BSC

Criteria/Basis Change Notice

Complete only applicable items.

1. QA: N/A
2. Page 1 of 3

3. Document Identifier:	4. Rev.:	5. CBCN:
000-3DR-MGR0-00100-000	007	001
6a. Title: *Project Design Criteria Document*	6b. Safety Classification of SSC: Non-ITS & Non-ITWI	

7. Reason for Change:

Technical Management Review Board (TMRB) Proposal TMRB-2007-063 provided Level 4 change control board approval to eliminate charcoal filters and radioiodine detectors that are currently specified in the *Project Design Criteria Document* (PDC) for the Central Control Center Facility (CCCF) and the Emergency Operations Center (EOC) [in the Administration Facility] heating, ventilation, and air conditioning (HVAC) systems.

Although initially incorporated to address emergency response facilities' requirements specified by NUREG-0696, the charcoal filters and radioiodine detectors are for events appropriate to reactor plants, but not to the repository. Except for Iodine-129 which is negligibly low in concentration, the radioiodine isotopes of concern will have decayed away before the assemblies are shipped to the repository. The charcoal filters and radioiodine detectors were not incorporated in the facility designs during the discussions on these requirements. Therefore, there is no impact to the design. These discussions have been conducted with the Safety Analysis Report (SAR) group, which is being written to reflect this change now. The Emergency Plan by Emergency Management may also be affected, but is in the process of being developed. Therefore, there are no significant impacts to LA products.

The DIRS number below will not be available until the CBCN is approved and the implemented TMRB proposal is submitted as a record – well before this CBCN is incorporated into the next PDC revision.

8. Supersedes Change Notice: ☐ Yes If, Yes, Change Notice: _____ ☒ No

9. Disciplines/Organizations Affected by this Change:

Balance of Plant Facilities Project Engineer	Electrical and I&C Discipline Engineering Manager	Mechanical Discipline Engineering Manager
Nuclear & Radiological Discipline Engineering Manager	L&NS Document Review	Preclosure Safety Analysis Manager
ESH Review Coordinator (EM)	Project Management SKC	Nuclear Facility Operations
		If 6b is ITS/ITWI: Quality Assurance: N/A

10. Description of Change:

Revise the following PDC criteria as follows:

4.2.12.1.3.5 CCC HVAC

The CCC ventilation system shall function in a manner comparable to the control room ventilation system. The CCC ventilation system need not be seismically qualified, redundant, instrumented in the control room, or automatically activated to fulfill its role. A CCC ventilation system that includes high-efficiency particulate air (HEPA) ~~and charcoal~~ filters is needed, as a minimum.

[RGA REG-CRW-RG-000455 (BSC 2007 [DIRS 181426]) adopted NUREG-0696 (NRC 1981 [DIRS 104098]) with clarification. NUREG-0696 Section 2.6 defines specific HVAC requirements of the CCC. The agreement defining the applicability of General Design Criterion 19, Standard Review Plan 6.4, and NUREG-0737 referenced in NUREG-0696 Section 2.6, and the referenced Regulatory Guides included in them, associated with nuclear power plant control room habitability have not yet been approved. Therefore, the application of these guides to the habitability of the repository operations rooms and the CCC cannot be specified at this time. CBCN017 to Revision 6 provided this criterion. ***TMRB-2007-063 [DIRS xxxxxx] provides management direction that charcoal filters are not required for the CCC. The TMRB proposal referenced an earlier analysis indicating the repository does not have events that provide a source that would necessitate these filters.]***

4.2.12.1.3.6 CCC Radiation Monitoring

Radiation monitoring systems shall be provided in the CCC composed of installed monitors or portable monitoring equipment dedicated to the CCC. These systems shall continuously indicate radiation dose rates and airborne radioactivity concentrations inside the CCC while in use during an emergency. These monitoring systems shall include local alarms with trip levels set to provide early warning to CCC personnel of adverse conditions that may affect the habitability of the TSC. ~~**Detectors shall be able to distinguish the presence or absence of radioiodine at concentrations as low as 10^{-7} microcuries/cc.**~~

[RGA REG-CRW-RG-000455 (BSC 2007 [DIRS 181426]) adopted NUREG-0696 (NRC 1981 [DIRS 104098]) with clarification. NUREG-0696 Section 2.6 defines specific radiation monitoring requirements of the CCC. The agreement defining the applicability

of General Design Criterion 19, Standard Review Plan 6.4, and NUREG-0737 referenced in NUREG-0696 Section 2.6, and the referenced Regulatory Guides included in them, associated with nuclear power plant control room habitability have not yet been approved. Therefore, the application of these guides to the habitability of the repository operations rooms and the CCC cannot be specified at this time. CBCN017 to Revision 6 provided this criterion. ***TMRB-2007-063 [DIRS xxxxxx] provides management direction that radioiodine detectors are not required for the CCC. The TMRB proposal referenced an earlier analysis indicating the repository does not have events that provide a source that would necessitate these detectors.****]*

4.2.12.1.5.2 EOC HVAC

The EOC ventilation system shall function in a manner comparable to the CCC. The EOC ventilation system need not be seismically qualified, redundant, instrumented in the control room, or automatically activated to fulfill its role. An EOC ventilation system that includes high-efficiency particulate air (HEPA) ~~**and no charcoal**~~ filters is needed.

*[RGA REG-CRW-RG-000455 (BSC 2007 [DIRS 181426]) adopted NUREG-0696 (NRC 1981 [DIRS 104098]) with clarification. NUREG-0696 Section 4.2 defines specific HVAC requirements of the CCC****, including specifying that charcoal filters are not required for this facility****. CBCN017 to Revision 6 provided this criterion.* ***Although TMRB-2007-063 [DIRS xxxxxx] provides management direction that charcoal filters are not required for the CCC, the same rationale can be applied to support this determination for the EOC. The TMRB proposal referenced an earlier analysis indicating the repository does not have events that provide a source that would necessitate these filters.****]*

4.2.12.1.5.3 EOC Radiation Monitoring

Radiation monitoring systems shall be provided in the EOC composed of installed monitors or portable monitoring equipment dedicated to the EOC. These systems shall continuously indicate radiation dose rates and airborne radioactivity concentrations inside the EOC while it is in use during an emergency. These monitoring systems shall include local alarms with trip levels set to provide early warning to EOC personnel of adverse conditions that may affect the habitability of the ~~**OSC**~~**EOC**. ~~**Detectors shall be able to distinguish the presence or absence of radioiodine at concentrations as low as 10^{-7} microcuries/cc.**~~

[RGA REG-CRW-RG-000455 (BSC 2007 [DIRS 181426]) adopted NUREG-0696 (NRC 1981 [DIRS 104098]) with clarification. NUREG-0696 Section 4.5 defines specific radiation monitoring requirements of the EOC. CBCN017 to Revision 6 provided this criterion. ***Although TMRB-2007-063 [DIRS xxxxxx] provides management direction that radioiodine detectors are not required for the CCC, the same rationale can be applied to support this determination for the EOC. The TMRB proposal referenced an earlier analysis indicating the repository does not have events that provide a source that would necessitate these detectors.****]*

4.9.2.3.13 CCC HVAC

The CCC ventilation system shall function in a manner comparable to the control room ventilation system. The CCC ventilation system need not be seismically qualified, redundant, instrumented in the control room, or automatically activated to fulfill its role. A CCC ventilation system that includes high-efficiency particulate air (HEPA) ~~**and charcoal**~~ filters is needed, as a minimum.

[RGA REG-CRW-RG-000455 (BSC 2007 [DIRS 181426]) has adopted NUREG-0696 (NRC 1981 [DIRS 104098]) with clarification. NUREG-0696 Section 2.6 defines specific HVAC requirements of the CCC. The agreement defining the applicability of General Design Criterion 19, Standard Review Plan 6.4, and NUREG-0737 referenced in section 2.6, and the referenced Regulatory Guides included in them, associated with nuclear power plant control room habitability have not yet been approved. Therefore, the application of these guides to the habitability of the repository operations rooms and the CCC cannot be specified at this time. ***TMRB-2007-063 [DIRS xxxxxx] provides management direction that charcoal filters are not required for the CCC. The TMRB proposal referenced an earlier analysis indicating the repository does not have events that provide a source that would necessitate these filters.****]*

4.9.2.3.14 EOC HVAC

The HVAC system shall function in a manner comparable to the CCC HVAC system. The HVAC system shall provide for isolation of the EOC and be provided with HEPA filters ~~**(no charcoal)**~~.

*[RGA REG-CRW-RG-000455 (BSC 2007 [DIRS 181426]) has adopted NUREG-0696 (NRC 1981 [DIRS 104098]) with clarification. NUREG-0696 Section 4.2 provides for the functions being performed by the facilities and systems and their requirements****, including specifying that charcoal filters are not required for this facility****. Although the CBCN017 to PDC Revision 6 identified criterion location 4.9.2.3.15, this is the next subsection number.* ***Although TMRB-2007-063 [DIRS xxxxxx] provides management direction that charcoal filters are not required for the CCC, the same rationale can be applied to support this determination for the EOC. The TMRB proposal referenced an earlier analysis indicating the repository does not have events that provide a source that would necessitate these filters****]*

11. REVIEWS AND APPROVAL			
Printed Name	**Title**	**Signature**	**Date**
11a. Preparer: David S. Rhodes	Discipline Engineering Manager		11-5-07
11b. Concurrence: Richard Foster (Acting)	Manager of Discipline Engineering		11-5-07 11-5-07
11c. Concurrence: N/A	Project Engineering Manager	N/A	N/A
11d. Approved: Barbara Rusinko	Engineering Manager		11/6/07