-44
DPR-56

"Administrative Changes to TS Section 5.0"

AFFECTED PAGES
(Camera-ready)

UNIT 2	UNIT 3
5.0-3	5.0-3
5.0-4	5.0-4
5.0-5	5.0-5
5.0-10	5.0-10
5.0-23	5.0-23
5.0-24	5.0-24
5.0-25	5.0-25
5.0-26	5.0-26

5.2 Organization

5.2.2 Unit Staff (continued)

a. A total of five non-licensed Operators shall be assigned for PBAPS Units 2 and 3 at all times.

b. Each on-duty shift crew composition may be less than the minimum requirements of 10 CFR 50.54(m)(2)(i) and Specification 5.2.2.a and 5.2.2.f for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

c. An individual qualified in radiation protection procedures shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

d. Administrative procedures shall be developed and implemented to limit the working hours of personnel who perform safety related functions (e.g., licensed Senior Reactor Operators (SROs), licensed Reactor Operators (ROs), health physicists, non-licensed operators, and key maintenance personnel).

(continued)

5.2 Organization

5.2.2 Unit Staff (continued)

The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime.

Any deviation from the above guidelines shall be authorized in advance by the Plant Manager or the Plant Manager's designee, in accordance with approved administrative procedures, and with documentation of the basis for granting the deviation. Routine deviation from the working hour guidelines shall not be authorized.

Controls shall be included in the procedures to require a periodic independent review be conducted to ensure that excessive hours have not been assigned.

e. The Senior Manager-Operations or an Operations Manager shall hold an SRO license.

f. An individual shall provide advisory technical support to the unit operations shift crew in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. This individual shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions described in the UFSAR, except for the Manager-Radiation Protection who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed Reactor Operator (RO) are those individuals who, in addition to meeting the requirements of TS 5.3.1, perform the functions described in 10 CFR 50.54(m).

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

h. Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the site boundary shall be in accordance with the following:

1. For noble gases: less than or equal to a dose rate of 500 mrems/yr to the total body and less than or equal to a dose rate of 3000 mrems/yr to the skin, and

2. For iodine-131, iodine-133, tritium, and for all radionuclides in particulate form with half lives > 8 days: less than or equal to a dose rate of 1500 mrems/yr to any organ;

i. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;

j. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and

k. Limitations on the annual dose or dose commitment to any member of the public, beyond the site boundary, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

The provisions of SR 3.0.2 and 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the UFSAR, Table 4.2.4, cyclic and transient occurrences to ensure that components are maintained within the design limits.

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Areas

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

5.7.1 High Radiation Areas with Dose Rates not Exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation):

a. Each entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.

b. Access to, and activities in, each such area shall be controlled by means of a Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while performing their assigned duties provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual or group entering such an area shall possess:

1. A radiation monitoring device that continuously displays radiation dose rates in the area ("radiation monitoring and indicating device"), or

2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached ("alarming dosimeter"), with an appropriate alarm setpoint, or

3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or

(continued)

5.7 High Radiation Areas

5.7.1 High Radiation Areas with Dose Rates not Exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation): (continued)

4. A self-reading dosimeter (e.g., pocket ion chamber or electronic dosimeter) and,

   (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel radiation exposure within the area, or

   (ii) Be under the surveillance, as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with individuals in the area who are covered by such surveillance.

e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel shall receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation)

a. Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:

   1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designee.

   2. Doors and gates shall remain locked except during periods of personnel or equipment entry or exit.

(continued)

5.7 High Radiation Areas

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation) (continued)

b. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual (whether alone or in a group) entering such an area shall possess:

1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or

2. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or

3. A self-reading dosimeter (e.g., pocket ion chamber or electronic dosimeter) and,

(i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continually displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or

(continued)

5.7 High Radiation Areas

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation) (continued)

(ii) Be under the surveillance, as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area.

4. In those cases where the options of Specifications 5.7.2.d.2 and 5.7.2.d.3, above, are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle, a radiation monitoring device that continuously displays radiation dose rates in the area.

e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel shall receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, and a clearly visible flashing light shall be activated at the area as a warning device.

5.2 Organization

5.2.2 Unit Staff (continued)

a. A total of five non-licensed Operators shall be assigned for PBAPS Units 2 and 3 at all times.

b. Each on-duty shift crew composition may be less than the minimum requirements of 10 CFR 50.54(m)(2)(i) and Specification 5.2.2.a and 5.2.2.f for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

c. An individual qualified in radiation protection procedures shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.

d. Administrative procedures shall be developed and implemented to limit the working hours of personnel who perform safety related functions (e.g., licensed Senior Reactor Operators (SROs), licensed Reactor Operators (ROs), health physicists, non-licensed operators, and key maintenance personnel).

(continued)

5.2 Organization

5.2.2 Unit Staff (continued)

The controls shall include guidelines on working hours that ensure adequate shift coverage shall be maintained without routine heavy use of overtime.

Any deviation from the above guidelines shall be authorized in advance by the Plant Manager or the Plant Manager's designee, in accordance with approved administrative procedures, and with documentation of the basis for granting the deviation. Routine deviation from the working hour guidelines shall not be authorized.

Controls shall be included in the procedures to require a periodic independent review be conducted to ensure that excessive hours have not been assigned.

e. The Senior Manager - Operations or an Operations Manager shall hold an SRO license.

f. An individual shall provide advisory technical support to the unit operations shift crew in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. This individual shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

5.0 ADMINISTRATIVE CONTROLS

5.3 Unit Staff Qualifications

5.3.1 Each member of the unit staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions described in the UFSAR, except for the Manager-Radiation Protection who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

5.3.2 For the purpose of 10 CFR 55.4, a licensed Senior Reactor Operator (SRO) and a licensed Reactor Operator (RO) are those individuals who, in addition to meeting the requirements of TS 5.3.1, perform the functions described in 10 CFR 50.54(m).

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

h. Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the site boundary shall be in accordance with the following:

1. For noble gases: less than or equal to a dose rate of 500 mrems/yr to the total body and less than or equal to a dose rate of 3000 mrems/yr to the skin, and

2. For iodine-131, iodine-133, tritium, and for all radionuclides in particulate form with half lives > 8 days: less than or equal to a dose rate of 1500 mrems/yr to any organ;

i. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;

j. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and

k. Limitations on the annual dose or dose commitment to any member of the public, beyond the site boundary, due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

The provisions of SR 3.0.2 and 3.0.3 are applicable to the Radioactive Effluent Controls Program surveillance frequency.

5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the UFSAR, Table 4.2.4, cyclic and transient occurrences to ensure that components are maintained within the design limits.

(continued)

5.0 ADMINISTRATIVE CONTROLS

5.7 High Radiation Areas

As provided in paragraph 20.1601(c) of 10 CFR Part 20, the following controls shall be applied to high radiation areas in place of the controls required by paragraph 20.1601(a) and (b) of 10 CFR Part 20:

5.7.1 High Radiation Areas with Dose Rates not Exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation):

a. Each entryway to such an area shall be barricaded and conspicuously posted as a high radiation area. Such barricades may be opened as necessary to permit entry or exit of personnel or equipment.

b. Access to, and activities in, each such area shall be controlled by means of a Radiation Work Permit (RWP) or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures and personnel continuously escorted by such individuals may be exempted from the requirement for an RWP or equivalent while otherwise performing their assigned duties provided that they are following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual or group entering such an area shall possess:

1. A radiation monitoring device that continuously displays radiation dose rates in the area ("radiation monitoring and indicating device"), or

2. A radiation monitoring device that continuously integrates the radiation dose rates in the area and alarms when the device's dose alarm setpoint is reached ("alarming dosimeter"), with an appropriate alarm setpoint, or

3. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area, or

(continued)

5.7 High Radiation Areas

5.7.1 High Radiation Areas with Dose Rates not Exceeding 1.0 rem/hour (at 30 centimeters from the radiation sources or from any surface penetrated by the radiation): (continued)

4. A self-reading dosimeter (e.g., pocket ion chamber or electronic dosimeter) and,

   (i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel radiation exposure within the area, or

   (ii) Be under the surveillance, as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with individuals in the area who are covered by such surveillance.

e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel shall receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation)

a. Each entryway to such an area shall be conspicuously posted as a high radiation area and shall be provided with a locked or continuously guarded door or gate that prevents unauthorized entry, and, in addition:

   1. All such door and gate keys shall be maintained under the administrative control of the shift supervisor, radiation protection manager, or his or her designee.

   2. Doors and gates shall remain locked except during periods of personnel or equipment entry or exit.

(continued)

5.7 High Radiation Areas

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation) (continued)

b. Access to, and activities in, each such area shall be controlled by means of an RWP or equivalent that includes specification of radiation dose rates in the immediate work area(s) and other appropriate radiation protection equipment and measures.

c. Individuals qualified in radiation protection procedures may be exempted from the requirement for an RWP or equivalent while performing radiation surveys in such areas provided that they are otherwise following plant radiation protection procedures for entry to, exit from, and work in such areas.

d. Each individual (whether alone or in a group) entering such an area shall possess:

1. A radiation monitoring device that continuously integrates the radiation rates in the area and alarms when the device's dose alarm setpoint is reached, with an appropriate alarm setpoint, or

2. A radiation monitoring device that continuously transmits dose rate and cumulative dose information to a remote receiver monitored by radiation protection personnel responsible for controlling personnel radiation exposure within the area with the means to communicate with and control every individual in the area, or

3. A self-reading dosimeter (e.g., pocket ion chamber or electronic dosimeter) and,

(i) Be under the surveillance, as specified in the RWP or equivalent, while in the area, of an individual qualified in radiation protection procedures, equipped with a radiation monitoring device that continuously displays radiation dose rates in the area; who is responsible for controlling personnel exposure within the area, or

(continued)

5.7 High Radiation Areas

5.7.2 High Radiation Areas with Dose Rates Greater than 1.0 rem/hour (at 30 centimeters from the radiation source or from any surface penetrated by the radiation), but less than 500 rads/hour (at 1 meter from the radiation source or from any surface penetrated by the radiation) (continued)

(ii) Be under the surveillance, as specified in the RWP or equivalent, while in the area, by means of closed circuit television, of personnel qualified in radiation protection procedures, responsible for controlling personnel radiation exposure in the area, and with the means to communicate with and control every individual in the area.

4. In those cases where the options of Specifications 5.7.2.d.2 and 5.7.2.d.3, above, are impractical or determined to be inconsistent with the "As Low As is Reasonably Achievable" principle, a radiation monitoring device that continuously displays radiation dose rates in the area.

e. Except for individuals qualified in radiation protection procedures, or personnel continuously escorted by such individuals, entry into such areas shall be made only after dose rates in the area have been determined and entry personnel are knowledgeable of them. These continuously escorted personnel shall receive a pre-job briefing prior to entry into such areas. This dose rate determination, knowledge, and pre-job briefing does not require documentation prior to initial entry.

f. Such individual areas that are within a larger area where no enclosure exists for the purpose of locking and where no enclosure can reasonably be constructed around the individual area need not be controlled by a locked door or gate, nor continuously guarded, but shall be barricaded, conspicuously posted, clearly visible flashing light shall be activated at the area as a warning device.