Radiation Protection Program for the Boiling Nuclear Superheater Reactor Facility Rincon, Puerto Rico

January 2020 Supersedes December 1999 Version This page intentionally left blank

Abb	reviatio	onsii			
1.0	Gene	eral Information1			
	1.1	Purpose1			
	1.2	As Low As Reasonably Achievable			
	1.5	1 3 1 ALARA Statement			
		1.3.2 ALARA Policy			
		1.3.3 Training			
		1.3.4 Design			
		1.3.5 Procedures			
		1.3.6 Planning			
		1.3.7 Internal Audits			
		1.3.8 Records			
	1.4	Program Description			
	1.5	Facility Description			
	1.6	Included and Excluded Activities4			
	1.7	Hazards Identification			
2.0	RPP Implementation				
3.0	Activities, Milestones, and Schedules				

Contents

Appendix

Appendix ARadiation Protection Requirements Matrix for the Boiling Nuclear Superheater
Reactor Facility Radiation Protection Program

Abbreviations

ALARA	As low as reasonably achievable
BONUS	Boiling Nuclear Superheater
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
mrem	millirem
PREPA	Puerto Rico Electric Power Authority
RPP	Radiation Protection Program
RPRM	Radiation Protection Requirements Matrix
SOP	Standard Operating Procedure

1.0 General Information

This Puerto Rico Electric Power Authority (PREPA) Boiling Nuclear Superheater (BONUS) Reactor Facility Radiation Protection Program (RPP) addresses all requirements of 10 *Code of Federal Regulations* (CFR) 835, "Occupational Radiation Protection." The Radiation Protection Requirements Matrix (RPRM) of the RPP specifies the applicability of each 10 CFR 835 requirement to BONUS Reactor Facility activities and is included as Appendix A of this document. The RPP RPRM documents whether a 10 CFR 835 requirement is applicable or non-applicable and the reason why.

1.1 Purpose

PREPA has an agreement with U.S. Department of Energy (DOE) to manage activities involving residual radiation and radioactive material at the BONUS Reactor Facility. The primary activity at the BONUS Reactor Facility is the establishment and operation of a museum with controlled access as necessary for the protection of museum visitors. The purpose of the BONUS Reactor Facility RPP is to comply with the requirements of 10 CFR 835 that are applicable to the activities at the facility. The RPP has been designed with the objective of minimizing exposure of employees, the public, and the environment to ionizing radiation to levels as low as reasonably achievable (ALARA). The RPP incorporates an ALARA policy that will ensure achievement of this objective.

The RPP is a management tool that enhances PREPA ability to carry out tasks in a manner that will protect the environment, public, and employee health and safety. All personnel and contractors shall be required to follow the BONUS Reactor Facility RPP.

1.2 Scope

The RPP scope applies to BONUS Reactor Facility museum operations, facility maintenance activities, routine radiological control functions, and activities involving potential occupational radiation exposures. The RPP scope does not include further decommissioning activities or intrusive activities that increase or have the potential to result in an increase in radiological exposure hazard conditions.

The PREPA's BONUS Reactor Facility RPP will remain in effect for the duration of radiological activities, even when operations are not conducted. Certain activities are constant, such as record maintenance, training needs, and program assessment. The PREPA's BONUS Reactor Facility RPP is not turned off and on at will, but functions on a graded approach considering current activities and a minimum base.

1.3 As Low As Reasonably Achievable (ALARA)

1.3.1 ALARA Statement

PREPA management is firmly committed to having a radiological control program of the highest quality. This program applies to activities that manage radiation and radioactive materials that may result in radiation exposure to workers, the public, and the environment. The fundamental principle underlying the BONUS Reactor Facility RPP is the following statement from the

Radiation Protection Guidance to the Federal Agencies for Occupational Exposure (1987): "There should not be any occupational exposure of workers to ionizing radiation without the expectation of an overall benefit from the activity causing the exposure."

1.3.2 ALARA Policy

PREPA policy is to conduct radiological operations in a manner that preserve the health and promote the safety of all its employees, contractors, and the public. In achieving this objective, PREPA management shall minimize the radiation exposure to employees and the public and the release of radioactivity to the environment. Deliberate efforts will be taken to further reduce exposures and releases in accordance with a process to make any such exposures or releases ALARA. The radiological control program consistently reflects this policy.

It is PREPA's policy to use its best efforts to perform all activities and services in a radiologically safe manner which protects employees, the public, and environment, as well as meeting or exceeding the applicable requirements of 10 CFR 835. In addition, PREPA is committed to the philosophy of maintaining individual and collective exposure ALARA.

1.3.3 Training

Standards will be established to promote the technical competency of the workforce, as appropriate, through implementation of radiological training and development programs. An appropriate level of technical competence gained through education, experience, and job-related technical and professional training is a critical component for achieving radiological control policy goals. Qualification requirements commensurate with this objective are established for technical and professional radiological control program positions and are, at a minimum, consistent with applicable industry standards and promote professional development and excellence in radiological performance. Additionally all employees subject to occupational exposure receive general employee training for radiation safety.

1.3.4 Design

The BONUS Reactor Facility contains the decommissioned BONUS reactor and associated systems. Decommissioning from 1968 to 1970 included removal of reactor fuel, flushing of system piping, and concrete entombment of the pressure vessel and internal components within the biological shield. No additional facility design changes are anticipated that would result in significant changes to radiological exposure potentials. Because of this, the incorporation of dose reduction, contamination reduction, and waste minimization features into the design of a new facility to maintain radiation exposures ALARA is not applicable to the scope of the BONUS Reactor Facility RPP.

1.3.5 Procedures

The implementation of dose reduction, contamination reduction, and waste minimization measures during the course of radiological work is managed through plans and procedures. These plans and procedures are designed such that radiological measurements, analyses, and worker monitoring results are accurate and appropriately made. The capability to accurately measure and analyze radioactive materials and workplace conditions, and to determine the

potential for personnel radiation exposure, is fundamental to the safe conduct of radiological operations and maintenance of ALARA exposures.

1.3.6 Planning

Radiological operations and activities are preplanned to allow for dose control effectiveness and contamination reduction and control measures. Operations and activities are performed in accordance with a graded approach and shall include reasonable controls directed toward reducing exposure, preventing the spread of radiological contamination, and minimizing the generation of contaminated wastes and the release of effluents.

The incorporation of exposure reduction, contamination reduction, and waste minimization features into tasks are implemented in the earliest planning stages whenever applicable or feasible. Wherever possible, these features are directed toward controlling contamination at the source, eliminating airborne radioactivity, maintaining personnel exposure below regulatory limits, and using a process that achieve ALARA exposure levels. Radiological control criteria shall reflect appropriate consensus recommendations of national and international standards-setting groups.

1.3.7 Internal Audits

The responsibility for compliance with BONUS Reactor Facility radiological protection requirements and for maintaining ALARA personnel radiation exposure levels starts with the employee and broadens as it progresses through the organization hierarchy. PREPA is fully responsible for radiological performance within their projects and sites field activities. Managers take necessary actions to ensure ALARA requirements are implemented and performance is monitored and corrected as necessary.

1.3.8 Records

Documentation produced as a result of the BONUS Reactor Facility RPP implementation, and associated radiological policies, plans, and procedures, support the team's continued commitment to maintain exposures ALARA and is maintained by PREPA management. Implementation guidance will be provided by the ALARA and records management procedures.

1.4 Program Description

Following is the scope of operations of the BONUS Reactor Facility:

- Establish, operate, and maintain the BONUS reactor museum;
- Maintain controlled access to specific areas at the BONUS Reactor Facility, as necessary, to protect the health and safety of museum visitors; and
- Conduct radiological control and surveillance activities to ensure that the potential for exposure of workers and museum visitors to radiation and radioactive material is ALARA.

1.5 Facility Description

PREPA does not manage or operate any facilities with a radiological component other than the BONUS Reactor Facility. The proposed use of the BONUS Reactor Facility is a museum available to the public. The BONUS Reactor Facility site includes the domed reactor building containing the reactor and reactor systems and outside support facilities. The area outside the reactor building has a negligible potential for measurable radiation or radioactive material exposure to the general public. The reactor building has three general levels: basement, reactor floor or main level, and mezzanine. Residual radioactive contamination is present on all levels, removable and fixed. PREPA intent is to allow public access to the outer part of the ring on the reactor floor level and prohibit access to the basement and other areas. Radioactive contamination has been detected in the proposed public access area but it is fixed and not removable. Access to other parts of the reactor building interior is blocked by metal and Plexiglas walls and other physical barriers.

1.6 Included and Excluded Activities

Activities with the potential to result in occupational exposure to ionizing radiation are authorized under the provisions of this RPP. The following list delineates activities that are within the scope of the RPP:

- Preparing and operating the BONUS Reactor Facility museum;
- Managing access to BONUS Reactor Facility areas for the purpose of protecting workers and visitors from exposure to radiation and radioactive material;
- Conducting routine radiation exposure, contamination, and air-sampling surveys;
- Packaging, transporting, and shipping radiological samples;
- Routine housekeeping work;
- Routine decontamination of personnel, areas, equipment, and materials;
- Handling and disposing of waste material generated during BONUS Reactor Facility activities;
- Routine maintenance of the facility (e.g., heating, ventilation, and air conditioning and electrical systems); and
- Associated radiological activities that are not specifically excluded below.

The following activities are not authorized and are excluded from the provisions of this RPP:

- Entry into a high radiation or very high radiation areas.
- Breaching piping, tanks, or reactor systems containing radioactive contamination.
- Intrusive work in contamination and fixed-contamination areas (e.g., scabbling concrete).
- Work involving the design of new facilities affecting radiation exposure potentials.
- Planned special exposure work.
- Entry into radiological buffer areas and contamination areas by visitors and workers without the appropriate radiological worker training.

- Activities with the potential to cause a total effective dose equivalent in excess of 50 millirems per year (mrem/year) (highest dose allowed by regulation in any one year of occupational exposure) for the embryo/fetus of declared females, minors, and members of the public.
- Initiation of any task involving the potential for exposure to radiation or radioactive material not within the scope of an approved RPP.

1.7 Hazards Identification

The radiological hazard at the BONUS Reactor Facility are relatively low. The potential radiation exposure hazards are from direct radiation and contamination levels associated with residual radioactivity, primarily cesium-137, followed by lower levels of nickel-63, and trace amounts of cobalt-60 and strontium-90. Radiological surveys and assessment of existing hazards show that no worker or member of the public would be expected to receive a total effective dose equivalent in excess of 50 mrem/year within the scope of activities authorized by this RPP.

Primary radiological hazards characteristic of BONUS Reactor Facility activities involve potential external and internal exposure from residual radioactive surface contamination of floors, reactor systems, and equipment.

Potential pathways of concern include inhalation of suspended particulates and ingestion of particulates during work in contamination areas. Minimization of exposure through these pathways of concern is achieved by engineering and administrative controls and use of personal protective equipment.

2.0 **RPP Implementation**

The baseline that establishes compliance with 10 CFR 835 is this BONUS Reactor Facility RPP, dated January 2020. Implementation of this RPP will be accomplished by plans and procedures. When a plan provides detailed guidance on how to implement a requirement or perform a specific task, no implementing procedure is necessary. When a plan does not provide specific guidance, implementing standard operating procedures (SOPs) are proposed. For example, in case of a BONUS Reactor basement flood event, PREPA developed an SOP which include water sampling and detailed instructions for wastewater management.

SOPs are generated to implement the BONUS Reactor Facility RPP in response to current task needs. The BONUS Reactor Facility assumes that DOE recognizes that SOPs are dynamic documents and must be developed, revised, or deleted as project needs dictate. SOPs are not intended to reflect future implementation requirements. The BONUS Reactor Facility RPP and its implementing SOPs are subject to a document control program that provides reasonable assurance that commitments made by the BONUS Reactor Facility RPP and Implementation Plan are maintained in effect as long as the requirements on which they are based remain current and applicable.

3.0 Activities, Milestones, and Schedules

Implementation of the BONUS Reactor Facility RPP is accomplished through plans and SOPs which exist or are being developed to meet current and anticipated future task needs. PREPA will achieve compliance with 10 CFR 835 before the start of any radiological work. Applying the continuous improvement philosophy to day-to-day tasks allows for identifying ways to enhance the ability to carry out work at the BONUS Reactor Facility to protect the environment and human health and safety.

Appendix A

Radiation Protection Requirements Matrix for the Boiling Nuclear Superheater Reactor Facility Radiation Protection Program This page intentionally left blank

Page	
A-1	

	Requirement Sta	itement	Description of Compliance Status
Section:	1AA.4.01	Applicable: No	
To allow for demonstrate should be m demonstrate	an actual measured equilibried equilibrium concentration, nultiplied by the ratio (100% a ed %), respectively.	um concentration or a the values given in this table ctual %) or (100%	The BONUS reactor does not have residual radioactive contamination that could produce radon concentrations that exceed natural background.
Section:	1AA.4.02	Applicable: No	
Alternatively and radon-2 level, respe	y, the derived air concentratio 222 <i>may</i> be replaced by 1 wor ctively, for appropriate limiting	n (DAC) values for radon-220 king level and 1/3 working g of daughter concentrations.	The BONUS reactor does not have residual radioactive contamination that could produce radon concentrations that exceed natural background.
Section:	1AD.1	Applicable: Yes	
Where surfa nuclides exi emitting nuc	ace contamination by both alp ists, the limits established for clides <i>should</i> apply independe	ha- and beta-gamma-emitting alpha- and betta-gamma- ently.	Where surface contamination by both alpha- and beta-gamma-emitting nuclides exists, PREPA will apply independently the limits, as are established, for alpha- and beta-gamma-emitting nuclides.
Section:	1AD.3.01	Applicable:	
The surface provided the than three ti square mete guide G if: (1) Frc it is G, cer i; o (2) It is or	e radioactivity levels <i>may</i> be a e maximum surface activity in imes the value specified. For er of surface SHALL be consi- om measurements of a repres determined that 1/n sum of r where Si is the disintegrations ntimeters squared determined r s determined that the sum of t particles in any 100 cm ² area	veraged over 1 square meter any area of 100 cm ² is less purposes of averaging, any dered to be above the activity entative number n of sections of for SI greater than or equal to s per minute per 100 from measurement of section he activity of all isolated spots exceeds 3G.	 PREPA may average (surface radioactivity) levels over 1 square meter provided the maximum surface activity in any area of 100 cm² is less than three times the value specified. For purposes of averaging, any square meter of surface will be considered to be above the activity guide G if: (1) From measurements of a representative number n of sections it is determined that 1/n sum of n for Si greater than or equal to G, where Si is the disintegrations per minute per 100 centimeters squared determined from measurement of section i; or (2) It is determined that the sum of the activity of all isolated spots or (3) Particles in any 100 cm² area exceed 3G.
Section: The surface provided the than 3 times	1AD.3.02 e radioactivity levels <i>may</i> be a e maximum surface activity in s the value specified.	Applicable: Yes veraged over 1 square meter any area of 100 cm ² is less	PREPA may average surface radioactivity levels over 1 square meter provided the maximum surface activity in any area of 100 cm ² is less than 3 times the value specified.
Section: 1AD.4.01 Applicable: Yes The amount of removable radioactive material per 100 cm ² of surface area <i>should</i> be determined by swiping the area with dry filter or soft absorbent paper, applying moderate pressure, and then assessing the amount of radioactive material on the swipe with an appropriate instrument of known efficiency. (Note: The use of dry material <i>may</i> not be appropriate for tritium.)			PREPA will determine the amount of removable radioactive material per 100 cm ² of surface area by swiping the area with dry filter or soft absorbent paper, applying moderate pressure, and then assessing the amount of radioactive material on the swipe with an appropriate instrument of know efficiency. (Note: The use of dry material <i>may</i> not be appropriate for tritium.)

	Requirement	t Statement	Description of Compliance Status
Section: When remained 100 cm ² is the actual	1AD.4.02 ovable contamination on o determined, the activity po area and the entire surface	Applicable: Yes bjects of surface area less than er unit area <i>should</i> be based on e <i>should</i> be wiped.	When removable contamination on objects of surface area less than 100 cm ² is determined, PREPA will base the activity per unit area on the actual area and the entire surface will be wiped.
Section: No person inconsister (1) Th (2) Ar thi	3(a) or DOE personnel <i>shall</i> ta it with the requirements of is part; or by program, plan, schedule s part.	Applicable: Yes ke or cause to be taken any action : e, or other process established by	No PREPA personnel will take or cause to be taken any action inconsistent with the requirements of 10 CFR 835 or any program, plan, schedule, or other process established by 10 CFR 835.
Section: With respe be respons	3(b) ct to a particular DOE acti ible for compliance with th	Applicable: Yes vity, contractor management <i>shall</i> ne requirements of this part.	With respect to a particular DOE activity, PREPA management will be responsible for compliance with the requirements of 10 CFR 835.
Section: Where thei implementa	3(c) e is no contractor for a D(ation and compliance with	Applicable: No DE activity, DOE <i>shall</i> ensure the requirements of this part.	10 CFR 835.3(c) applies to DOE and is not applicable to the PREPA BONUS Reactor RPP.
Section: Nothing in necessary	3(d) this part <i>shall</i> be construe to protect health and safe	Applicable: Yes d as limiting actions that may be ty.	Nothing in 10 CFR 835 will be construed as limiting actions that may be necessary to protect health and safety.
Section: 4 Applicable: Yes Unless otherwise specified, the quantities used in the records required by this part <i>shall</i> be clearly indicated in special units of curie, rad, or rem, including multiples and subdivisions of these units. The SI units, becquerel (Bq), gray (Gy), and sievert (Sv), are only provided parenthetically in this part for reference with scientific standards. These SI units ARE NOT AUTHORIZED for use in records required under this part.			The quantities used in the records required by 10 CFR 835 will be clearly indicated in special units of curie, rad, or rem, including multiples and subdivisions of these units.
Section: An activity as approve	101(a) <i>shall</i> be conducted in com d by DOE.	Applicable: Yes ppliance with a documented RPP	All activities will be conducted in compliance with the PREPA BONUS Reactor RPP as approved by DOE.
Section: DOE may	101(b) direct or make modification	Applicable: Yes ns to an RPP.	PREPA may direct or make modifications to the BONUS Reactor RPP.

	Requirement Stateme	nt	Description of Compliance Status			
Section:	101(c).01	Applicable:	Yes	The contents of the BONUS Reactor RPP is commensurate with the		
The content of each RPP <i>shall</i> be commensurate with the nature of the activities performed and shall include formal plans and measures for applying the ALARA process to occupational exposure.				nature of the activities performed and will include formal plans and measures for applying the ALARA process to occupational exposure.		
Section:	101(d).01	Applicable:	Yes	The BONUS Reactor RPP will specify the existing or anticipated		
The RPP <i>si</i> are intende	<i>hall</i> specify the existing or anticipate d to be within the scope of the RPP.	d operational tasks	operational tasks that are intended to be within the scope of the BONUS Reactor RPP.			
Section:	101(d).02	Applicable:	Yes			
Except as p RPP <i>shall</i> r DOE.	provided in §835.101(i), any task out not be initiated until an update of the	side the scope of a RPP is approved I	an Oy	Tasks outside the scope of the BONUS Reactor RPP will not be initiated at the BONUS Reactor until an update of the RPP is approved by DOE.		
Section:	101(e)	Applicable:	Yes	The content of the BONUS Reactor RPP will address, but will not		
The conten limited to, e	t of the RPP <i>shall</i> address, but <i>shall</i> ach requirement in this part.	not necessarily be	9	necessarily be limited to, each requirement in 10 CFR 835.		
Section:	101(f).01	Applicable:	Yes	The BONUS Reactor RPP will include plans, schedules, and other		
The RPP <i>si</i> achieving c	<i>hall</i> include plans, schedules, and ot ompliance with regulations of this pa	her measures for art.		measures for achieving compliance with regulations of 10 CFR 835.		
Section:	101(f).02	Applicable:	No			
Unless othe amendmen no later tha	erwise specified in this part, complian ts to this part published on June 8, 2 n July 9, 2010.	nce with the 2007, shall be achie	eved	Compliance with 10 CFR 835 will be achieved before any radiological operations occur.		
Section:	101(g)	Applicable:	Yes	PREPA will submit the BONUS Reactor RPP to DOE before any		
An update of	of the RPP shall be submitted to DO	E.		radiological operations occur.		
Section:	101(g)(1)	Applicable:	Yes	An undate of the BONUS Reactor BPP will be submitted to DOE		
An update of the BONUS Reactor RPP will be submitted to DOE whenever a change or an addition to the RPP is made.				whenever a change or an addition to the BONUS Reactor RPP is made.		
Section:	101(g)(2)	Applicable:	Yes	An update of the BONUS Reactor RPP will be submitted to DOE prior to		
Prior to the	initiation of a task not within the sco	pe of the RPP.		the initiation of a task hot within the scope of the bondos headtor HFF.		
Section:	101(g)(3)	Applicable:	Yes	An update of the BONUS Reactor RPP will be submitted to DOE within		
Within 180	80 days of the effective date of any modifications to this part. [180 days of the effective date of any modification to 10 CFR 835.					

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Page	
A-4	

Requirement Statement	Description of Compliance Status	
Section: 101(h).01 Applicable: Ye Changes, additions, or updates to the RPP <i>may</i> become effective without prior DOE approval only if the changes do not decrease the effectiveness of the RPP and the RPP, as changed, continues to mee the requirements of this part.	PREPA will consider changes, additions, or updates to the BONUS Reactor RPP without prior DOE approval only if the changes do not decrease the effectiveness of the RPP and the RPP, as changed, continues to meet the requirements of 10 CFR 835.	
Section:101(h.02Applicable:YeProposed changes that decrease the effectiveness of the RPP shall r be implemented without submittal to and approval by DOE.	Proposed changes that decrease the effectiveness of the BONUS Reactor RPP will not be implemented without submittal to and approval by DOE.	
Section:101(i)Applicable:YeAn initial RPP or an update <i>shall</i> be considered approved 180 days after its submission unless rejected by DOE at an earlier date.	The BONUS Reactor RPP or an update will be considered approved 180 days after its submission unless rejected by DOE at an earlier date.	
Section: 102 Applicable: Ye Internal audits of the RPP, including examination of program content and implementation, shall be conducted through a process that ensur that all functional elements of the RPP are reviewed no less frequent than every 36 months.	Internal audits of all functional elements of the RPP will be conducted no less frequently than every 36 months and will include program content and implementation.	
Section: 103 Applicable: Ye Individuals responsible for developing and implementing measures necessary for ensuring compliance with the requirements of this part shall have the appropriate education, training, and skills to discharge these responsibilities.	BONUS Reactor personnel responsible for the development and implementation of necessary measures for ensuring compliance with the requirements of this part will have the appropriate education, training, and skills to discharge these responsibilities.	
Section: 104 Applicable: Ye Written procedures shall be developed and implemented as necessar to ensure compliance with this part, commensurate with the radiologic hazards created by the activity and consistent with the education, training, and skills of the individuals exposed to those hazards.	Written procedures will be developed and implemented as necessary to ensure compliance with this part, commensurate with the radiological hazards created by the activity and consistent with the education, training, and skills of the individuals exposed to those hazards.	
Section: 202(a)(1) Applicable: Ye Except for planned special exposures conducted consistent with 835.204 and emergency exposures authorized in accordance with 835.1302, the occupational dose received by general employees shall be controlled such that the following annual limits are not exceeded in year: a total effective dose equivalent of 5 rems (0.05 sievert).	The occupational exposure to general employees resulting from activities will be controlled so the following annual limit is not exceeded: a total effective dose equivalent of 5 rems (0.05 sievert). There will be no planned special exposures under 835.204 or emergency exposure a situations under 835.1302.	

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Page A-5	

	Requirement State	ment	Description of Compliance Status	
Section: The sum of exposures a other than t	202(a)(2) the equivalent dose to the whole and the committed dose equivale he lens of the eye of 50 rems (0.	Applicable: e body for external ent to any organ or tissu 5 sievert).	Yes ue	The sum of the equivalent dose for external exposures and the committed dose equivalent to any organ or tissue other than the lens of the eye of 50 rems (0.5 sievert).
Section: An equivale	202(a)(3) Int dose to the lens of the eye of	Applicable: 15 rems (0.15 sievert).	Yes	The occupational exposure to general employees resulting from activities will be controlled so the following annual limit is not exceeded: a lens of the eye equivalent dose of 15 rems (0.15 sievert).
Section: The sum of external exp any extremi	202(a)(4) the equivalent dose to the skin o posures and the committed equiv ty of 50 rems (0.5 sievert).	Applicable: or to any extremity for valent dose to the skin	Yes or to	The occupational exposure to general employees resulting from activities will be controlled so the following annual limit is not exceeded: the sum of the equivalent dose to the skin or to any extremity for external exposures and the committed equivalent dose to the skin or to any extremity of 50 rems (0.5 sievert).
Section: All occupati resulting fro 835.204 and 835.1302, s §835.202(a)	202(b) onal doses received during the c m planned special exposures cc d emergency exposures authoriz thall be included when demonstr) and 835.207.	Applicable: current year, except do onducted in compliance ed in accordance with ating compliance with	Yes ses with	All occupational exposure to general employees resulting from activities received during the current year will be included when demonstrating compliance with §835.202(a) and § 835.207. There will be no planned special exposures under 835.204 or emergency exposure situations under 835.1302.
Section: Doses from and particip be included the occupat	202(c) background, therapeutic and dia ation as a subject in medical res in dose records or in the assess ional exposure limits.	Applicable: agnostic medical radiat earch programs <i>shall</i> r ment of compliance wi	Yes ion, not ith	Exposures from background, therapeutic and diagnostic medical radiation, and voluntary participation in medical research programs will not be included in dose records or in the assessment of compliance with the occupational exposure limits.
Section: The total eff the effective dose from in	203(a) fective dose during a year <i>shall</i> k e dose from external exposures a ntakes during the year.	Applicable: be determined by summ and the committed effe	Yes ning ctive	The total effective dose during a year will be determined by summing the effective dose from external exposures and the committed effective dose from intakes during the year.
Section: Determinati weighting fa	203(b) ons of the effective dose equival actor values provided in §835.2.	Applicable: ent <i>shall</i> be made usin	Yes	Determinations of the effective dose equivalent will be made using the weighting factor values provided in §835.2.
Section: For the case weighting fa effective do	203(c) e of uniform external irradiation of actor (wT) equal to 1 <i>may</i> be use se equivalent.	Applicable: of the whole body, a d in determination of th	Yes	This section was deleted in the 2007 revision of 10 CFR 835.

Page A-(
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	Requirement	Statement	Description of Compliance Status	
Section: A planned to receive of doses rece the followir considerec prevent a r are unavai	204(a)(1) special exposure <i>may</i> be an doses in addition to and acc ived under the limits specifi ng condition is satisfied: the I only in an exceptional situa adiological worker from exc lable or impractical;	Applicable: No uthorized for a radiological worker counted for separately from the ed in §835.202(a), provided that planned special exposure is ation when alternatives that might eeding the limit in §835.202(a)(1)	The BONUS reactor will not have planned special exposure.	
Section: A planned to receive of doses rece the followir employer, planned sp	204(a)(2) special exposure <i>may</i> be an doses in addition to and acc ived under the limits specifi ng condition is satisfied: the if the employer is not the co pecial exposure, in writing.	Applicable: No uthorized for a radiological worker counted for separately from the ed in §835.202(a), provided that contractor management (and ntractor) specifically requests the	The BONUS reactor will not have planned special exposure.	
Section: A planned to receive of doses receive the followin appropriate environme	204(a)(3) special exposure <i>may</i> be an doses in addition to and acc sived under the limits specifi ng condition is satisfied: Join a DOE Headquarters progra nt safety, and health matter	Applicable: No uthorized for a radiological worker counted for separately from the ed in §835.202(a), provided that the written approval from the am officer responsible for s.	The BONUS reactor will not have planned special exposure.	
Section: Prior to rec special exp special exp limits <i>shall</i>	204(b) guesting an individual to par bosure, the individual's dose bosures and all doses in exc be determined.	Applicable: No ticipate in an authorized planned from all previous planned cess of the occupational dose	The BONUS reactor will not have planned special exposure.	
Section: An individu addition to exceeding limits estab	204(c)(1) al <i>shall</i> not receive a plann the doses determined in §8 the following: in a year, the blished in 835.202(a).	Applicable: No ed special exposure that, in 35.204(b), would result in a dose numerical values of the dose	The BONUS reactor will not have planned special exposure.	
Section: An individu addition to exceeding numerical	204{c){2) al <i>shall</i> not receive a plann the doses determined in §8 the following: over the indiv values of the dose limits est	Applicable: No ed special exposure that, in 35.204(b), would result in a dose idual's lifetime, 5 times the ablished at 835.835.202(a).	The BONUS reactor will not have planned special exposure.	

	Requirer	nent Statement	Description of Compliance Status
Section:	204(d)	Applicable: No	
Prior to a p from each	olanned special expos individual involved. E	ure, written consent <i>shall</i> be obtained ach such written consent shall include:	The BONUS reactor will not have planned special exposure.
Section:	204(d)(1)	Applicable: No	The BONUS reactor will not have planned special exposure.
The purpos		rations and procedures to be used;	
	204(0)(2)	Applicable. No	The BONUS reactor will not have planned special exposure.
radiologica performing	l conditions and assoc the task; and	r hazards which might be involved in	
Section:	204(d)(3)	Applicable: No	The BONI IS reactor will not have planned special exposure
Instruction: considering	s on the measures to g other risks that may	be taken to keep the dose ALARA be present.	
Section:	204(e)	Applicable: No	
Records of the conduct of a planned special exposure <i>shall</i> be maintained and a written report submitted within 30 days after the planned special exposure to the approving organizations identified in §835.204(a) (3).			The BONUS reactor will not have planned special exposure.
Section:	204(f)	Applicable: No	
The dose f controlling but <i>is to be</i>	rom planned special e future occupational d <i>included</i> in records a	exposures is not to be considered in ose of the individual under §835.202(a) and reports required under this part.	The BONUS reactor will not have planned special exposure.
Section:	205(a)	Applicable: Yes	
Nonuniforr radioactive section.	n exposures of the sk material on the skin	in from X-rays, beta radiation, or are to be assessed as specified in this	Nonuniform exposures of the skin from X-rays, beta radiation, or radioactive material on the skin will be assessed as specified in §835.205.
Section:	205(b)(1)	Applicable: Yes	
For purpos assessmen 100 cm ² or year <i>shall</i> I maximum the skin, an for the yea	tes of demonstrating on the shall be conducted more. The nonunifor be averaged over the dose, added to any ur nd recorded as the eq r.	compliance with §835.202(a) (4), d as follows: area of skin irradiated is m equivalent dose received during the 100 cm ² of the skin receiving the niform equivalent dose also received by uivalent dose to any extremity or skin	For purposes of demonstrating compliance with §835.202(a) (4), assessments will be conducted as follows: area of skin irradiated is 100 cm ² or more. The nonuniform equivalent dose received during the year will be averaged over the 100 cm ² of the skin receiving the maximum dose, added to any uniform equivalent dose also received by the skin, and recorded as the equivalent dose to any extremity or skin for the year.

	Requirement S	Statement	Description of Compliance Status
Section: Area of sk nonuniforn the year s by the ski skin for the skin receiv f, which is no case sl	205(b)(2) in irradiated is 10 cm ² or m n equivalent dose (H) to the hall be added to any unifor n and recorded as the equ e year. H is the equivalent of ing the maximum absorbed the irradiated area in cm ² di hall a value of f less than 0.1	Applicable: Yes nore, but less than 100 cm ² . The e irradiated area received during m equivalent dose also received ivalent dose to any extremity or dose averaged over the 1 cm ² of l dose, D, reduced by the fraction ivided by 100 cm ² (i.e., H = fd). In be used.	For purposes of demonstrating compliance with $\$835.202(a)(4)$, assessments will be conducted as follows: area of skin irradiated is 10 cm ² or more, but less than 100 cm ² . The nonuniform equivalent dose (H) to the irradiated area received during the year will be added to any uniform equivalent dose also received by the skin and recorded as the equivalent dose to any extremity or skin for the year. H is the equivalent dose averaged over the 1 cm ² of skin receiving the maximum absorbed dose, D, reduced by the fraction f, which is the irradiated area in cm ² divided by 100 cm ² (i.e., H = fd). In no case will a value of f less than 0.1 be used.
Section: Area of ski dose <i>shall</i> dose. This	205(b)(3) in irradiated is less than 10 c be averaged over the 1 cm ² equivalent dose <i>shall</i> :	Applicable: Yes	For purposes of demonstrating compliance with §835.202(a) (4), assessments will be conducted as follows: area of skin irradiated is less than 10 cm ² , the nonuniform dose equivalent will be averaged over the 1 cm ² of skin receiving the maximum dose. This equivalent dose will:
(1) Be a	e recorded in the individual's s a special entry; and	occupational exposure history	 Be recorded in the individual's occupational exposure history as a special entry; and
(2) No e:	ot be added to any other sha xtremity or skin recorded as	allow dose equivalent to any the equivalent dose for the year.	(2) Not be added to any other equivalent dose to any extremity or skin recorded as the dose equivalent for the year.
Section: The equiva conceptior pregnant v	206{a) alent dose limit for the embry to birth, as a result of occup vorker, is 0.5 rem (0.005 sie	Applicable: Yes yo/fetus from the period of pational exposure of a declared vert).	The equivalent dose limit for the embryo/fetus from the period of conception to birth, as a result of occupational exposure of a declared pregnant worker, is 0.5 rem (0.005 sievert).
Section: Substantia the limits p	206(b) Il variation above a uniform e provided in §835.206(a) <i>shal</i>	Applicable: Yes exposure rate that would satisfy // be avoided.	Substantial variation above a uniform exposure rate that would satisfy the limits provided in §835.206(a) will be avoided.
Section: If the equiver exceeded pregnancy where add gestation p	206(c) valent dose to the embryo/fe 0.5 rem (0.005 sievert) by v, the declared pregnant work ditional occupational exposu- period.	Applicable: Yes itus is determined to have already the time a worker declares her ker <i>shall</i> not be assigned to tasks ure is likely during the remaining	If the dose equivalent to the embryo/fetus is determined to have already exceeded 0.5 rem (0.005 sievert) by the time a worker declares her pregnancy, the declared pregnant worker will not be assigned to tasks where additional occupational exposure is likely during the remaining gestation period.
Section: The dose radioactive effective d specified a	207 limits for minors occupatior materials at a DOE activity ose in a year and 10 perce at 835.202(a)(3) and (a)(4).	Applicable: Yes nally exposed to radiation and/or / are 0.1 rem (0.001 sievert) total nt of the occupational dose limits	Any minor exposed to radiation and/or radioactive material during direct onsite access at the BONUS reactor will not exceed 0.1 rem (0.001 sievert) total effective dose in a year and 10 percent of occupational dose limits specified at 835.202(a)(3) and (a)(4).

Requirement Statement			Description of Compliance Status	
Section:	208	Applicable: Yes	The total effective dose limit for members of the public exposed to	
The total radiation a is 0.1 rem	effective dose limit for r and/or radioactive materia (0.001 sievert) in a year.	nembers of the public exposed to I during access to a controlled area	will not exceed 0.1 rem (0.001 sievert) total effective dose equivalent in a year.	
Section:	209(a)	Applicable: Yes		
The DAC in the continue material.	values given in Appendixe trol of occupational exposi	es A and C to this part <i>shall</i> be used ures to airborne radioactive	The DAC values given in Appendixes A and C to 10 CFR 835 will be used in the control of occupational exposures to airborne radioactive material.	
Section:	209(b)	Applicable: Yes		
The estimation	ation of internal dose shal	/ be based on bioassay data rather	The estimation of internal dose will be based on bioassay data rather than air concentration values unless bioassay data are:	
than air co	ncentration values unless	bioassay data are:	(1) Unavailable;	
(1) U	navailable;		(2) Inadequate; or	
(2) Ir	adequate; or		(3) Internal dose estimates based on air concentration values are	
(3) Ir d	iternal dose estimates bas emonstrated to be as or m	sed on air concentration values are nore accurate.	demonstrated to be as or more accurate.	
Section:	401(a){1)	Applicable: Yes		
Monitoring of individuals and areas <i>shall</i> be performed to demonstrate compliance with the regulations in this part.			Compliance with the regulations in 10 CFR 835.	
Section:	401(a)(2)	Applicable: Yes	Monitoring of individuals and areas will be performed to document radiological conditions in the workplace.	
Document Section:	101(a)(3)	Applicable: Ves		
Detect cha	anges in radiological cond	itions.	Monitoring of individuals will be performed to detect changes in radiological conditions.	
Section:	401(a)(4)	Applicable: Yes	Monitoring of individuals and areas will be performed to detect the gradual	
Detect the	gradual buildup of radioa	ctive material.	buildup of radioactive material in the workplace.	
Section:	401(a)(5)	Applicable: Yes	Monitoring of individuals and areas will be performed to verify the	
Verify the effectiveness of engineered and administrative controls in containing radioactive material and reducing radiation exposure.		ed and administrative controls in reducing radiation exposure.	effectiveness of engineering and process controls in containing radioactive material and reducing radiation exposure.	
Section:	401(a) (6)	Applicable: Yes	Monitoring of individuals and areas will be performed to identify and	
Identify an and/or rad	nd control potential source lioactive material.	s of personnel exposure to radiatior	control potential sources of individual exposure to radiation and/or radioactive material.	

January	
2020	

Page A	
k-10	

Requirement Statement		Description of Compliance Status
Section:401(b){1)Applicable:Instruments and equipment used for monitoring shall be periodicall maintained and calibrated on an established frequency.	Yes Iy	Instruments and equipment used for monitoring will be periodically maintained and calibrated on an established frequency of at least once per year.
Section:401(b)(2)Applicable:Instruments and equipment used for monitoring shall be appropriat the types, levels, and energies of the radiations encountered.	Yes te for	Instruments and equipment used for monitoring will be appropriate for the types, levels, and energies of the radiations encountered.
Section:401(b){3)Applicable:Instruments and equipment used for monitoring shall be appropriate existing environmental conditions.	Yes te for	Instruments and equipment used for monitoring will be appropriate for existing environmental conditions.
Section:401(b)(4)Applicable:Instruments and equipment used for monitoring shall be routinely t for operability.	Yes tested	Instruments and equipment used for monitoring will be routinely tested for operability.
Section: 402(a)(1)(i) Applicable: For the purpose of monitoring individual exposures to extradiation, personnel dosimetry shall be provided to and use radiological workers who, under typical conditions, are likely to re an effective dose to the whole body of 0.1 rem (0.001 sievert) or in one year.	Yes ternal ed by eceive more	For the purpose of monitoring individual exposures to external radiation, personnel dosimetry will be provided to and used by radiological workers who, under typical conditions, are likely to receive an effective dose to the whole body of 0.1 rem (0.001 sievert) or more in one year.
Section: 402(a)(1)(ii) Applicable: For the purpose of monitoring individual exposures to extradiation, personnel dosimetry shall be provided to and use radiological workers who, under typical conditions, are likely tequivalent dose to the skin or to any extremity of 5 rems (0.05 side or more in a year.	Yes ternal ed by to an evert)	For the purpose of monitoring individual exposures to external radiation, personnel dosimetry will be provided to and used by radiological workers who, under typical conditions, are likely to receive an equivalent dose to the skin or to any extremity of 5 rems (0.05 sievert) or more in a year.
Section:402(a)(1)(iii)Applicable:For the purpose of monitoring individual exposures to external radipersonnel dosimetry will be provided to and used by radiological wewho, under typical conditions, receive a lens of the eye equivalentof 1.5 rems (0.015 sievert) or more in a year.	Yes iation, orkers dose	For the purpose of monitoring individual exposures to external radiation, personnel dosimetry will be provided to and used by radiological workers who, under typical conditions, are likely to receive a lens of the eye equivalent dose of 1.5 rems (0.015 sievert) or more in a year.
Section: 402(a)(2) Applicable: For the purpose of monitoring individual exposures to extradiation, personnel dosimetry <i>shall</i> be provided to and use declared pregnant workers who are likely to receive from exposurces an equivalent dose to the embryo/fetus in excess of 10% applicable limit in §835.206.	Yes ternal ed by ternal of the	For the purpose of monitoring individual exposures to external radiation, personnel dosimetry will be provided to and used by declared pregnant workers who are likely to receive from external sources an equivalent dose to the embryo/fetus in excess of 10% of the applicable limit in §835.206.

Requirement Statement	Description of Compliance Status
Section: 402(a)(3) Applicable: Yes For the purpose of monitoring individual exposures to external radiation, personnel dosimetry <i>shall</i> be provided to and used by occupationally exposed minors likely to receive a dose in excess of 50% of the applicable limits in §835.207 in a year from external sources.	For the purpose of monitoring individual exposures to external radiation, personnel dosimetry will be provided to and used by minors and members of the public likely to receive, in 1 year, from external sources, a dose in excess of 50% of the applicable limits in §835.207 or §835.208, respectively.
Section: 402(a)(4) Applicable: No For the purpose of monitoring individual exposures to external radiation, personnel dosimetry <i>shall</i> be provided to and used by Members of the public entering a controlled area likely to receive a dose in excess of 50 percent of the limit at 835.208 in a year from external sources; and individuals entering high or very high radiation area.	There are no high or very high radiation areas at the BONUS reactor.
Section:402{a)(5)Applicable:NoFor the purpose of monitoring individual exposures to external radiation, personnel dosimetry <i>shall</i> be provided to and used by individuals entering a high or very high radiation area.No	There are no high or very high radiation areas at the BONUS reactor.
Section:402(b)Applicable:YesExternal dose monitoring programs implemented to demonstrate compliance with 835.402(a) shall be adequate to demonstrate compliance with the dose limits established in Subpart C of this part.	External dose monitoring programs implemented to demonstrate compliance with 835.402(a) will be adequate to demonstrate compliance with the dose limits established in Subpart C of this part.
Section: 402(b)(1) Applicable: Yes Accredited, or exempted from accreditation, in accordance with PREPA.	Accredited, or exempted from accreditation, in accordance with PREPA.
Section:402(b)(2)Applicable:YesDetermined by the PREPA Officer responsible for environment, safety, and health matters to have performance substantially equivalent to that of programs accredited.	Determined by the PREPA Officer responsible for environment, safety, and health matters to have performance substantially equivalent to that of programs accredited.
Section: 402(c)(1) Applicable: Yes For the purpose of monitoring individual exposures to internal radiation, internal dose evaluation programs (including routine bioassay programs) <i>shall</i> be conducted for radiological workers who, under typical conditions, are likely to receive a committed effective dose of 0.1 rem (0.001 sievert) or more from all occupational radionuclide intakes in a year.	For the purpose of monitoring individual exposures to internal radiation, internal dose evaluation programs (including routine bioassay programs) will be conducted for radiological workers who, under typical conditions, are likely to receive a committed effective dose of 0.1 rem (0.001 sievert) or more from all occupational radionuclide intakes in a year.

	Requireme	nt Statement	Description of Compliance Status
Section: For the pui internal c programs) receive ar embryo/fet	402(c)(2) rpose of monitoring indiv lose evaluation progr <i>shall</i> be conducted for i intake or intakes resu us in excess of 10% of t	Applicable: Yes ridual exposures to internal radiation, ams (including routine bioassay declared pregnant workers likely to ulting in an equivalent dose to the he limit stated in §835.206(a).	For the purpose of monitoring individual exposures to internal radiation, internal dose evaluation programs (including routine bioassay programs) will be conducted for declared pregnant workers likely to receive an intake or intakes resulting in an equivalent dose to the embryo/fetus in excess of 10% of the limit stated in §835.206(a).
Section: For the put internal of programs) are likely to limit stated	402(c)(3) rpose of monitoring indiv lose evaluation progr <i>shall</i> be conducted for preceive a dose in exce in §835.207 from all rac	Applicable: Yes ridual exposures to internal radiation, ams (including routine bioassay occupationally exposed minors who ss in excess of 50% of the applicable lionuclide intakes in a year.	For the purpose of monitoring individual exposures to internal radiation, internal dose evaluation programs (including routine bioassay programs) will be conducted for occupationally exposed minors who, under typical conditions, are likely to receive a dose in excess of 50% of the applicable limit stated in §835.207 from all occupational radionuclide intakes in a year.
Section: For the purinternal of programs) the public of 50% of year.	402(c)(4) rpose of monitoring individual lose evaluation progr <i>shall</i> be conducted for entering a controlled are the limit stated at 835.2	Applicable: Yes ridual exposures to internal radiation, ams (including routine bioassay occupationally exposed members of ea likely to receive a dose in excess 08 from all radionuclide intakes in a	For the purpose of monitoring individual exposures to internal radiation, internal dose evaluation programs (including routine bioassay programs) <i>shall</i> be conducted for occupationally exposed members of the public entering a controlled area likely to receive a dose in excess of 50% of the limit stated at 835.208 from all radionuclide intakes in a year.
Section: Internal d compliance compliance	402(d) ose monitoring progra e with 835.402(c) sh e with the dose limits est	Applicable: Yes ams implemented to demonstrate <i>all</i> be adequate to demonstrate ablished in Subpart C of this part.	Internal dose monitoring programs implemented to demonstrate compliance with §835.402(c) shall be adequate to demonstrate compliance with the dose limits established in Subpart C in this part.
Section: Accredited PREPA.	402(d)(1) , or exempted from accr	Applicable: Yes editation, in accordance with	Accredited, or exempted from accreditation, in accordance with the PREPA.
Section: Determined and health of program	402(d)(2) d by the PREPA Officer matters to have perform s accredited.	Applicable: Yes responsible for environment, safety, ance substantially equivalent to that	Determined by the PREPA Officer responsible for environment, safety, and health matters to have performance substantially equivalent to that of programs accredited.
Section: Monitoring individual i year.	403(a)(1) of airborne radioactiv s likely to receive an exp	Applicable: Yes rity shall be performed where an posure of 40 or more DAC hours in a	Monitoring of airborne radioactivity shall be performed where an individual is likely to receive an exposure of 40 or more DAC hours in a year.

Requirement Statement				Description of Compliance Status	
Section:	403(a)(2)	Applicable:	Yes	Monitoring of airborne radioactivity shall be performed as necessary to	
Monitoring characteriz protective been prese	of airborne radioactivity te the airborne radio devices for protection cribed.	v shall be performed as necessa pactivity hazard where respira against airborne radionuclides	ry to atory have	characterize the airborne radioactivity hazard where respiratory protective devices for protection against airborne radionuclides have been prescribed.	
Section:	403(b)	Applicable:	Yes		
Real-time a provide wa immediate material.	air monitoring shall be p arning of airborne radic action to terminate	erformed as necessary to detect pactivity concentrations that wa inhalation of airborne radioa	t and rrant ctive	Real-time air monitoring shall be performed as necessary to detect and provide warning of airborne radioactivity concentrations that warrant immediate action to terminate inhalation of airborne radioactive material.	
Section:	405(a)(1))	Applicable:	Yes		
f package ype A queceived fueceived for the made to lelivery.	s containing quantities o uantity (as defined at rom radioactive materia take possession of the	of radioactive material in excess 10 CFR 71.4) are expected to Il transportation, arrangements package when the carrier offers	of a o be shall it for	If packages containing quantities of radioactive material in excess of a Type A quantity (as defined at 10 CFR 71.4) are expected to be received by BONUS personnel from radioactive material transportation, arrangements will be made to take possession of the package when the carrier offers it for delivery.	
Section:	405(a))(2)	Applicable:	Yes		
f package Type A qu received fu ce made t the package package e	s containing quantities of uantity (as defined at rom radioactive materia o receive notification as ge at the carrier's term xpeditiously after receivi	of radioactive material in excess 10 CFR 71.4) are expected to Il transportation, arrangements s soon as practicable after arriv hinal and to take possession of ng such notification.	of a o be shall al of f the	BONUS reactor personnel will receive notification as soon as practicable after arrival of the package at the carrier's terminal and to take possession of the package expeditiously after receiving such notification.	
Section:	405(b)(1)	Applicable:	Yes	Upon receipt from radioactive material transportation by BONUS	
Upon receipt of package the package III label (as	pt from radioactive mates s known to contain radi ge is labeled with a Rac specified at 49 CFR 17	erial transportation, external surf oactive material shall be monitor lioactive White I, Yellow II, or Ye 2.403 and 172.436-44D.	aces red if ellow	reactor personnel, external surfaces of packages known to contain radioactive material shall be monitored if the package is labeled with a Radioactive White I, Yellow II, or Yellow III label (as specified at 49 CFR 172.403 and 172.436-44D.	
Section:	405(b)(2)	Applicable:	Yes		
Upon recei of package (as defined 10 CFR 7 Radioactiv CFR 172.4	pt from radioactive mate to that have been transp at 10 CFR 71.4) on an 1.4) shall be monitore White I, Yellow II, or 03 and 172.436-44D.	erial transportation, external surf ported as low specific activity mat rexclusive use vehicle (as define d if the package is labeled wi Yellow III label (as specified a	aces terial ed at ith a at 49	Has been transported as low specific activity material (as defined at 10 CFR 71.4) on an exclusive use vehicle (as defined at 10 CFR 71.4).	

	Requirement Statemen	t	Description of Compliance Status	
Section: 4 Has evidence or damaged.	405(b)(3) e of degradation, such as packages	Applicable: that are crushed,	Yes wet,	Has evidence of degradation, such as packages that are crushed, wet, or damaged.
Section: 2 The monitorin (1) Meas pack 71.4) (2) (2) M Type mate	405(c)(1) ng required by paragraph (b) of this surements of removable contamina age contains only special form (as) or gaseous radioactive material; a fleasurements of radiation levels if t a B quantity (as defined at 10 CFR 7 erial.	Applicable: section shall includ tion levels, unless defined at 10 CFR nd, he package contai 71.4) of radioactive	Yes de: the ns a	 The monitoring required by paragraph (b) of this section will include: (1) Measurements of removable contamination levels, unless the package contains only special form (as defined at 10 CFR 71.4) or gaseous radioactive material; and, (1) (2) Measurements of radiation levels if the package contains a Type B quantity (as defined at 10 CFR 71.4) of radioactive material.
Section: 4 The monitorin completed as not later than receipt of the	405(d) ng required by paragraph (b) of s soon as practicable following rece a 8 hours after the beginning of the package.	Applicable: this section sha pipt of the package working day follo	Yes III be e, but owing	The monitoring required by paragraph (b) of this section will be completed as soon as practicable following receipt of the package, but not later than 8 hours after the beginning of the working day following receipt of the package.
Section: 4 Monitoring p transported of continuous of contractor em exposure mea	405(e) oursuant to 835.405(b) is not r on a PREPA site which have bservation and control of a PREP, ployee who is knowledgeable of a asurement measures.	Applicable: equired for pack remained under A employee or PF nd implements req	Yes ages the EPA uired	Monitoring pursuant to 835.405(b) will not be required for packages transported on a PREPA site which have remained under the continuous observation and control of a PREPA employee or PREPA contractor employee who is knowledgeable of and implements required exposure measurement measures.
Section: 5	501(a) try control shall be maintained for e	Applicable: ach radiological ar	Yes rea.	Personnel entry control will be maintained for each radiological area.
Section: 5 The degree o potential radio	f control shall be commensurate wi ological hazards within the area.	Applicable: th existing and	Yes	The degree of control will be commensurate with existing and potential radiological hazards within the area.

	Requirem	ent Statement	Description of Compliance Status		
Section:	501(c)	Applicable:	Yes		
One or r (1)	nore of the following meth Signs and barricades;	ods <i>shall</i> be used to ensure co	ntrol:	One or mo entry) con	nore of the following methods will be used to ensure (personnel ntrol:
(2)	Control devices on entrar	ICES;		(1) 5	Signs and barricades;
(3)	Conspicuous visual alarm	is, audible alarms, or both;		(2) (Control devices on entrances;
(4)	Locked entrance ways; o			(3) (Conspicuous visual alarms, audible alarms, or both;
(5)	Administrative controls.			(4) L	Locked entrance ways; or
These administrative procedures <i>shall</i> include actions essential to ensure the effectiveness and operability of barricades, devices, alarms, and locks				(5) <i>A</i>	Administrative controls.
Section:	501(d)	Applicable:	Yes		
Written perform specify and pote	authorizations shall be work within radiologica radiation protection meas ential hazards.	required to control entry in areas. These authorization ures commensurate with the e	to and s shall existing	Written au area and	uthorizations will be required to perform specific work within the will include specific radiation protection measures.
Section:	501(e)	Applicable:	Yes	Nie erstur	
No contr prevent	rols shall be installed at ar rapid evacuation of perso	y radiological area exit that wo nel under emergency conditio	uld ns.	No contro prevent ra	ols will be installed at any radiological area exit that would apid evacuation of personnel under emergency conditions.
Section:	502(a)	Applicable:	No		
The follo radiation	owing measures shall be in a area:	nplemented for each entry into	a high		
(1)	The area shall be monito determine the exposure r exposed; and	ed as necessary during access ates to which the individuals ar	s to e	There are	e no high radiation areas at the BONUS reactor.
(2)	Each individual shall be r dosimetry device or other immediate estimate of the dose to the whole body d	nonitored by a supplemental means capable of providing ar individual's integrated equival uring the entry.	n ent		

January 2020

	F	Requirement Statement		Description of Compliance Status		
Section	: 502(b)	Ар	plicable:	No		
One or r each en levels ei the who from the	more of the follo atrance or acces xist such that an le body of 1 ren e source or from	wing physical control features s s point to a high radiation area n individual could exceed an eq n (0.01 sievert) in any 1 hour at any surface that the radiation p	shall be used where radia uivalent dos 30 centimet penetrates:	d for tion e to ærs		
(1)	A control device radiation levels be reduced be	e that prevents entry to the are exist or upon entry causes the ow that level defining a high ra	a when high radiation le diation area	vel to		
(2)	A device that for operation of the the area	unctions automatically to preven a radiation source or field while	nt use or individuals a	are in		
(3)	A control device audible alarm s radiation area aware of the el	e that energizes a conspicuous signal so that the individual enter and the supervisor of the activit ntry	s visible or ering the hig sy are made	h	There are no high radiation areas at the BONUS reactor.	
(4)	Entryways that area is require	are locked; during periods whe d, positive control over each en	en access to try is mainta	the ined		
(5)	Continuous dir preventing una	ect or electronic surveillance th uthorized entry	at is capable	e of		
(6)	A control devic visual alarm sig operation of th evacuation of t device that will	e that will automatically genera gnals to alert personnel in the a e radiation source and in suffici he area or activation of a secor prevent use or operation of the	te audible au rea before u ent time to p ndary contro e source	nd ise or bermit I		
Section	: 502(c)	Ар	plicable:	No		
In additi impleme inadvert	ion to the above ented to ensure tent access to v	requirements, additional meas individuals are not able to gain ery high radiation areas.	ures shall be unauthorize	e ed or	There are no high or very high radiation areas at the BONUS reactor.	
Section	: 502(d)	Ар	plicable:	No		
No cont that wou	rols shall be est uld prevent rapi	ablished in a high or very high devacuation of personnel.	radiation are	ea	There are no high or very high radiation areas at the BONUS reactor.	
Section	: 601(a)	Ар	plicable:	Yes		
Except a required trefoil in	as otherwise pro d by this subpar black or mager	ovided in this subpart, postings shall include the standard radi ita imposed upon a yellow back	and labels ation warnin <ground.< td=""><td>g</td><td>Radioactive items or containers of radioactive materials will be individually labeled if adequate warning is not provided by control measures and required posting.</td></ground.<>	g	Radioactive items or containers of radioactive materials will be individually labeled if adequate warning is not provided by control measures and required posting.	

	Requi	rement Statement		Description of Compliance Status		
Section: Signs requ	601(b) lired by this subpar	Applicable: Ye	es D id	OE-approved signs, labels, and radiation symbols will be used to dentify areas specified in Subpart G of 10 CFR 835.		
posted and	d may include radio	logical protection instructions.				
Section: 601(c) Applicable: Yes The posting and labeling requirements in this subpart may be modified to reflect the special considerations of DOE activities conducted at private residences or businesses. Such modifications shall provide the same level of protection to individuals as the existing provisions in this subpart.				Required signs and labels will have a yellow background. The radiation ymbol will be black or magenta.		
Such mod level of p section.	ifications (to postin rotection to indivi	ng requirements) <i>shall</i> provide the sar duals as the existing provisions in tl	me his			
Each acce posted wh in the area radiologica receive a t year.	602(a) ess point to a contr enever radiologica I. Individuals who e al areas or radioad total effective dose	Applicable: Ye olled area (as defined in §835.2) shall areas or radioactive material areas ex nter only controlled areas without enteri ctive material areas are not expected of more than 0.1 rem (0.001 sievert) in	be E kist po ing ra to bo n a	Each access point to a controlled area (as defined in §835.2) will be osted, identifying it as a controlled area, whenever radioactive material, adiation fields, or both which would require posting under §835.603 may e present in the area.		
Section: Signs used materials c contractor	602(b) d for the purpose of or radioactive mater to avoid conflict wit	Applicable: Ye notifying individuals of radiological rial areas may be selected by the h local security requirements.	es S w	igns used for this purpose may be selected by PREPA to avoid conflict vith local security requirements.		
Section: Each acce (as defined the wordin	603 ss point to radiolog d in §835.2) shall be g provided in this s	Applicable: Ye ical areas and radioactive material areas e posted with conspicuous signs bearing ection.	es s E g	ach access point to a radiological area (as defined in §835.2) will be osted with conspicuous signs bearing the wording provided in §835.603.		
Section: The words area.	603(a) "Caution, Radiatio	Applicable: Ye n Area" <i>shall</i> be posted at each radiatior	es Ti n ai	he words "Caution, Radiation Area" will be posted at each radiation rea.		
Section: The words Area" <i>shal</i>	603(b) "Caution, High Rad / be posted at each	Applicable: N diation Area" or "Danger, High Radiation high radiation area.		here are no high radiation areas at the BONUS reactor.		

Description of Compliance Status		
There are no very high radiation areas at the BONUS reactor.		
The words "Caution, Airborne Radioactivity Area" will be posted for any occupied area in which airborne radioactivity levels exceed, or are likely to exceed, 10% of the DAC value listed in appendix A or Appendix C of 10 CFR 835.		
The words "Caution, Contamination Area" will be posted at each contamination area.		
The words "Danger, High Contamination Area" will be posted where contamination levels are greater than 100 times the values listed in Appendix D of 10 CFR 835.		
The words "Caution, Radioactive Materials(s)" will be posted at each high contamination area.		
BONUS reactor areas may be exempted from the posting requirements of 835.603 for periods of less than 8 continuous hours when placed under continuous observation and control of an individual knowledgeable of, and empowered to implement, required access and exposure control measures.		
 BONUS reactor areas may be excepted from the radioactive material area posting requirements of 835.603(g) when: (1) Posted in accordance with 835.603(a) through (f); or (2) Each item or container of radioactive material is labeled in accordance with this subpart such that individuals entering the area are made aware of the hazard; or (3) The radioactive material of concern consists solely of structures or installed components which have been activated (i.e., such as by being exposed to neutron radiation or particles produced by an accelerator) 		

	Requ	uirement Statement	Description of Compliance Status		
Section: Areas of transpor posted i accorda	: 604(c) containing only pao rtation labeled and in accordance with 8 nce with 835.405.	Applicable: Yes ckages received from radioactive material in non-degraded condition need not be 835.603 until the packages are monitored in	BONUS reactor areas containing only packages received from radioactive material transportation labeled and in non-degraded condition need not be posted in accordance with 835.603 until the packages are monitored in accordance with 835.405.		
Section: 605 Applicable: No Except as provided at 835.606, each item or container of radioactive material shall bear a durable, clearly visible label bearing the standard radiation warning trefoil and the words "Caution, Radioactive Material" or "Danger, Radioactive Material." The label shall also provide sufficient information to permit individuals handling, using, or working in the vicinity of the items or containers to take precautions to avoid or control exposures.			Except as provided at 835.606, each BONUS reactor item or container of radioactive material will bear a durable, clearly visible label bearing the standard radiation warning trefoil and the words "Caution Radioactive Material" or "Danger, Radioactive Material." The label will also provide sufficient information to permit individuals handling, using, or working in the vicinity of the items or containers to take precautions to avoid or control exposures.		
Section: Items a	: 606(a) nd containers may b	Applicable: Yes	BONUS reactor items and containers may be excepted from the radioactive material labeling requirements of 835.605 when:		
labeling (1) (2)	requirements of 83 Used, handled, or accordance with provided to permit control exposures; The quantity of rad	5.605 when: stored in areas posted and controlled in this subpart and sufficient information is individuals to take precautions to avoid or or ioactive material is less than one tenth of	 (1) Used, handled, or stored in areas posted and controlled ir accordance with this subpart and sufficient information is provided to permit individuals to take precautions to avoid o control exposures; or (2) The quantity of radioactive material is less than one tenth of the values specified in Appendix E of this part and less than 		
(3)	the values specified 0.1 Ci; or Packaged, labeled regulations of the Orders governing r	d in Appendix E of this part and less than d, and marked in accordance with the U.S. Department of Transportation or DOE adioactive material transportation; or	 0.1 Ci; or (3) Packaged, labeled, and marked in accordance with the regulations of the U.S. Department of Transportation or DOE Orders governing radioactive material transportation; or (4) Inaccessible or accessible only to individuals authorized to 		
(4)	Inaccessible, or acchandle or use them	cessible only to individuals authorized to n, or to work in the vicinity; or	(1) Installed in manufacturing, process, or other equipment, such		
(5) (6)	Installed in manufa as reactor compone The radioactive ma their components.	cturing, process, or other equipment, such ents, piping, and tanks; or terial consists solely of nuclear weapons or	as reactor components, piping, and tanks; or(6) The radioactive material consists solely of nuclear weapons or their components.		
Section Radioac be exen	tive material labels	Applicable: Yes applied to sealed radioactive sources may specifications of 835.601(a).	Radioactive material labels applied to BONUS reactor sealed radioactive sources may be exempted from the color specifications of 835.601(a).		

Requirement Statement	Description of Compliance Status
Section:701(a)Applicable:YesRecords shall be maintained to document compliance with this part and with radiation protection programs required by §835.101.	BONUS reactor records will be maintained to document compliance with 10 CFR 835 and with radiation protection programs required by §835.101.
Section:701(b)Applicable:YesUnless otherwise specified in this subpart, records <i>shall</i> be retained until final disposition is authorized by PREPA.	Unless otherwise specified in Subpart H of 10 CFR 835, BONUS reactor records will be retained until final disposition is authorized by PREPA.
Section: 702(a)) Applicable: Yes Except as authorized by 835.702(b), records shall be maintained to document doses received by all individuals for whom monitoring was conducted and to document doses received during planned special exposures, unplanned doses exceeding the monitoring thresholds of 835.402, and authorized emergency exposures.	Except as authorized by 835.702(b), records will be maintained to document doses received by all individuals for whom monitoring was conducted and to document doses received during planned special exposures, unplanned doses exceeding the monitoring thresholds of 835.402, and authorized emergency exposures.
Section: 702(b) Applicable: Yes Recording of non-uniform equivalent dose to the skin is not required if the dose is less than 2% of the limit specified for the skin in 835.202(a) (4). Recording of internal dose (committed effective dose or committed equivalent dose) is not required for any monitoring result estimated to correspond to an individual receiving less than 0.01 rem (0.1 millisievert) committed effective dose. The bioassay or air monitoring result used to make the estimate shall be maintained in accordance with 835.703(b) and the unrecorded internal dose estimate for any individual in a year shall not exceed the applicable monitoring threshold at 835.402(c).	Recording of non-uniform equivalent dose to the skin will not be required if the dose is less than 2% of the limit specified for the skin in 835.202(a) (4). Recording of internal dose (committed effective dose or committed equivalent dose) is not required for any monitoring result estimated to correspond to an individual receiving less than 0.01 rem (0.1 millisievert) committed effective dose. The bioassay or air monitoring result used to make the estimate shall be maintained in accordance with 835.703(b) and the unrecorded internal dose estimate for any individual in a year shall not exceed the applicable monitoring threshold at 835.402(c).

Requirement Statement				Description of Compliance Status		
Section: 702(c) Applicable: Yes			The rec	The records required by this section will:		
The records required by this section shall: (1) Be sufficient to evaluate compliance with Subpart C of this			(1)	 (1) Be sufficient to evaluate compliance with Subpart C of this part; 		
(2)	part; Be suffi	cient to provide dose information necessary to	(2)	 Be sufficient to provide dose information necessary to complete reports required by subpart I of this part; 		
 complete reports required by Subpart I of this part; (3) Include results of monitoring used to assess the following quantities for external dose received during the year: a. The effective dose from external sources of radiation (equivalent dose to the whole body) may be used as effective does (external exposure); b. The equivalent dose to the lens of the eye; c. The equivalent dose to the skin; and d. The equivalent dose to the extremities. (4) Include the following information for internal dose resulting from intakes received during the year: a. Complete results of monitoring used to assess the following information for internal dose resulting from intakes received during the year: 		 The effective dose from external sources of radiatio (equivalent dose to the whole body) may be used a effective does (external exposure); The equivalent dose to the lens of the eye; The equivalent dose to the skin; and The equivalent dose to the extremities. In the equivalent dose to the extremities. In the following information for internal dose resulting intakes received during the year: Committed effective dose; 				
	a. b. c.	Committed effective dose; Committed equivalent dose to any organ or tissue of concern; and Identity of the radionuclides.	(5)	b. c. Includ	 Committed equivalent dose to any organ or tissue c concern; and Identity of the radionuclides. le the following quantities for the summation of the 	
(5)	Include externa	the following quantities for the summation of the I and internal dose:		exterr a	al and internal dose: Total effective dose in a year;	
	b.	For any organ or tissue assigned an internal dose during the year, the sum of the equivalent dose to the whole body from external exposures and the committed equivalent dose to that organ or tissue; and		5	during the year, the sum of the equivalent dose to the whole body from external exposures and the committed equivalent dose to that organ or tissue; and	
(6)	c. Include declare	Cumulative total effective dose. the equivalent dose to the embryo or fetus of a d pregnant worker.	(6)	c. Includ declar	Cumulative total effective dose. le the equivalent dose to the embryo or fetus of a red pregnant worker.	

Januar	
2020	

Page A-22	

Requirement Statement	Description of Compliance Status		
Section: 702(d) Applicable: Yes Documentation of all occupational doses received during the current year, except for doses resulting from planned special exposures conducted in compliance with 835.204 and emergency exposures authorized in accordance with 835.1302(d), shall be obtained to demonstrate compliance with 835.202(a). If complete records documenting previous occupational dose during the year cannot be obtained, a written estimate signed by the individual may be accepted to demonstrate compliance.	Documentation of all occupational doses received during the current year, except for doses resulting from planned special exposures conducted in compliance with 835.204 and emergency exposures authorized in accordance with 835.1302(d), will be obtained to demonstrate compliance with 835.202(a). If complete records documenting previous occupational dose during the year cannot be obtained, a written estimate signed by the individual may be accepted to demonstrate compliance.		
Section: 702(e) Applicable: Yes For radiological workers whose occupational dose is monitored in accordance with 835.402, reasonable efforts shall be made to obtain complete records of prior year's occupational internal and external doses.	For radiological workers whose occupational dose is monitored in accordance with 835.402, reasonable efforts will be made to obtain complete records of prior year's occupational internal and external doses.		
The (individual monitoring) records required by this section <i>shall</i> be sufficient to provide dose information necessary to complete reports required by Subpart I of this part and by PREPA requirements for occurrence reporting and processing.	The individual monitoring records required by this section will be sufficient to provide dose information necessary to complete reports required by Subpart I of this part and by PREPA requirements for occurrence reporting and processing.		
Section:702(f)Applicable:YesThe records specified in this section that are identified with a specific individual <i>shall</i> be readily available to that individual.	The records specified in this section that are identified with a specific individual will be readily available to that individual.		
Section:702(g)Applicable:YesData necessary to allow future verification or reassessment of the recorded doses shall be recorded.	Data necessary to allow future verification or reassessment of the recorded doses will be recorded.		
Section:702(h)Applicable:YesAll records required by this section shall be transferred to PREPA upon cessation of activities at the site that could cause exposure to individuals.	All records required by this section will be transferred to PREPA upon cessation of activities at the site that could cause exposure to individuals.		
Section: 703(a) Applicable: Yes The following information <i>shall</i> be documented and maintained: Results of monitoring for radiation and radioactive material as required by Subparts E and L of this part, except for monitoring required by 835.1102.	Results of surveys for radiation and radioactive material in the workplace, as required by §§835.401, 835.403, and 835.404, will be documented and maintained.		

	Requirer	nent Statement	Description of Compliance Status		
Section:	703(b)	Applicable: Ye	S		
The followi of monitori external an	ng information <i>shall</i> b ng used to determine id internal sources.	e documented and maintained: Result individual occupational exposure fro	Results of surveys, measurements, and calculations used to determine individual occupational exposure from external and internal sources will be documented and maintained.		
Section:	703(c)	Applicable: Ye	5		
The followi of monitori equipment	ng information <i>shall</i> b ng for the release o as required by §835. ⁻	e documented and maintained: Resul f material and control of material ar I 101.	Results of surveys for the release of material and equipment as required by §835.1101(d) will be documented and maintained.		
Section:	703(d)	Applicable: Ye	s		
The followi of mainte equipment	ng information <i>shall</i> b nance and calibrati as required by §835.4	e documented and maintained: Resul ion performed on Instruments ar 401(b).	Results of maintenance and calibration performed on instruments and ts equipment used for area monitoring and contamination control, as nd required by §835.401, will be documented and maintained.		
Section:	704(a)	Applicable: Ye	s		
Training re compliance	cords <i>shall</i> be mainta with §§835.901	ned, as necessary, to demonstrate	I raining records <i>shall</i> be maintained, as necessary, to demonstrate compliance with §§835.901.		
Section:	704(b)	Applicable: Ye	S		
Actions tak actions req and contro <i>shall</i> be do	en to maintain occup uired for this purpose I actions required by cumented.	ational exposures ALARA, including the system of the syste	Actions taken to maintain occupational exposures ALARA, including the actions required for this purpose by §835.101, as well as facility design and control actions required by §§835.1001, 835.1002, and 835.1003, will 3, be documented.		
Section:	704(c)	Applicable: Ye	s		
Records <i>sl</i> and other r	<i>nall</i> be maintained to c eviews of program co	locument the results of internal audits nternal audits	other reviews of program content and implementation.		
Section:	704(d}	Applicable: Ye	S		
Written de conception maintained	clarations of pregna , and revocations o	ncy, including the estimated date f declarations of pregnancy shall H	of Written declarations of pregnancy will be maintained.		
Section:	704(e)	Applicable: Ye	s		
Changes ir shall be do	n equipment, techniqu cumented.	es, and procedures used for monitorin	Changes in equipment, techniques, and procedures used for monitoring in the workplace will be documented.		
Section:	704(f)	Applicable: Ye	s		
Records sh with the re- source con	nall be maintained as quirements of 835.12 trol, inventory, and so	necessary to demonstrate compliand 01 and 835.1202 for sealed radioactiv	the requirements of 835.1201 and 835.1202 for sealed source control, inventory, and source leak tests.		

	Requirement S	Statement	Description of Compliance Status
Section:	801(a).01	Applicable: Yes	
Radiation e §835.402 s	exposure data for individuals shall be reported as specified	monitored in accordance with d in this section.	Radiation exposure data for individuals monitored in accordance with §835.402 will be reported as specified in this section.
Section:	801(a).02	Applicable: Yes	
The inform required ur	ation (radiation exposure da nder §835.702(c).	ta) <i>shall</i> include the data	The information (radiation exposure data) will include the data required under §835.702(c).
Section:	801(a).03	Applicable: Yes	
Each notific and include individual's identificatio	cation (radiation exposure d e the site or facility name, th social security number, en on number.	ata) and report <i>shall</i> be in writing a name of the individual, and the nployee number, or other unique	Each notification (radiation exposure data) and report will be in writing and include the site or facility name, the name of the individual, and the individual's social security number or employee number.
Section:	801(b).01	Applicable: Yes	
Upon the re exposure s available, b	equest from an individual ter shall be provided to that inc out not later than 90 days aft	rminating employment, records of dividual as soon as the data are ter termination.	Upon the request from an individual terminating employment, records of exposure will be provided to that individual as soon as the data are available, but not later than 90 days after termination.
Section:	801(b).02	Applicable: Yes	
A written es on availabl requested.	stimate of the radiation dose e information <i>shall</i> be provid	ereceived by an employee based ded at the time of termination, if	A written estimate of the radiation dose received by an employee based on available information will be provided at the time of termination, if requested.
Section:	801(c)	Applicable: Yes	
Each PRE an annual monitored §835.402.	PA- or PREPA-contractor- basis, provide a radiation during the year at that sit	operated site or facility <i>shall</i> , on dose report to each individua te or facility in accordance with	PREPA will, on an annual basis, provide a radiation dose report to each individual monitored during the year at the BONUS reactor in accordance with §835.402.
Section:	801(d)	Applicable: Yes	
Detailed ir made ava consistent	nformation concerning any ilable to the individual u with the provisions of the Pr	individual's exposure <i>shall</i> be pon request of that individual ivacy Act (5 U.S.C.552a).	Detailed information concerning any individual's exposure will be made available to the individual upon request of that individual, consistent with the provisions of the Privacy Act (5 U.S.C. 552a).
Section:	801(e).01	Applicable: Yes	When PREPA contractor is required to report to PREPA, pursuant to
When a PF requiremer an individu exposure i provide the included th	REPA contractor is required the for occurrence reporting al to radiation and/or radioa in accordance with §835.2 at individual with a report erein.	to report to PREPA, pursuant to and processing, any exposure of active material or planned specia 204(e), the contractor <i>shall</i> also t on his or her exposure data	requirements for occurrence reporting and processing, any exposure of an individual to radiation and/or radioactive material, the BONUS management will also provide that individual with a report on his or her exposure data included therein. There are no credible scenarios at the BONUS reactor in which personnel could receive a dose during planned special exposures.

January 2020

January	
2020	

Page A-25	

Requi	rement Statement		Description of Compliance Status
Section: 801(e).02	Applicable:	Yes	
Radiation exposure data repo than the transmittal to PREP.	ort <i>shall</i> be transmitted at a time not la A.	ater	the transmittal to PREPA.
Section: 901(a).01 Each individual <i>shall</i> comple established at 835.901(c) cc and the required controls be controlled areas.	Applicable: ete radiation safety training on the mmensurate with the hazards in the fore being permitted unescorted acc	Yes topics e area ess to	Each individual will complete radiation safety training on the topics established at 835.901(c) commensurate with the hazards in the area and the required controls before being permitted unescorted access to controlled areas and before receiving occupational dose prior to receiving occupational exposure during access to controlled areas at the BONUS reactor.
Section: 901(a).02 Each individual <i>shall</i> completestablished at 835.901(c) b access to controlled areas at	Applicable: ete radiation safety training on the efore receiving occupational dose a site or facility.	Yes topics during	Allowance may be made for previous PREPA training on generic radiation safety topics (i.e., those not specific to a site or facility), provided the training was received at another site or facility within the past 2 years (for general employees).
Section: 901(b) Each individual <i>shall</i> demon training topics established hazards in the area and requ an examination and performa	Applicable: nstrate knowledge of the radiation at 835.901(c), commensurate wit uired controls, by successful complet ance demonstrations.	Yes safety h the tion of	The knowledge of radiation safety possessed by general employees will be verified by examination.
Section: 901(b).01 Each individual <i>shall</i> demon training topics established unescorted access to radiolo	Applicable: nstrate knowledge of the radiation at 835.901(c) before being per gical areas.	Yes safety mitted	Retraining will be provided when there is a significant change to radiation protection policies and procedures that affect general employees and will be conducted at intervals not to exceed 2 years.
Section: 901(b).02 Each individual <i>shall</i> demon training topics established at assignments as a radiologica	Applicable: nstrate knowledge of the radiation t 835.901(c) before performing uneso I worker.	Yes safety corted	Retraining will be provided when there is a significant change to radiation protection policies and procedures that affect general employees and will be conducted at intervals not to exceed 2 years.

	Requi	rement Statement	Description of Compliance Status	
Section: Radiatio	901(c) on safety training <i>shal</i>	Applicable:	Yes extent	
appropri degree o	iate to each individua of exposure to radiolo	's prior training, work assignments, gical hazards:	and	
(1)	Risks of exposure to including prenatal rad	radiation and radioactive materials, Jiation exposure;	1	
(2)	Basic radiological fur concepts;	damentals and radiation protection		Radiological worker training programs and retraining will be established
(3)	Physical design features, policies, procedures, at the facility to mana including both routing	ares, administrative controls, limits, alarms, and other measures impler uge doses and maintain doses ALAI and emergency actions;	mented RA,	and conducted at intervals not to exceed 2 years to familiarize the worker with the fundamentals of radiation protection and the ALARA process.
(4)	Individual rights and implementation of the	responsibilities as related to a facility RPP;		
(5)	Individual responsibi required by 835.101;	ities for implementing ALARA meas and	sures	
(6)	Individual exposure r accordance with 835	eports that may be requested in .101.		
Section:	901(d)	Applicable:	Yes	
When ai (a) or (b	n escort is used in lie) of this section, the e	u of training in accordance with para scort <i>shall</i> :	agraph	
(1)	 (1) Have completed radiation safety training, examinations, and performance demonstrations required for entry to the area and performance of the work; and 		Radiological worker training will include both classroom and applied training.	
(2)	Ensure that all escor documented RPP.	ed individuals comply with the		
Section:	901(e)	Applicable:	Yes	
Radiatio significa that may Such tra 835.901 examina	on safety training <i>shal</i> int change to the rac y affect the individual aining provided for in (b)(1) and (b)(2) sh ation.	be provided to individuals when the liation protection policies and proc and at intervals not to exceed 24 m individuals subject to the requirement all include successful completion	ere is a cedures nonths. ents of of an	Radiological worker training will either precede assignment as a radiological worker or be concurrent with assignment as a radiological worker if the worker is accompanied by and under the direct supervision of a trained radiological worker.

Requirement Statement			Description of Compliance Status
Section: Measures areas ALA	1001(a)01 <i>shall</i> be taken to maint RA through engineered a	Applicable: Yes ain radiation exposure in controlled and administrative controls.	Measures will be taken to maintain radiation exposure in controlled areas ALARA through engineered and administrative controls.
Section: Measures areas ALA primary n confineme	1001(a).02 shall be taken to maint ARA through engineered nethods used will be nt, ventilation, remote ha	Applicable: Yes ain radiation exposure in controlled d and administrative controls. The physical design features (e.g., ndling, and shielding).	Measures will be taken to maintain radiation exposure in controlled areas ALARA through facility and equipment design and administrative control The primary methods used will be physical design features (e.g. confinement, ventilation, remote handling, and shielding).
Section: Measures areas ALA control. Ad methods to	1001(a).03 shall be taken to maint RA through facility and e ministrative controls sha control radiation expose	Applicable: Yes ain radiation exposure in controlled equipment design and administrative // be employed only as supplemental ures.	Measures will be taken to maintain radiation exposure in controlled areas ALARA through facility and equipment design and administrative control Administrative controls and procedural requirements will be employed only as supplemental methods to control radiation.
Section: For specifie to be imp radiation e	1001(b) c activities where use of ractical, administrative xposures ALARA.	Applicable: Yes engineered controls is demonstrated controls <i>shall</i> be used to maintain	For specific activities where use of engineered controls is demonstrated to be impractical, administrative controls and procedural requirements wi be used to maintain radiation exposures ALARA.
Section: During the the following be used to developing	1002(a) design of new facilities ng objectives <i>shall</i> be a assure that occupation and justifying facility des	Applicable: Yes or modification of existing facilities, dopted: Optimization methods <i>shall</i> al exposure is maintained ALARA in sign and physical controls.	During modifications of the BONUS reactor, optimization methods will be used to assure that occupational exposure is maintained ALARA in developing and justifying facility design and physical controls. PREPA is not involved in the design or construction of new DOE facilities.
Section: The design sources of (2000 hou average of average a exposure n occupancy 20% of the	1002(b) n objective for controlling f radiation in areas of rs per year) shall be to 0.5 millirem (5 microsie as is reasonably achie rates for potential expos differs from the above s applicable standards in	Applicable: Yes g personnel exposure from external continuous occupational occupancy maintain exposure levels below an everts) per hour as far as below this evable. The design objectives for sure to a radiological worker where hall be ALARA and shall not exceed 835.202.	During modifications of the BONUS reactor, the design objective for controlling personnel exposure from external sources of radiation in areas of continuous occupational occupancy (2000 hours per year) will be to maintain exposure levels below an average of 0.5 mrem (5 microsieverts per hour and as far below this average as is reasonably achievable PREPA is not involved in the design or construction of new reacto facilities.
Section: Regarding objective s workplace such mate ventilation	1002(c) the control of airborn shall be, under normal of atmosphere and in any rial by workers to levels shall be normally used.	Applicable: No e radioactive material, the design conditions, to avoid releases to the situation to control the inhalation of that are ALARA. Confinement and	Regarding the control of airborne radioactive material, the design objective will be, under normal conditions, to avoid releases to the workplace atmosphere and in any situation to control the inhalation o such material by workers to levels that are ALARA. Confinement and ventilation shall be normally used.

	Requirement Statement	Description of Compliance Status	
Section: The des <i>shall</i> in deconta	1002(d) Applicable: sign or modification of a facility and the selection of manclude features that facilitate operations, mainter mination, and decommissioning.	Yes aterials nance,	During design or modifications of the BONUS reactor, the design or modification of the facility and the selection of materials will include features that facilitate operation, maintenance, decontamination, and decommissioning. PREPA is not involved in the design or construction of new reactor facilities.
Section: During administ	1003(a) Applicable: routine operations, the combination of engineered rative controls <i>shall</i> provide that the anticipated occupa	Yes d and ational	During routine operations, the combination of design features and administrative control procedures will provide that the anticipated magnitude of the total effective dose equivalent will not exceed 5 rems
dose to 835.202	general employees shall not exceed the limits establish	hed at	(0.05 seivert) in a year.
Section: During administ	1003(b) Applicable: routine operations, the combination of design feature trative control procedures <i>shall</i> provide that the ALARA pr d for personnel exposures to jonizing radiation.	Yes s and rocess	During routine operations, the combination of design features and administrative control procedures will provide that the anticipated magnitude of the committed dose equivalent to any organ or tissue, plus any deep dose equivalent from external exposure, will not exceed 50 rems (0.5 sievert) in a year.
Except and equairborne (1)	as provided in paragraphs (b) and (c) of this section, m ipment in contamination areas, high contamination areas radioactivity areas <i>shall not</i> be released to a controlled at Removable surface contamination levels on acce surfaces exceed the removable surface contamination specified in Appendix D of this part; or Prior use suggests that the removable surface contami levels on inaccessible surfaces are likely to excee removable surface contamination values specified in App	aterial s, and rea if: essible values ination ed the pendix	There are no radiological areas established to control surface or airborne radioactive material currently posted at the BONUS reactor.
Section: Material specified moveme another controls	D of this part. 1101(b) Applicable: and equipment exceeding the removable contamination d in Appendix D of this part may be conditionally released to the sent onsite from one radiological area for immediate placement radiological area only if appropriate monitoring and approfor the movement are established and exercised.	Yes levels sed for nent in opriate	Material and equipment exceeding the removable contamination levels specified in Appendix D to 10 CFR 835 may be conditionally released for movement onsite from one radiological area for immediate placement in another radiological area only if appropriate monitoring and controls are established and exercised.
Section: Material total cor released only und levels at in Appen	1101(c)(1) Applicable: and equipment with fixed contamination levels that excent tamination values specified in Appendix D of this part m for use in controlled areas outside of the radiological der the following conditions: Removable surface contami re below the removable surface contamination values specified and D of this part.	Yes ed the nay be areas ination ecified	Material and equipment with fixed contamination levels that exceed the total contamination values specified in Appendix D to 10 CFR 835 may be released for use in controlled areas outside of the radiological areas provided that removable contamination levels are below the level specified in Appendix D of 10 CFR 835.

	Requirement S	Statement	Description of Compliance Status
Section: The materia labeled to a	1101(c)(2) al or equipment is routinely lert personnel of the contar	Applicable: Yes monitored and clearly marked or ninated status.	The material or equipment will be routinely monitored and clearly marked or labeled to alert personnel of the contaminated status.
Section: Appropriate inadvertent radiological	1102(a) e controls shall be maintaine transfer of removable cont areas under normal operat	Applicable: Yes ed and verified which prevent the amination to locations outside of ing conditions.	Appropriate controls will be maintained and verified which prevent the inadvertent transfer of removable contamination to locations outside o radiological areas under normal operating conditions.
Section: Any area ir Appendix E with the ph radionuclide contaminat	1102(b) n which contamination level 0 of this part <i>shall</i> be contro ysical and chemical charac e present, and the fi ion levels.	Applicable: Yes s exceed the values specified in olled in a manner commensurate cteristics of the contaminant, the xed and removable surface	Any area in which contamination levels exceed the values specified in Appendix D of this part will be controlled in a manner commensurate with the physical and chemical characteristics of the contaminant, the radionuclide present, and the fixed and removable surface contamination levels.
Section: Areas acco contaminat levels are specified in located out (1) Th sun pa (2) Th the	1102(c) essible to individuals whe ion levels exceed, but the r less than, corresponding Appendix D of this part, <i>sh</i> side of radiological areas: e area <i>shall</i> be routinely mo face contamination level face contamination values rt; and e area <i>shall</i> be conspicuous e contaminated status.	Applicable: Yes ere the measured total surface removable surface contamination surface contamination values oall be controlled as follows when ponitored to ensure the removable remains below the removable specified in Appendix D of this sly marked to warn individuals of	 Areas accessible to individuals at the BONUS reactor where the measured total surface contamination levels exceed, but the removable surface contamination levels are less than, corresponding surface contamination values specified in Appendix D of this part, will be controlled as follows when located outside of radiological areas: The area will be routinely monitored to ensure the removable surface contamination level remains below the removable surface contamination values specified in Appendix D of this part; and The area will be conspicuously marked to warn individuals of the contaminated status.
Section: Individuals radioactivity of surface of	1102(d) exiting contamination, h areas <i>shall</i> be monitored, contamination.	Applicable: No igh contamination, or airborne as appropriate, for the presence	There are no areas at the BONUS reactor where removable contamination exists at levels exceeding the removable surface contamination values specified in Appendix D. There is no contamination or airborne radioactivity areas currently posted at the BONUS reactor.
Section: Protective removable surface cor	1102(e) clothing <i>shall</i> be required contamination exists at le tamination values specified	Applicable: Yes d for entry to areas in which evels exceeding the removable in Appendix D of this part.	Protective clothing will be required for entry to areas in which removable contamination exists at levels exceeding the removable surface contamination values specified in Appendix D of this part.
Section: Sealed rad manner co involving th	1201 lioactive sources <i>shall</i> be mmensurate with the haze e sources.	Applicable: Yes used, handled, and stored in a ards associated with operations	Sealed radioactive sources currently in use at the BONUS reactor site will be used, handled, and stored in a manner commensurate with the hazards associated with operations involving the sources.

	Require	ment Statement	Description of Compliance Status	
Section:	1202(a)	Applicable:	No	
Each ac intervals	countable sealed rad not to exceed 6 month	oactive source <i>shall</i> be inventors. This inventory shall:	oried at	
(1)	Establish the physical radioactive source;	ocation of each accountable sea	led	There are no accountable sealed radioactive sources currently in use at the BONUS reactor site.
(2)	Verify the presence an labels; and	d adequacy of associated posting	gs and	
(3)	Establish the adequac	y of storage locations, containers	, and	
Section:	1202(b)	Applicable:	No	
Except f radioactiv source s damage leak test equal to	or sealed radioactive ve material or tritium shall be subject to a is suspected, and at in s shall be capable of or exceeding 0.005 uC	sources consisting solely of g , each accountable sealed rad source leak test upon receip ntervals not to exceed 6 months. detecting radioactive material i.	gaseous lioactive t, when Source leakage	There are no accountable sealed radioactive sources currently in use at the BONUS reactor site.
Section:	1202(c)	Applicable:	No	
Notwithsi accounta leak test sources inventory source le	tanding the requiremend ble sealed radioactive ting if that source h shall be stored in a vas required by parage tak testing prior to bein	nts of paragraph (b) of this sec source is not subject to periodic as been removed from service controlled location, subject to graph (a) of this section, and su g returned to service.	tion, an source e. Such periodic bject to	There are no-removed-from-service accountable sealed radioactive sources currently in use at the BONUS reactor site.
Section:	1202(d)	Applicable:	No	
Notwithst section, periodic i area that	tanding the requirem an accountable seale inventory and source l is unsafe for human e	ents of paragraph (a) and (b) of radioactive source is not su eak testing if that source is locate ntry or otherwise inaccessible.	of this bject to ed in an	There are no-removed-from-service accountable sealed radioactive sources currently in use at the BONUS reactor site.
Section:	1202(e)	Applicable:	No	
An acco radioactiv spread o	ountable sealed radi ve material <i>shall</i> be co f radioactive contamina	oactive source found to be ontrolled in a manner that minim ation.	leaking izes the	There are no accountable sealed radioactive sources currently in use at the BONUS reactor site.

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Requirement Statement	Description of Compliance Status
Section: 1301(a)(1) Applicable: No A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in §§835.202 as a result o an authorized emergency exposure may be permitted to return to work in radiological areas during the current year providing that the following condition is met: Approval is first obtained from the contractor management and the head of the responsible PREPA field organization;	There are no credible scenarios at the BONUS reactor in which personnel could receive a dose during accidents or emergency conditions.
Section:1301(a)(2)Applicable:NoThe individual receives counseling from radiological protection and medical personnel regarding the consequences of receiving additional occupational exposure during the year.	There are no credible scenarios at the BONUS reactor in which personnel could receive a dose during accidents or emergency conditions.
Section:1301(a)(3)Applicable:NoThe affected employee agrees to return to radiological work.	There are no credible scenarios at the BONUS reactor in which personnel could receive a dose during accidents or emergency conditions.
Section:1301(b)Applicable:NoAll doses exceeding the limits specified in §§835.202 <i>shall</i> be recorded in the affected individual's occupational dose record.	There are no credible scenarios at the BONUS reactor in which personnel could receive a dose during accidents or emergency conditions.
Section: 1301(c) Applicable: No When the conditions under which a dose was received in excess of the limits specified in 835.202, except those received in accordance with 835.204, have been eliminated, operating management shall notify the head of the responsible DOE field organization.	There are no credible scenarios at the BONUS reactor in which personnel could receive a dose during accidents or emergency conditions.
Section: 1301(d) Applicable: No Operations which have been suspended as a result of a dose in excess of the limits specified in §§835.202, except those received in accordance with 835.204, may be resumed only with the approval of DOE.	There are no credible scenarios at the BONUS reactor in which personnel could receive a dose during accidents or emergency conditions.
Section: 1302(a) Applicable: No The risk of injury to those individuals involved in rescue and recovery operations <i>shall</i> be minimized.	There are no credible scenarios at the BONUS Reactor in which personnel could receive a dose during accidents or emergency conditions.
Section:1302(b)Applicable:NoOperating management shall weigh actual and potential risks against the benefits to be gained.No	There are no credible scenarios at the BONUS Reactor in which personnel could receive a dose during accidents or emergency conditions.
Section: 1302(c) Applicable: No No individual <i>shall</i> be required to perform a rescue action that might involve substantial personal risk.	There are no credible scenarios at the BONUS Reactor in which personnel could receive a dose during accidents or emergency conditions.

Page	
A-32	

RPP for the Boiling Nuclear Superheater Reactor Facility, Puerto Rico

	Requireme	ent Statement		Description of Compliance Status
Section: Each indivi in occupati 835.202(a) beforehand will be subj	1302(d) dual authorized to perfo onal doses exceeding <i>shall</i> be trained in ac l of the known or antici ected.	Applicable: orm emergency actions likely to the values of the limits provid cordance with §835.901 and bi pated hazards to which the indiv	No result ed at riefed /idual	There are no credible scenarios at the BONUS reactor in which personnel could receive a dose during accidents or emergency conditions.
Section: Installations potentially of individua provide nuc	1304(a) s possessing sufficie constitute a critical ma als to radiation from a clear accident dosimetr	Applicable: nt quantities of fissile materi ss, such that the excessive expo a nuclear accident is possible, y for those individuals.	No al to osure <i>shall</i>	There are no credible scenarios at the BONUS reactor in which personnel could receive a dose during accidents or emergency conditions.
Section: Nuclear actinitial scred	1304(b)(1) cident dosimetry <i>shall</i> i ening of personnel whether significant expo	Applicable: nclude a method by which to co involved in a nuclear acciden osures to radiation occurred.	No nduct nt to	The BONUS reactor has no fissile material.
Section: Methods ar	1304(b)(2) nd equipment for analys	Applicable: sis of biological materials.	No	The BONUS reactor has no fissile material.
Section: A system o	1304(b)(3) f fixed nuclear accident	Applicable: t dosimeter units.	No	The BONUS reactor has no fissile material.
Section: Personal n	1304(b)(4) uclear accident dosime	Applicable: ters.	No	The BONUS reactor has no fissile material.

Abbreviations:

cm² = square centimeters SI = International System of Units

Requirement Number	Applicable	Document Evidence
1AA.4.01	No	
1AA.4.02	No	
1AD.1	Yes	RCM, Table 2-2, Note 1
1AD.3.01	Yes	RCM, Table 2-2, Note 3
1AD.3.02	Yes	RCM, Table 2-2, Note 3
1AD.4.01	Yes	RCM, Table 2-2, Note 2
1AD.4.02	Yes	RCM, Table 2-2, Note 2
3(a)	Yes	RPP Section 5
3(b)	Yes	RPP Section 1
3(c)	No	N/A
3(d)	Yes	RPP Section 5
4	Yes	RCM, Article 713
101(a)	Yes	RCM Article 112; RPP Section 1
101(b)	Yes	RCM Section 112; RPP Section 5
101(c).01	Yes	RCM Articles 138, 311, 312, 316; RPP Sections 1.1, 1.2, 1.3, 1.4, 6.2
101(d).01	Yes	RPP Sections 1.1, 1.2
101(d).02	Yes	RPP Sections 1.1, 1.2
101(e)	Yes	RPP, Section 7; addressed throughout RCM
101(f).01	Yes	RPP Section 4
101(f).02	Yes	10 CFR 835
101(g)(1), (2), (3)	Yes	RPP Section 5
l 101(h){1)	Yes	RPP Section 5
101{h)(2)	Yes	RPP Section 5
101(h)(3)	Yes	RPP Section 5
101(i)	Yes	RPP Section 5
102.01	Yes	RPP Section 6.1.4; RCM Article 134
102.02	Yes	RPP Section 6.1.4; RCM Article 134
103	Yes	RPP 6.1.3; RCM Chapter 1 Part 4 and Article 551
104	Yes	RPP 6.1.3; RCM Article 341
202(a)(1)	No	Planned special exposures / emergency exposures not in scope
202(a)(2)	No	Planned special exposures / emergency exposures not in scope
202(a)(3)	No	Planned special exposures / emergency exposures not in scope
202(a)(4)	No	Planned special exposures / emergency exposures not in scope
202(b)	Yes	Planned special exposures / emergency exposures not in scope
202(c)	Yes	RPP Section 6.3; Article 213
203(a)	Yes	RCM, Table 1
203(b)	Yes	RCM, Table 2-1, Note 1
204(a)(1)	No	Planned special exposures / emergency exposures not in scope
204(a)(2)	No	Planned special exposures / emergency exposures not in scope
204(a)(3)	No	Planned special exposures / emergency exposures not in scope
204(b)	No	Planned special exposures / emergency exposures not in scope

Requirement Number	Applicable	Document Evidence
204(c)(1)	No	Planned special exposures / emergency exposures not in scope
204(c)(2)	No	Planned special exposures / emergency exposures not in scope
204(d)	No	Planned special exposures / emergency exposures not in scope
204(d)(1)	No	Planned special exposures / emergency exposures not in scope
204(d)(2)	No	Planned special exposures / emergency exposures not in scope
204(d)(3)	No	Planned special exposures / emergency exposures not in scope
204(e)	No	Planned special exposures / emergency exposures not in scope
204(f)	No	Planned special exposures / emergency exposures not in scope
205(a)	Yes	Planned special exposures / emergency exposures not in scope
205(b)(1)	Yes	Planned special exposures / emergency exposures not in scope
205(b)(2)	Yes	Planned special exposures / emergency exposures not in scope
205(b)(3)	Yes	Planned special exposures / emergency exposures not in scope
206(a)	Yes	RCM, Article, 215; RPP Sections 6.3, 6.12
206(b)	Yes	RCM, Article 215; RPP Sections 6.3, 6.12
206(c)	Yes	RCM, Article 215; RPP Sections 6.3, 6.12
207	Yes	RCM, Article 214 and Table 1
208	Yes	RCM, Article 214, and Table 1
209(a)	Yes	RCM, Article 223; and RPP, Section 6.3
209(b)	Yes	RCM, Article 521
		BONUS activities do not warrant participation in a bioassay program
401(a)(1)	Yes	RPP Sections 6.5, 6.6.3
401(a)(2)	Yes	RPP Sections 6.5, 6.6.3
401(a)(3)	Yes	RPP Sections 6.5, 6.6.3
401(a)(4)	Yes	RPP Sections 6.5, 6.6.3
401(a)(5)	Yes	RPP Sections 6.5, 6.6.3
401(a)(6)	Yes	RPP Sections 6.5, 6.6.3
401(b)	Yes	RPP Sections 6.5, 6.6.3
401(b)(1)	Yes	RPP Section 6.5.4; RCM Article 551
401(b)(2)	Yes	RPP Section 6.5.4; RCM Article 551
401(b)(3)	Yes	RPP Section 6.5.4; RCM Article 551
401(b)(4)	Yes	RPP Section 6.5.4; RCM Article 551
402(a)(1)(i)	Yes	RPP Section 6.3; RCM Article 511
402(a)(1)(ii)	Yes	RPP Section 6.3; RCM Article 511
402(a)(1)(iii)	Yes	RPP Section 6.3; RCM Article 511
402(a)(2)	Yes	RPP Section 6.3; RCM Article 511
402(a)(3)	Yes	RPP Section 6.3; RCM Article 511
402(a)(4)	No	RPP Section 6.3; RCM Article 511.
402(a)(5)	No	RPP Section 6.3; RCM Article 511
402(b)	Yes	RPP Section 6.3; RCM Article 512
402(c)(1)	Yes	RPP Section 6.4; RCM Article 521
402(c)(2)	Yes	RPP Section 6.4; RCM Article 521
402(c)(3)	Yes	RPP Section 6.4; RCM Article 521

Requirement Number	Applicable	Document Evidence
402(c)(4)	Yes	RPP Section 6.4; RCM Article 521
402(d)	Yes	The requirements of this part are stated as not applicable in Article 521
402(d)(1)	No	The requirements of this part are stated as not applicable in Article 521
402(d)(2)	No	The requirements of this part are stated as not applicable in Article 521
403{a)(1)	Yes	RPP Section 6.5; RCM Article 555
403(a)(2)	Yes	RPP Section 6.5; RCM Article 555
403(b)	Yes	Real-time air monitoring is N/A to LMS activities
405(a)(1)	Yes	RPP Section 6.6.7; Addendum to RCM Article 431
405(a)(2)	Yes	RPP Section 6.6.7; Addendum to RCM Article 431
405(b)(1)	Yes	RPP Section 6.6.7; Addendum to RCM Article 431
405(b)(2)	Yes	RPP Section 6.6.7; Addendum to RCM Article 431
405(b)(3)	Yes	RPP Section 6.6.7; Addendum to RCM Article 431
405©(1)	Yes	RPP Section 6.6.7; Addendum to RCM Article 431
405©(2)	Yes	RPP Section 6.6.7; Addendum to RCM Article 431
405©(3)	Yes	RPP Section 6.6.7; Addendum to RCM Article 431
405(d)	Yes	RPP Section 6.6.7; Addendum to RCM Article 431
405©	Yes	RPP Section 6.6.7; Addendum to RCM Article 431
501(a)	Yes	RPP Section 6.6; RCM Article 330
501(b)	Yes	RPP Section 6.6; RCM Article 330
501(c)	Yes	RPP Section 6.6; RCM Article 330
501(d).01	Yes	RPP Section 6.6.; RCM Article 330
501(d).02	Yes	RPP Section 6.6; RCM Article 330
501(d).03	Yes	RPP Section 6.6; RCM Article 330
501(e)	Yes	RPP Section 6.6; RCM Article 330
502(a)	No	N/A
502(b)	No	N/A
502(c)	No	N/A
601(a)	Yes	RPP Section 6.6; RCM Article 231
601(b)	Yes	RPP Section 6.6; RCM Article 231
601(c)	Yes	RPP Section 6.6; RCM Article 231
602(a)	Yes	RPP Section 6.6, RCM Articles 231 and 232
602(b)	Yes	RPP Section 6.6; RCM Article 231 and 232
603	Yes	RPP Sections 6.6; RCM Articles 231 through 238
603(a)	Yes	RPP Section 6.6; RCM Articles 231 through 238
603(b)	No	RPP Section 6.6; RCM Articles 231 through 238
603(c)	No	N/A
603(d)	Yes	N/A
603(e)	Yes	RPP Section 6.6; RCM, Article 231 through 238
603(f)(g)	Yes	RPP Section 6.6; RCM, Article 231 through 238
604(a)(b)(c)	Yes	RPP Section 6.6; RCM Article 231
605	Yes	RPP Section 6.6; RCM Article 231
606(a)(b)	Yes	RPP Section 6.6; RCM Article 412 and Table 4-2

Requirement Number	Applicable	Document Evidence
701(a)	Yes	RPP Section 6.9; RCM Articles 711, 712, 713
701(b)	Yes	RPP Section 6.9; RCM Articles 711, 712, 713
702(a)	Yes	RPP Sections 6.9, 6.10; RCM Articles 721, 722
702(b)	Yes	N/A
702(c)(1)	Yes	RCM Article 711 through 722
702(c)(2)	Yes	RCM Article 711 through 722
702(c)(3)(i)	Yes	RCM Article 711 through 722
702(c)(3)(ii)	Yes	RCM Article 711 through 722
702(c)(3}(iii)	Yes	RCM Article 711 through 722
702(c)(3)(iv)	Yes	RCM Article 711 through 722
702(c)(4)(i)	Yes	Does not apply because of limited potential for internal exposure
702(c)(4)(ii)	Yes	Does not apply because of limited potential for internal exposure
702(c)(4)(iii)	Yes	Does not apply because of limited potential for internal exposure
702(c)(5)(i)	Yes	RCM Article 722
702(c)(5)(ii)	Yes	Does not apply because of the limited potential for internal exposure
702(c)(5)(iii)	Yes	RCM Article 722
702(c)(6)	Yes	RCM Article 722
702(d).01	Yes	RCM Article 722
702(d).02	Yes	RCM Article 721
702(e)	Yes	RCM Article 721
702(f)	Yes	RCM Article 721
702(g)	Yes	RCM Article 722
702(h)	Yes	RCM Article 722
703(a)	Yes	RPP Section 6.9; RCM Articles 712 and 751
703(b)	Yes	RPP Section 6.9; RCM Articles 712 and 751
703(c)	Yes	RPP Section 6.9; RCM Articles 712 and 751
703(d)	Yes	RPP Section 6.9; RCM Articles 712 and 751
704(a)	Yes	RPP Section 6.9
704(b)	Yes	RPP Section 6.9; RCM Article 725
704(c)	Yes	RPP Section 6.9; RCM Articles 138, 712, and 742
704(d)	Yes	RPP 6.9; RCM Article 723
704(e)	Yes	RPP 6.9; RCM Article 751
704(f)	Yes	RCM Article 755
801(a).01	Yes	RPP Section 6.10; RCM Article 781
801(a).02	Yes	RPP Section 6.10; RCM Article 781
801(a).03	Yes	RPP Section 6.10; RCM Article 781
801(b).01	Yes	RPP Section 6.10; RCM Article 781
801(b).02	Yes	RPP Section 6.10; RCM Article 781
801(c)	Yes	RPP Section 6.10; RCM Article 781
801(d)	Yes	RPP Section 6.10; RCM Article 781
801(e).01	Yes	RPP Section 6.10; RCM Articles 722 and 781
801(e).02	Yes	RPP Section 6.10; RCM Article 781

Requirement Number	Applicable	Document Evidence
901(a).01	Yes	RPP Section 6.11; RCM Chapter 6
901(a).02	Yes	RPP Section 6.11; RCM Article 612
901(a).03	Yes	RPP Section 6.11; RCM Article 612
901(a).04	Yes	RPP Section 6.11; RCM Article 612
901(b).01	Yes	RPP Section 6.11; RCM Articles 613
901(b).02	Yes	RPP Section 6.11; RCM Article 613
901(c)	Yes	RPP Section 6.11; RCM Article 613
901(d)	Yes	RPP Section 6.11; RCM Articles 621 and 631
901(e)	Yes	RPP Section 6.11; RCM Article 613
1001(a).01	Yes	RPP Section 6.2.3; RCM Articles 128 and 311
1001(a).02	Yes	RPP 6.2.3; RCM Article 128
1001(a).03	Yes	RPP Section 6.2.3; RCM Article 128
1001(b)	Yes	RPP Section 6.2.3; RCM Article 128 and 131
1002(a)	Yes	RPP Section 6.2.3; RCM Article 128
1002(b)	Yes	RPP Section 6.2.3; RCM Article 128
1002(b).02	Yes	RPP Section 6.2.3; RCM Article 128
1002(b).03	Yes	RPP Section 6.2.3; RCM Article 128
1002(c).01	Yes	RPP Section 6.2.3; RCM Article 128
1002(c).02	Yes	RPP Section 6.2.3; RCM Article 128
1002(d)	Yes	RPP Section 6.2.3; RCM Article 128
1003(a)	Yes	RPP Section 6.2; RCM Article 311
1003(b)	Yes	RPP Section 6.2; RCM Article 311
1101(a)(1)	Yes	RPP Section 6.5; RCM Chapter 4 Part 1
1101(a)(2)	Yes	RPP Section 6.5; RCM Chapter 4 Part 1
1101(b)	Yes	RPP Section 6.5; RCM Chapter 4 Part 1
1101(c)(1)	Yes	RPP Section 6.5; RCM Chapter 4 Part 1
1101(c)(1)	Yes	RPP Section 6.5; RCM Chapter 4 Part 1
1101(c)(2)	Yes	RPP Section 6.5; RCM Chapter 4 Part 1
1102(a)(b)(c)(e)	Yes	RPP Section 6.5; RCM Articles 337 and 338
1102(d)	No	N/A
1201	Yes	RPP Section 6.6.6; RCM Article 431
1202(a)(b)(c)(d)(e)	No	RPP Section 6.6.6; RCM Article 431
1301(a)(1)	No	RPP Section 6.7; N/A
1301(a)(2)	No	RPP Section 6.7; N/A
1301(a)(3)	No	RPP Section 6.7; N/A
1301(b)	No	RPP Section 6.7; N/A
1301(c)	No	RPP Section 6.7; N/A
1301(d)	No	RPP Section 6.7; N/A
1302(a)	No	RPP Section 6.7; N/A
1302(b)	No	RPP Section 6.7; N/A
1302(c)	No	RPP Section 6.7; N/A
1302(d)	No	RPP Section 6.7; N/A

Requirement Number	Applicable	Document Evidence
1302(e)	No	RPP Section 6.7; N/A
1304(a)	No	RPP Section 6.8; N/A
1304(b)(1)	No	RPP Section 6.8; N/A
1304(b)(2)	No	RPP Section 6.8; N/A
1304(b)(3)	No	RPP Section 6.8; N/A
1304(b)(4)	No	RPP Section 6.8; N/A

Abbreviations:

N/A = not applicable RCM = Radiation Control Manual