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## RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

### APR1400 Design Certification

Korea Electric Power Corporation / Korea Hydro & Nuclear Power Co., LTD

Docket No. 52-046

**RAI No.:** 490-8599  
**SRP Section:** 12.03-12.04 – Radiation Protection Design Features  
**Application Section:** 12.2, 12.3-12.4, and 3.11  
**Date of RAI Issue:** 05/25/2016

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### **Question No. 12.03-53**

#### REQUIREMENTS AND GUIDANCE

10 CFR 52.47(a)(5) requires that the FSAR contain the kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in 10 CFR 20.

10 CFR 50.34(f)(2)(vii) requires that the applicant preform radiation and shielding design reviews of spaces around systems that may, as a result of an accident, contain accident source term, and design as necessary to permit adequate access to important areas and to protect safety equipment from the radiation environment and references NUREG-0737, Section II.B.2.

10 CFR 50.49(e)(4) requires the identification of the radiation environment, including the total dose, expected during normal operation over the installed life of the equipment, and the radiation environment associated with the most severe design basis accident during or following which the equipment is required to remain functional, including the radiation resulting from recirculating fluids for equipment located near the recirculating lines and including dose-rate effects. This requirement is reflected within the guidance of SRP section 3.11 "Environmental Qualification of Mechanical and Electrical Equipment."

GDC 61 states that system should be provided with suitable shielding for radiation protection.

NUREG-0737, Section II.B.2, provides the systems that should be assumed in the post-accident shielding analysis to contain high levels of radioactivity.

SRP 12.3-12.4 indicates that the staff will conduct shielding design review to ensure that the design permits adequate access to important areas and provides for protection of safety equipment from radiation, following an accident. In addition, SRP 12.3-12.4 indicates that the staff will review the basis for the radiation shielding design.

## ISSUE

As a result of the DCD Chapter 12 shielding audit, it was determined that the source term for systems re-circulating accident fluid, used in the radiation shielding analysis, was inconsistent with the source term provided in the response to RAI 8247, Question 12.02-16. The applicant later confirmed that the source term provided in the response to RAI 8247, Question 12.02-16, were the correct values.

Furthermore, the applicant indicated that the cumulative effects of this issue with other source term issues identified in previous staff RAIs may result in potential shielding design changes or other changes in the DCD. Other RAIs that could impact the radiological dose and shielding analysis include RAI 8339, Question 12.02-19 and RAI 8420, Questions 12.02-22 and 12.02-23 (note that these RAIs include some of the potentially most significant source issues. However, any other changes that could impact the radiological analysis, as a result of other RAIs or corrections should also be fully considered.).

Considering this, staff requests the following;

1. The mission dose rates to vital areas will likely increase as a result of result of resolving the source term issues described above and the dose values for accessing and performing activities in the Remote Control Console Room and the Remote Shutdown Room were already near the 5 rem limit. Therefore, the applicant must ensure that the methods, models, and assumptions, used for calculating the mission doses, for those mission doses near the 5 rem limit, are appropriately conservative, contain sufficient margin, and are appropriately detailed to ensure that the mission doses will be below 5 rem limit, or make appropriate changes. Specifically, the applicant should ensure that the calculations contain sufficient conservatism to account for limitations in the computer programs used to perform the calculations. The MicroShield computer code does not allow for modeling complex geometries and does not have the accuracy of MCNP computer code, but is being relied on for much of the post-accident mission dose, shielding analysis, including for areas near the 5 rem limit. Therefore, for areas near the 5 rem limit, the applicant is requested to provide additional information demonstrating that the calculations contain sufficient conservatism to ensure mission dose rates will remain below the 5 rem limit.
2. Considering all of the above, please describe the cumulative impacts of all of the source term changes on the radiation shielding, zoning, mission dose, and equipment qualification design and provide general information demonstrating that the radiation shielding design is adequate. Ensure that if shielding changes are required that it does not impact other areas of the design (for example, the structural design).

## **Response**

1. As described in the response to RAI 207-8247, Question 12.02-16, Revision 2 (ML16306A454), the accident mission doses were reevaluated and updated considering the following three changes:
  - Shielding results were updated based on the revised radionuclide concentrations and component data (i.e., IRWST volume) for the affected systems in the revised

DCD Table 12.2-24 as indicated in the response to the RAI 207-8247, Question 12.02-16, Revision 2 (ML16306A454).

- The on-site atmospheric dispersion factor was revised as indicated in the response to RAI 20-7912, Question 02.03.04-1, Revision 1 (ML16159A246). The accident mission doses, as reported in RAI 207-8247, Question 12.02-16, Revision 2 (ML16306A454), Table 12.4-8, are calculated to be higher, resulting from the greater input value of the on-site atmospheric dispersion factor.
- Changes were made to the airborne concentrations used for the inhalation and submersion dose rates as follows: The radionuclide concentrations at the point of the HVAC intake were used in the previous mission dose analyses, which were determined to be overly conservative, as the operator will not continuously stand in front of the intake point during LOCA conditions. For a more realistic, yet conservative, analysis of the inhalation dose rate more evenly distributed equilibrium conditions of the radionuclide concentrations in the whole area of the Auxiliary Building are used.

As a result of the above changes, the following paragraphs summarize the calculation of the air submersion dose rate, the external direct dose rate, and the inhalation dose rate; identifies the conservative parameters for these analyses; and provides qualitative evaluations on the corresponding margins of each exposure pathway.

- Air submersion dose rate

According to Section 4.2.7 of Reg. Guide 1.183, the following expression is used to correct the semi-infinite cloud dose,  $DDE_{\infty}$ , to a finite cloud dose,  $DDE_{finite}$ , where the vital area room is modeled as a hemisphere that has a volume,  $V$ , in cubic feet, equivalent to that of the vital area room.

$$DDE_{finite} = \frac{DDE_{\infty} V^{0.338}}{1173} = DDE_{\infty} \times \text{Geometry Factor}$$

Where,

$DDE_{finite}$  = finite cloud dose

$DDE_{\infty}$  = semi-infinite cloud dose

$V$  = finite volume of vital area room

The determination of  $DDE_{finite}$  is based on the geometry factor, as summarized in Table 1 below for the different vital areas. Although the air submersion dose rates in the vital areas can be calculated based on the corresponding geometry factors for each of the individual vital areas, the geometry factor of the Auxiliary Building is used conservatively for each vital area in this calculation. The air submersion dose rates, thus calculated, are maximized based on the use of the geometry factor for the AB. KHNP believes that the air submersion dose rates for the Remote Shutdown Room (137-A06D) and the Remote Control Console Room (137-A41A), have sufficient margins over the use of their corresponding geometry factors.

**Table 1 Geometry Factors for Various Vital Areas**

Vital Area (Room No.)	Volume (ft <sup>3</sup> )	Geometry Factor
Auxiliary Building	6.371E+06	1.700E-01
Remote Shutdown Room (137-A06D)	9.440E+03	1.880E-02
Remote Control Console Room (137-A41A)	9.597E+03	1.891E-02

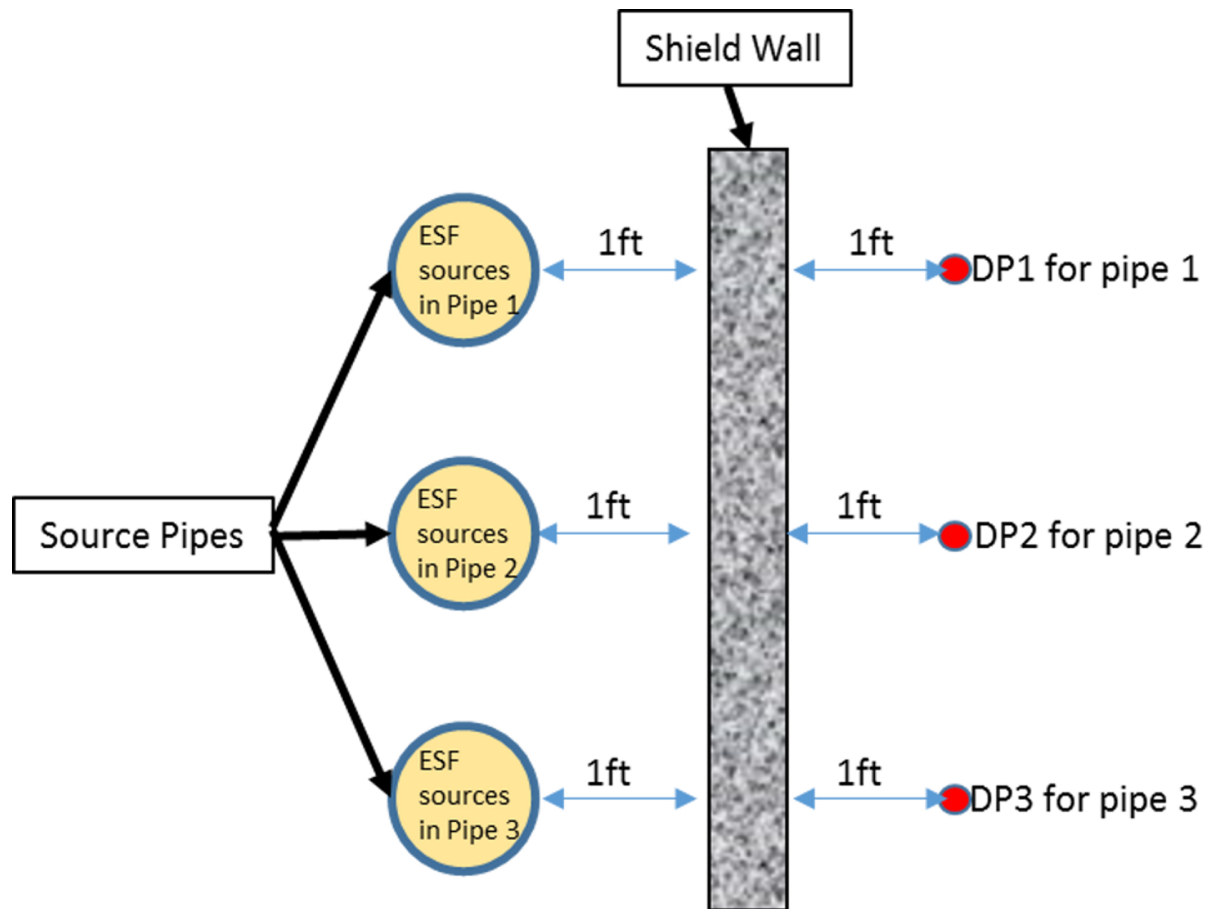
- External direct dose rate

The determination of the external direct dose rate is based on the simplified model of complex geometry, such as a pipe way, used in the shielding analysis. The simplified model contains two different methods to ensure that the calculations are conservative in each of the two methods: the piping model and the cubicle model.

The simplified piping model is illustrated in Figure 1.

For the shielding design of the pipe chase, the external direct dose is calculated with a shield wall between the source piping and the dose points (DPs). The DPs are located on the opposite side of the piping, separated by a shield wall. The layout of three pipes is used as an example for clarification purposes. In this model, the three pipes are assumed to be on the same vertical plane, such that the dose rate at each DP location is maximized. Since the dose point is taken at a plane in front of the three pipes, the individual dose rate at each dose point is calculated by the summation of all 3 source points. The calculation of the shield wall thickness is based on the total dose from the summation of the 3 sources. This calculation method for the determination of the shield wall thickness is therefore conservative.

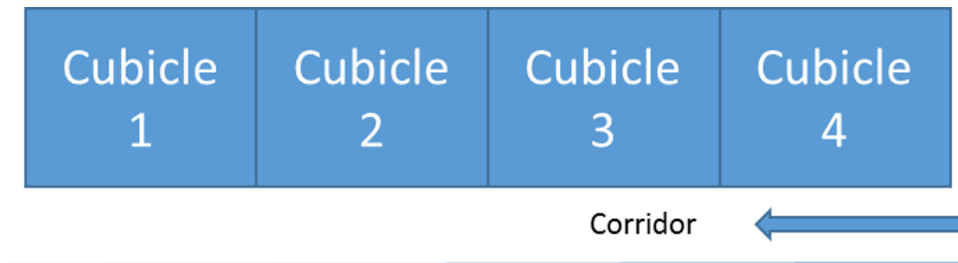
The source summation method discussed above uses direct external dose of the three dose points. The direct dose at right angle far exceeds that from incidental angles. Hence this direct and summation method has more than enough margin to offset the use of the MicroShield software as a simplified calculation tool, as opposed to the use of more complex tool such as MCNP software.



**Figure 1 Dose Point Locations for Three Parallel Piping Design**

It should be noted that, if an external direct dose rate for access routes or vital areas is calculated to be lower than 0.15 mSv/hr, the dose rate of 0.15 mSv/hr is conservatively used as this is the upper dose rate limit of radiation zone 1 during accident conditions. In addition, the dose rate obtained at one hour after LOCA is used conservatively for cases within 24 hours after the onset of the LOCA.

As for the cubicle method, the cubicle with the highest dose rate is used to calculate the external direct dose. In the below example, an operator is assumed to be passing 4 cubicles along a corridor as shown in Figure 2. The accumulated dose is determined by the sum of the products of dose rates from the individual cubicles 1 to 4 and the travel (passing) times. However, if the cubicle #4 has the highest source compared to the other cubicles (#1 to #3 in this example), the source from cubicle #4 with the highest dose rate is used for all cubicles. In this example, the 4 rooms therefore are considered to have the same high sources as the cubicle #4. Hence, if the operator takes 1 minute to pass through the corridor in front of the 4 rooms, he would be exposed to cubicle #4 for 1 minute. In this approach, the external dose rate thus determined is conservative and bounding.



**Figure 2 Model to calculate the external dose rate for Operator**

- Inhalation dose rate

The inhalation dose rate is calculated using the minimum assigned protection factor (APF) of 10 for a half-mask respirator in order for the inhalation dose to be conservative and bounding. Typical nuclear power plant operation would have operating procedures to reduce the inhalation dose to a level that is as low as reasonably achievable (ALARA). The available respirator types provide a range of APFs that vary from 10 to greater than 1000, based on the particulate filter efficiencies (Appendix A to 10 CFR Part 20). Since the inhalation dose could be a major contributor to the TEDE dose, the use of appropriate respirator is thus a standard practice and can thus reduce the inhalation dose. The APF 100 for a full-mask respirator has a factor of approximately 3.55 over APF 10 for the Remote Control Console Room and the Remote Shutdown Room for the first hour post-LOCA duration, as indicated in Table 2 below. The use of a higher APF above 10 can provide additional margin for the inhalation dose in these two rooms.

**Table 2 Comparison of Mission Doses for APF 10 and APF 100**

Post-LOCA Time (hr)	Mission Dose (mSv)			
	Remote Shutdown Room		Remote Control Console Room	
	APF 10	APF 100	APF 10	APF 100
1	6.99	1.96	7.72	2.17
2	42.69	11.30	47.16	12.48
3	44.82	13.61	49.51	15.03
4	18.62	7.34	18.07	8.10
24	3.00	1.36	3.31	1.51

In summary, the mission dose thus calculated contains sufficient conservatism to ensure mission dose rates will remain below the 5 rem limit through the use of a set of conservative calculation assumptions and a full mask respirator with an APF of 100 or higher.

2. The cumulative impacts of all of the source term changes can be described as follows;

The updates of the component source terms, as impacted by the correction of component data, the revision of onsite atmospheric dispersion factors, and the revision of the HVAC intake model, have cumulative impacts on the radiation shielding, zoning, mission dose, and equipment qualification design. The various RAIs on these changes are summarized as follows:

- RAI 20-7912 Question 02.03.04-1, Revision 1 (ML16159A246, revision of onsite atmospheric dispersion factor);
- RAI 13-7856 Question 12.02-2, Revision 4 (changes to CVCS component data);
- RAI 207-8247 Question 12.02-16, Revision 2 (ML16306A454, changes to radionuclide concentrations accident mission doses);
- RAI 308-8339 Question 12.02-19, Revision 0 (ML16272A470, justification of decontamination factors for CVCS purification ion exchange resin and SGBD ion exchange resin);
- RAI 343-8420 Question 12.02-22, Revision 1 (changes to CVCS component data);
- RAI 343-8420 Question 12.02-23, Revision 1 (ML17038A171, effect of daughter nuclides on shielding); and
- RAI 343-8420 Question 12.02-25, Revision 0 (update of VCT data and off-gas flow, effect of daughter nuclides on GRS shielding).

The cumulative impacts on radiation shielding, radiation zoning, mission dose analysis, and equipment qualification design are summarized in the paragraphs below:

- Shielding and Zoning

The shielding design, as impacted by the revision of source terms and daughter nuclides, is assessed and discussed in RAI 343-8420, Question 12.02-23, Revision 1 (ML17038A171) and RAI 343-8420, Question 12.02-25, Revision 0. These RAIs were previously submitted to the NRC for review for acceptance. KHNP continues to perform evaluation and checking of the data and shielding evaluation results and will advise the NRC of any changes or updates.

Specifically for the CVCS and BOP systems, with the exception of the GRS, the source term changes have insignificant impacts on plant shielding due to the conservative assumptions and margins contained in the original source term and shielding analyses. The detailed descriptions are provided in the response to RAI 343-8420, Question 12.02-23, Revision 1 (ML17038A171).

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For the GRS, the source term changes have impacts on the radiation shielding and zoning because the source terms for the GRS consist of a relatively small number of nuclides. Therefore, the impact of the source term changes in GRS components are evaluated and the radiation zones and the minimum required shield thickness are revised as described in the response to RAI 343-8420, Question 12.02-25, Revision 0.

It is noted that these shielding changes do not impact on the structural design.

- Mission dose

The mission doses have been updated due to the changes to source terms, component data, atmospheric dispersion factors, and the HVAC intake model. The results of the mission dose evaluation are summarized in the response to RAI 207-8247, Question 12.02-16, Revision 2 (ML16306A454), which was submitted to the NRC for review. Each of the radiation dose factors contains conservative methods and assumptions as discussed in item #1 of this response.

- Equipment qualification design

The EQ analyses for the post-accident conditions were evaluated using the RUNT-G code. This analysis is independent of the mission dose analyses performed with the MicroShield and ESF source terms. The EQ results are therefore not impacted by the change of the ESF source terms and the inclusion of the corresponding daughter nuclides.

The EQ analyses for the normal conditions were reevaluated due to the revision of EQ source terms, 1.0 % F.F., by effects of daughter nuclides, and of component data as discussed in the responses to RAI 13-7856, Question 12.02-2, Revision 4, RAI 343-8420, Questions 12.02-22, Revision 1, 12.02-23, Revision 1 (ML17038A171) and 12.02-25, Revision 0. The normal EQ dose rates provided in Table 3 of Technical Report APR1400-EX-NR-14001-P/NP will be revised as indicated in Attachment.

In conclusion, the cumulative impacts of all of the source term changes on the radiation shielding, zoning, mission dose, and equipment qualification designs are evaluated and summarized as described above. KHNP will continue to verify and manage the changes due to the revision of source terms on shielding designs to ensure accuracy and consistency.

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### **Impact on DCD**

There is no impact on the DCD.

### **Impact on PRA**

There is no impact on the PRA.



**Impact on Technical Specifications**

There is no impact on the Technical Specifications.

**Impact on Technical/Topical/Environmental Reports**

Technical Report APR1400-EX-NR-14001-P/NP Table 3, which was attached to the response to RAI 176-8089 Question 03.11-9, will be revised as indicated in Attachment.

RAI 176-8089 - Question 03.11-9

APR1400-E-X-NR-14001-NP, Rev. 0

RAI 490-8599 - Question 12.03-53

Table 3 ~~Table 4~~ (4 of 28)

Bldg.	Room No.	Identification	H/M	Pressure (psig)		Temperature (°F)		Relative Humidity (%)		Radiation TID (Gy)						
				Normal	Accident	Normal	Accident	Normal	Accident	Normal			Accident			Total
										Gamma	Beta	Neutron	Gamma	Beta	Neutron	
AB	068-A10A	FILTER & DEMIN. VALVE AREA	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	8.3E+04	1)	2)	1)	1)	3)	8.3E+04
AB	068-A11A	FILTER & DEMIN. VALVE AREA	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+04	1)	2)	1)	1)	3)	1.7E+04
AB	068-A12A	FILTER & DEMIN. VALVE AREA	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.9E+03	1)	2)	1)	1)	3)	3.9E+03
AB	068-A13A	ELEV. HALL		0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	077-A01A	REACTOR DRAIN FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	2.5E+04	1)	2)	1)	1)	3)	2.5E+04
AB	077-A02A	SFP CLEAN-UP FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	7.0E+03	1)	2)	1)	1)	3)	7.0E+03
AB	077-A03A	SFP DEMIN FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	7.0E+03	1)	2)	1)	1)	3)	7.0E+03
AB	077-A04A	SFP CLEAN-UP FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	7.0E+03	1)	2)	1)	1)	3)	7.0E+03
AB	077-A05A	SFP DEMIN FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	7.0E+03	1)	2)	1)	1)	3)	7.0E+03
AB	077-A06A	PURIFICATION FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	2.7E+08	1)	2)	1)	1)	3)	2.7E+08
AB	077-A07A	REACTOR MAKE-UP WATER FILTER PIT	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.5E+02	1)	2)	1)	1)	3)	1.5E+02
AB	077-A08A	PURIFICATION FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	2.7E+08	1)	2)	1)	1)	3)	2.7E+08
AB	077-A09A	SGBD FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.1E+04	1)	2)	1)	1)	3)	3.1E+04
AB	077-A10A	SEAL INJECTION FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	8.8E+04	1)	2)	1)	1)	3)	8.8E+04
AB	077-A11A	SGBD FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.1E+04	1)	2)	1)	1)	3)	3.1E+04
AB	077-A12A	SEAL INJECTION FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	8.8E+04	1)	2)	1)	1)	3)	8.8E+04
AB	077-A13A	SGBD FILTER PIT	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.1E+04	1)	2)	1)	1)	3)	3.1E+04
AB	077-A14A	BORIC ACID FILTER PIT	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	9.2E+02	1)	2)	1)	1)	3)	9.2E+02
AB	077-A15A	FILTER CARTRIDGE STORAGE	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	4.8E+07	1)	2)	1)	1)	3)	4.8E+07
AB	078-A01C	PNS SWGR RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	078-A01D	PNS SWGR RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	078-A02C	CLASS 1E SWGR O1C RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	078-A02D	CLASS 1E SWGR O1D RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	078-A03C	CLASS 1E LOAD CENTER O1C RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	078-A03D	CLASS 1E LOAD CENTER O1D RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	078-A04C	MISC. ELECTRICAL EQUIP. RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	078-A04D	MISC. ELECTRICAL EQUIP. RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	078-A05C	TRAIN-C DC & IP EQUIP. RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	078-A05D	TRAIN-D DC & IP EQUIP. RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	078-A06C	N1E BATTERY RM	M	0.0	S/N	65 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00

RAI 176-8089 - Question 03.11-9

APR1400-E-X-NR-14001-NP, Rev. 0

RAI 490-8599 - Question 12.03-53

Table 3 Table 4 (12 of 28)

Bldg.	Room No.	Identification	H/M	Pressure (psig)		Temperature (°F)		Relative Humidity (%)		Radiation TID (Gy)						Total
				Normal	Accident	Normal	Accident	Normal	Accident	Normal			Accident			
										Gamma	Beta	Neutron	Gamma	Beta	Neutron	
AB	137-A14B	480V N1E MCC 18N RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A15A	480V CLASS 1E MCC 04A RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A15B	480V CLASS 1E MCC 04B RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A16A	ELEV. HALL	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	1)	1)	3)	1.7E+01
AB	137-A16B	ELEV. HALL	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	1)	1)	3)	1.7E+01
AB	137-A17A	PENETRATION MUX A RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A17B	PENETRATION MUX B RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A18A	ELECTRICAL PENETRATION RM(A)	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A18B	ELECTRICAL PENETRATION RM(B)	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A19A	SG BLOWDOWN FLASH TANK RM	H	0.0	4.424	50 to 104	325	7 to 90	100	2.3E+03	1)	2)	1)	1)	3)	2.3E+03
AB	137-A20A	GENERAL ACCESS AREA	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A21A	ELECTRICAL EQUIP. RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A22A	ELECTRICAL EQUIP. RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A23A	480V CLASS 1E MCC 03A RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A24B	480V N1E MCC 17N RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A25A	FUEL HANDLING AREA EMER. EXHAUST ACU RM	M	0.0	S/N	50 to 122	S/N	7 to 90	S/N	1.7E+01	1)	2)	5.1E+03	1)	3)	5.1E+03
AB	137-A27B	STORAGE RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	1)	1)	3)	1.7E+01
AB	137-A28B	AUX BLDG. CONTROLLED AREA(II) SUPPLY AHU RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	1)	1)	3)	1.7E+01
AB	137-A29B	GENERAL ACCESS AREA	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	1)	1)	3)	1.7E+01
AB	137-A30C	MAIN STEAM ENCLOSURE	H	0.0	22.3	50 to 122	340	7 to 90	100	1)	1)	2)	5.0E+01	1)	3)	5.0E+01
AB	137-A30D	MAIN STEAM ENCLOSURE	H	0.0	22.3	50 to 122	340	7 to 90	100	1)	1)	2)	5.0E+01	1)	3)	5.0E+01
AB	137-A31C	MAIN STEAM VALVE ROOM	H	0.0	3.0	50 to 104	360	7 to 90	100	1)	1)	2)	1.8E+02	1)	3)	1.8E+02
AB	137-A31D	MAIN STEAM VALVE ROOM	H	0.0	3.0	50 to 104	360	7 to 90	100	1)	1)	2)	1.8E+02	1)	3)	1.8E+02
AB	137-A32B	PIPE CHASE	H	0.0	S/N	50 to 130	N/A	7 to 90	N/A	4.1E+01	1)	2)	1)	1)	3)	4.1E+01
AB	137-A35C	REACTOR TRIP SWGR RM	M	0.0	S/N	65 to 85	N/A	40 to 60	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A36C	REACTOR TRIP SWGR RM	M	0.0	S/N	65 to 85	N/A	40 to 60	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A37C	REACTOR TRIP SWGR RM	M	0.0	S/N	65 to 85	N/A	40 to 60	N/A	1)	1)	2)	1)	1)	3)	0.0E+00
AB	137-A38C	REACTOR TRIP SWGR RM	M	0.0	S/N	65 to 85	N/A	40 to 60	N/A	1)	1)	2)	1)	1)	3)	0.0E+00

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Bldg.	Room No.	Identification	H/M	Pressure (psig)		Temperature (°F)		Relative Humidity (%)		Radiation TID (Gy)						
				Normal	Accident	Normal	Accident	Normal	Accident	Normal			Accident			Total
										Gamma	Beta	Neutron	Gamma	Beta	Neutron	
EDGB	121-H01B	LUBE OIL MAKEUP TANK RM	M	0.0	S/N	50 to 122	S/N	7 to 90	S/N	1)	1)	2)	N/A	N/A	N/A	0.0E+00
EDGB	121-H02A	DIESEL FUEL OIL DAY TANK RM	M	0.0	S/N	50 to 122	S/N	7 to 90	S/N	1)	1)	2)	N/A	N/A	N/A	0.0E+00
EDGB	121-H02B	DIESEL FUEL OIL DAY TANK RM	M	0.0	S/N	50 to 122	S/N	7 to 90	S/N	1)	1)	2)	N/A	N/A	N/A	0.0E+00
EDGB	135-H01A	D/G EXHAUST SILENCER RM	M	0.0	S/N	40 to 150	S/N	6 to 99	S/N	1)	1)	2)	N/A	N/A	N/A	0.0E+00
EDGB	135-H01B	D/G EXHAUST SILENCER RM	M	0.0	S/N	40 to 150	S/N	6 to 99	S/N	1)	1)	2)	N/A	N/A	N/A	0.0E+00
EDGB	135-H02A	AIR INTAKE FILTER RM	M	0.0	S/N	40 to 122	S/N	7 to 90	S/N	1)	1)	2)	N/A	N/A	N/A	0.0E+00
EDGB	135-H02B	AIR INTAKE FILTER RM	M	0.0	S/N	40 to 122	S/N	7 to 90	S/N	1)	1)	2)	N/A	N/A	N/A	0.0E+00
EDGB	135-H03A	EDG RM NOR. SUPPLY AHU RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	N/A	N/A	N/A	0.0E+00
EDGB	135-H03B	EDG RM NOR. SUPPLY AHU RM	M	0.0	S/N	50 to 104	S/N	7 to 90	S/N	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	057-P01	ELEV. HOISTWAY	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	062-P01	CONTAMINATED CLOTHING STORAGE	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	062-P02	MASK DECONTAMINATION RM	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	063-P01	HOT PIPE CHASE	H	0.0	S/N	50 to 130	N/A	7 to 90	N/A	3.4E+03	1)	2)	1.5E+04	N/A	N/A	3.4E+03
CPB	063-P02	GRS HEADER DRAIN TANK RM	H	0.0	S/N	50 to 122	N/A	7 to 90	N/A	1.9E+06	1)	2)	N/A	N/A	N/A	1.9E+06
CPB	063-P03	VALVE RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	5.9E+04	1)	2)	N/A	N/A	N/A	5.9E+04
CPB	063-P04	GRS INLET SKID RM	H	0.0	S/N	50 to 122	N/A	7 to 90	N/A	4.2E+04	1)	2)	N/A	N/A	N/A	4.2E+04
CPB	063-P05	S.R.L.T STORAGE TANK RM	H	0.0	S/N	50 to 122	N/A	7 to 90	N/A	6.4E+07	1)	2)	N/A	N/A	N/A	6.4E+07
CPB	063-P06	FUTURE USE AREA	H	0.0	S/N	50 to 122	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	063-P07	VALVE RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	2.6E+06	1)	2)	N/A	N/A	N/A	2.6E+06
CPB	063-P08	LOW ACTIVITY SPENT RESIN TANK RM	H	0.0	S/N	50 to 122	N/A	7 to 90	N/A	2.2E+05	1)	2)	N/A	N/A	N/A	2.2E+05
CPB	063-P10	HOT TOOL RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+01	1)	2)	N/A	N/A	N/A	3.5E+01
CPB	063-P12	LRS SEAL WATER RECYCLE EQUIPMENT RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+01	1)	2)	N/A	N/A	N/A	3.5E+01
CPB	063-P13	HOT PIPE CHASE	H	0.0	S/N	50 to 130	N/A	7 to 90	N/A	3.2E+06	1)	2)	N/A	N/A	N/A	3.2E+06
CPB	063-P14	HOT TOOL RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+01	1)	2)	N/A	N/A	N/A	3.5E+01
CPB	063-P16	CORRIDOR	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	063-P17	HVAC CHASE	M	0.0	S/N	50 to 130	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	063-P18	STAIR	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	063-P19	ELECT. RISER	M	0.0	S/N	50 to 130	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	063-P20	HVAC CHASE	M	0.0	S/N	50 to 130	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01

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Bldg.	Room No.	Identification	H/M	Pressure (psig)		Temperature (°F)		Relative Humidity (%)		Radiation TID (Gy)						
				Normal	Accident	Normal	Accident	Normal	Accident	Normal			Accident			Total
										Gamma	Beta	Neutron	Gamma	Beta	Neutron	
CPB	077-P01	HOT PIPE WAY	H	0.0	S/N	50 to 130	N/A	7 to 90	N/A	3.7E+06	1)	2)	N/A	N/A	N/A	3.7E+06
CPB	079-P01	ELEV. HOISTWAY	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	079-P02	ELEV. HOISTWAY	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P01	WASTE GAS DRYER SKID RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	7.6E+03	1)	2)	N/A	N/A	N/A	7.6E+03
CPB	085-P02	WASTE GAS DRYER SKID RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	7.6E+03	1)	2)	N/A	N/A	N/A	7.6E+03
CPB	085-P03	VALVE RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.6E+04	1)	2)	N/A	N/A	N/A	3.6E+04
CPB	085-P04	CHARCOAL GUARD BED RM	H	0.0	S/N	50 to 122	N/A	7 to 90	N/A	6.0E+04	1)	2)	N/A	N/A	N/A	6.0E+04
CPB	085-P05	ELECT. RISER	M	0.0	S/N	50 to 130	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	085-P06	VALVE RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	2.6E+06	1)	2)	N/A	N/A	N/A	2.6E+06
CPB	085-P07	VALVE RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.4E+05	1)	2)	N/A	N/A	N/A	1.4E+05
CPB	085-P08	VALVE RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.4E+05	1)	2)	N/A	N/A	N/A	1.4E+05
CPB	085-P09	WASTE SHREDDER RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.4E+02	1)	2)	N/A	N/A	N/A	1.4E+02
CPB	085-P11	SORTING RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.4E+02	1)	2)	N/A	N/A	N/A	1.4E+02
CPB	085-P12	DROP AREA (CLEAN)	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	085-P13	CLEAN WASTE STORAGE	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	085-P14	CORRIDOR	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	085-P15	VALVE RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.1E+04	1)	2)	N/A	N/A	N/A	1.1E+04
CPB	085-P16	VALVE RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	2.4E+04	1)	2)	N/A	N/A	N/A	2.4E+04
CPB	085-P17	VALVE RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.0E+03	1)	2)	N/A	N/A	N/A	1.0E+03
CPB	085-P18	DROP AREA(POTENTIAL)	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+01	1)	2)	N/A	N/A	N/A	3.5E+01
CPB	085-P19	POTENTIAL CLEAN WASTE STORAGE	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.4E+02	1)	2)	N/A	N/A	N/A	1.4E+02
CPB	085-P20	VALVE RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	8.5E+02	1)	2)	N/A	N/A	N/A	8.5E+02
CPB	085-P21	CHARCOAL GUARD BED RM	H	0.0	S/N	50 to 122	N/A	7 to 90	N/A	6.0E+04	1)	2)	N/A	N/A	N/A	6.0E+04
CPB	085-P24	DAW DRYER & DEWATERING EQUIP. RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+02	1)	2)	N/A	N/A	N/A	3.5E+02
CPB	085-P26	DROP AREA(HOT)	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+01	1)	2)	N/A	N/A	N/A	3.5E+01
CPB	085-P30	HOT TOOL RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+01	1)	2)	N/A	N/A	N/A	3.5E+01
CPB	085-P31	PRIMARY SAMPLING RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	7.1E+01	1)	2)	N/A	N/A	N/A	7.1E+01
CPB	085-P32	PRIMARY SAMPLING SINK RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	2.1E+03	1)	2)	N/A	N/A	N/A	2.1E+03
CPB	085-P33	HOT TOOL RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+01	1)	2)	N/A	N/A	N/A	3.5E+01
CPB	085-P35	STORAGE	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01

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Bldg.	Room No.	Identification	H/M	Pressure (psig)		Temperature (°F)		Relative Humidity (%)		Radiation TID (Gy)						
				Normal	Accident	Normal	Accident	Normal	Accident	Normal			Accident			Total
										Gamma	Beta	Neutron	Gamma	Beta	Neutron	
CPB	085-P36	SAMPLE COUNTING RM	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	085-P37	RADIOCHEMISTRY LAB	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	085-P38	BALANCE RM	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	085-P39	LAB SERVICE VALVE STATION	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	085-P40	LAB OPERATOR'S OFFICE	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	085-P41	COMPOUND BLDG. SUMP PUMP RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P42	IX MODULE RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	6.7E+05	1)	2)	N/A	N/A	N/A	6.7E+05
CPB	085-P43	IX MODULE RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	6.7E+05	1)	2)	N/A	N/A	N/A	6.7E+05
CPB	085-P44	RO FEED TANK RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	2.2E+04	1)	2)	N/A	N/A	N/A	2.2E+04
CPB	085-P45	DRUM REMOVAL CHASE	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	7.4E+05	1)	2)	N/A	N/A	N/A	7.4E+05
CPB	085-P46	MF MEMBRANE MODULE RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.0E+03	1)	2)	N/A	N/A	N/A	3.0E+03
CPB	085-P47	MF MEMBRANE MODULE RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.0E+03	1)	2)	N/A	N/A	N/A	3.0E+03
CPB	085-P48	RO MEMBRANE MODULE & VALVE SKID RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.1E+07	1)	2)	N/A	N/A	N/A	1.1E+07
CPB	085-P50	SAMPLE CHILLER RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P51	SECONDARY SAMPLING RM	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P52	BALANCE RM	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P53	LAB STORAGE	M	0.0	S/N	70 to 80	N/A	20 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P54	TURBINE GENERATOR BLDG. LAB	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P55	LAB OFFICE	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P57	LUBE OIL LAB	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P58	CORRIDOR	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P59	TELECOM CLOSET	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	085-P61	ELECT. RISER	M	0.0	S/N	50 to 130	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	096-P01	CHARCOAL DELAY BED RM	H	0.0	S/N	50 to 122	N/A	7 to 90	N/A	2.2E+06	1)	2)	N/A	N/A	N/A	2.2E+06
CPB	096-P02	CHARCOAL DELAY BED RM	H	0.0	S/N	50 to 122	N/A	7 to 90	N/A	2.2E+06	1)	2)	N/A	N/A	N/A	2.2E+06
CPB	100-P01	CHEMICAL STORAGE AREA	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	100-P02	GRS EQUIP. REMOVAL AREA	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.2E+03	1)	2)	N/A	N/A	N/A	3.2E+03
CPB	100-P03	HOT TOOL RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+01	1)	2)	N/A	N/A	N/A	3.5E+01
CPB	100-P04	WELDING RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	100-P05	HOT INSTRUMENT RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+01	1)	2)	N/A	N/A	N/A	3.5E+01

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Bldg.	Room No.	Identification	H/M	Pressure (psig)		Temperature (°F)		Relative Humidity (%)		Radiation TID (Gy)						
				Normal	Accident	Normal	Accident	Normal	Accident	Normal			Accident			Total
										Gamma	Beta	Neutron	Gamma	Beta	Neutron	
CPB	100-P40	VESTIBULE	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P41	LOBBY	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P42	O.S.C. AREA	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P43	HEALTH PHYSICS STORAGE	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	100-P44	WATER HEATER TANK RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P45	MEN'S TOILET	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P46	MEN'S SHOWER RM	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P47	DRYING AREA	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P48	CORRIDOR	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P49	TELECOM CLOSET	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P50	VESTIBULE	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P51	WOMEN'S SHOWER RM	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P52	DRYING AREA	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P53	WOMEN'S TOILET	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P54	CORRIDOR	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	100-P55	CORRIDOR	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	100-P56	LAUNDRY AREA	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P57	ELECT. RISER	M	0.0	S/N	50 to 130	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	100-P58	ELECT. RISER	M	0.0	S/N	50 to 130	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P59	DAW STORAGE RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P60	WASTE DRUM TRANSF. RM	H	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	100-P61	VIP LOCKER RM	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P62	TOILET	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	100-P63	SHOWER RM	M	0.0	S/N	70 to 80	N/A	30 to 70	N/A	1)	1)	2)	N/A	N/A	N/A	0.0E+00
CPB	120-P01	GASEOUS RADWASTE SAMPLE CONTROL PANEL RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	120-P02	GASEOUS RADWASTE SAMPLE VALVE RACK RM	H	0.0	S/N	50 to 122	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	120-P03	GRS EXHAUST RAD MONITOR RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	120-P04	CHARCOAL DELAY BED REMOVAL AREA	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	1.7E+01	1)	2)	N/A	N/A	N/A	1.7E+01
CPB	120-P05	HOT TOOL RM	M	0.0	S/N	50 to 104	N/A	7 to 90	N/A	3.5E+01	1)	2)	N/A	N/A	N/A	3.5E+01

