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Your ref: Docket No. 52-006
Our ref: DCP_NRC_003136

February 21, 2011

Subject: Wording Changes on ITAAC Inspectability Concerns and Editorial Corrections

This letter is being submitted in response to an NRC request to document ITAAC (Inspections, tests, analyses, and acceptance criteria) corrections and repair several editorial items in support of the AP1000 Design Certification Amendment Application (Docket No. 52-006). The information included in these responses is generic and is expected to apply to all COL applications referencing the AP1000 Design Certification and the AP1000 Design Certification Amendment Application.

Agreed upon technical corrections are made to the DCD Tier 1 ITAAC wording in two areas. Table 2.3.5-2 items 3a through 3d clarify the test and acceptance criteria for crane and hoist tests. Table 2.5.1-4 Item 5 now refers the test and acceptance criteria to the overall HFE verification and validation program. Agreed upon editorial corrections are made to wording in Tier 1 Tables 2.1.1-2, 2.1.3-2, 2.2.3-1, 2.2.3-4, 2.2.3-6, 2.3.8-1, 2.3.13-2, 2.6.5-1, 3.2-1, and 3.3-6, and to Figures 2.3.4-1 and 3.3-14.

Information deemed security related is labeled on the following pages. The marked portion contains sensitive unclassified non-safeguards information relative to the physical protection of an AP1000 Nuclear Power Plant that should be withheld from public disclosure pursuant to 10 CFR 2.390(d). A redacted version (public version) is also provided.

Questions or requests for additional information related to the content and preparation of this response should be directed to Westinghouse. Please send copies of such questions or requests to the prospective applicants for combined licenses referencing the AP1000 Design Certification. A representative for each applicant is included on the cc: list of this letter.

Very truly yours,


R. F. Ziesing
Director, U.S. Licensing

/Enclosure

D063
NRD

1. Markup of DCD Revision 18, Wording Changes on ITAAC Inspectability Concerns and Editorial Corrections
2. Security-Related Information, Withhold Under 10 CFR 2.390d
Figure 3.3-14
3. Redacted Version, Withheld Under 10 CFR 2.390d
Figure 3.3-14

| | | | |
|-----|----------------|-------------------------|----|
| cc: | D. Jaffe | - U.S. NRC | 3E |
| | E. McKenna | - U.S. NRC | 3E |
| | P. Buckberg | - U.S. NRC | 3E |
| | T. Spink | - TVA | 3E |
| | P. Hastings | - Duke Power | 3E |
| | R. Kitchen | - Progress Energy | 3E |
| | A. Monroe | - SCANA | 3E |
| | P. Jacobs | - Florida Power & Light | 3E |
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| | E. Schmiech | - Westinghouse | 3E |
| | G. Zinke | - NuStart/Entergy | 3E |
| | R. Grumbir | - NuStart | 3E |
| | S. Ritterbusch | - Westinghouse | 3E |
| | D. Lindgren | - Westinghouse | 3E |

ENCLOSURE 1

Markup of DCD Revision 18, Wording Changes on
ITAAC Inspectabilty Concerns and Editorial Corrections

2. System Based Design Descriptions and ITAAC**AP1000 Design Control Document**

| Table 2.1.1-2 | | |
|--------------------------|-----------|--------------------------------|
| Component Name | Tag No. | Component Location |
| Refueling Machine | FHS-FH-01 | Containment |
| Fuel Handling Machine | FHS-FH-02 | Auxiliary Building |
| Spent Fuel Storage Racks | FHS-FS-02 | Auxiliary Building |
| New Fuel Storage Racks | FHS-FS-01 | Auxiliary Building |
| Fuel Transfer Tube | FHS-FT-01 | Auxiliary Building/Containment |

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2. System Based Design Descriptions and ITAAC

AP1000 Design Control Document

| Table 2.1.3-2 Inspections, Tests, Analysis, and Acceptance Criteria | | |
|--|---|---|
| Design Commitment | Inspections, Tests, Analysis | Acceptance Criteria |
| 1. The functional arrangement of the RXS is as described in the Design Description of this Section 2.1.3. | Inspection of the as-built system will be performed. | The as-built RXS conforms with the functional arrangement as described in the Design Description of this Section 2.1.3. |
| 2.a) The reactor upper internals rod guide arrangement is as shown in Figure 2.1.3-1. | Inspection of the as-built system will be performed. | The as-built RXS will accommodate the fuel assembly and control rod drive mechanism pattern shown in Figure 2.1.3-1. |
| 2.b) The control assemblies (rod cluster and gray rod) and drive rod arrangement is as shown in Figure 2.1.3-2. | Inspection of the as-built system will be performed. | The as-built RXS will accommodate the control assemblies (rod cluster and gray rod) and drive rod arrangement shown in Figure 2.1.3-2. |
| 2.c) The reactor vessel arrangement is as shown in Figure 2.1.3-3. | Inspection of the as-built system will be performed. | The as-built RXS will accommodate the reactor vessel arrangement shown in Figure 2.1.3-3. |
| 3. The components identified in Table 2.1.3-1 as ASME Code Section III are designed and constructed in accordance with ASME Code Section III requirements. | Inspection will be conducted of the as-built components as documented in the ASME design reports. | The ASME Code Section III design reports exist for the as-built components identified in Table 2.1.3-1 as ASME Code Section III. |
| 4. Pressure boundary welds in components identified in Table 2.1.3-1 as ASME Code Section III meet ASME Code Section III requirements. | Inspection of as-built pressure boundary welds will be performed in accordance with the ASME Code Section III. | A report exists and concludes that the ASME Code Section III requirements are met for non-destructive examination of pressure boundary welds. |
| 5. The pressure boundary components (RV, CRDMs, and incore instrument QuickLoc assemblies) identified in Table 2.1.3-1 as ASME Code Section III retain their pressure boundary integrity at their design pressure. | A hydrostatic test will be performed on the components of the RXS required by the ASME Code Section III to be hydrostatically tested. | A report exists and concludes that the results of the hydrostatic test of the pressure boundary components (RV, CRDMs, and incore instrument QuickLoc assemblies) conform with the requirements of the ASME Code Section III. |

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2. System Based Design Descriptions and ITAAC

AP1000 Design Control Document

| Table 2.2.3-1 | | | | | | | | | |
|--|--------------|-----------------------|----------------|-------------------------|-----------------------------|------------------------|-----------------|-----------------|-------------------------------|
| Equipment Name | Tag No. | ASME Code Section III | Seismic Cat. I | Remotely Operated Valve | Class 1E/Qual. Harsh Envir. | Safety-Related Display | Control PMS/DAS | Active Function | Loss of Motive Power Position |
| Passive Residual Heat Removal Heat Exchanger (PRHR HX) | PXS-ME-01 | Yes | Yes | - | -/- | - | -/- | - | - |
| Accumulator Tank A | PXS-MT-01A | Yes | Yes | - | -/- | - | -/- | - | - |
| Accumulator Tank B | PXS-MT-01B | Yes | Yes | - | -/- | - | -/- | - | - |
| Core Makeup Tank (CMT) A | PXS-MT-02A | Yes | Yes | - | -/- | - | -/- | - | - |
| CMT B | PXS-MT-02B | Yes | Yes | - | -/- | - | -/- | - | - |
| IRWST | PXS-MT-03 | No | Yes | - | -/- | - | -/- | - | - |
| IRWST Screen A | PXS-MY-Y01A | No | Yes | - | -/- | - | -/- | - | - |
| IRWST Screen B | PXS-MY-Y01B | No | Yes | - | -/- | - | -/- | - | - |
| IRWST Screen C | PXS-MY-Y01C | No | Yes | - | -/- | - | -/- | - | - |
| Containment Recirculation Screen A | PXS-MY-Y02A | No | Yes | - | -/- | - | -/- | - | - |
| Containment Recirculation Screen B | PXS-MY-Y02B | No | Yes | - | -/- | - | -/- | - | - |
| pH Adjustment Basket 3A | PXS-MY-Y03A | No | Yes | - | -/- | - | -/- | - | - |
| pH Adjustment Basket 3B | PXS-MY-Y03B | No | Yes | - | -/- | - | -/- | - | - |
| pH Adjustment Basket 4A | PXS-MY-Y04A | No | Yes | - | -/- | - | -/- | - | - |
| pH Adjustment Basket 4B | PXS-MY-Y04B | No | Yes | - | -/- | - | -/- | - | - |
| CMT A Inlet Isolation Motor-operated Valve | PXS-PL-V002A | Yes | Yes | Yes | Yes/Yes | Yes (Position) | Yes/No | None | As Is |
| CMT B Inlet Isolation Motor-operated Valve | PXS-PL-V002B | Yes | Yes | Yes | Yes/Yes | Yes (Position) | Yes/No | None | As Is |

Note: Dash (-) indicates not applicable.

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2. System Based Design Descriptions and ITAAC

AP1000 Design Control Document

| Table 2.2.3-4 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria | | |
|---|--|--|
| Design Commitment | Inspections, Tests, Analyses | Acceptance Criteria |
| 5.a) The seismic Category I equipment identified in Table 2.2.3-1 can withstand seismic design basis loads without loss of safety function. | <p>i) Inspection will be performed to verify that the seismic Category I equipment and valves identified in Table 2.2.3-1 are located on the Nuclear Island.</p> <p>ii) Type tests, analyses, or a combination of type tests and analyses of seismic Category I equipment will be performed.</p> <p>iii) Inspection will be performed for the existence of a report verifying that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions.</p> | <p>i) The seismic Category I equipment identified in Table 2.2.3-1 is located on the Nuclear Island.</p> <p>ii) A report exists and concludes that the seismic Category I equipment can withstand seismic design basis dynamic loads without loss of safety function. For the PXS containment recirculation and IRWST screens, a report exists and concludes that the screens can withstand seismic dynamic loads and also post-accident operating loads, including head loss and debris weights.</p> <p>iii) A report exists and concludes that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions. For the PXS containment recirculation and IRWST screens, a report exists and concludes that the as-built screens including their anchorage are bounded by the seismic loads and also post-accident operating loads, including head loss and debris weights.</p> |
| 5.b) Each of the lines identified in Table 2.2.3-2 for which functional capability is required is designed to withstand combined normal and seismic design basis loads without a loss of its functional capability. | Inspection will be performed verifying that the as-built piping meets the requirements for functional capability. | A report exists and concludes that each of the as-built lines identified in Table 2.2.3-2 for which functional capability is required meets the requirements for functional capability. |

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2. System Based Design Descriptions and ITAAC AP1000 Design Control Document

| Table 2.2.3-6 | | |
|--|---|-------------------------------|
| Equipment | Tag No. | Function |
| Hot Leg Sample Isolation Valves | PSS-PL-V001A/B | Transfer open |
| Liquid Sample Line Containment Isolation Valves IRC | PSS-PL-V010A/B | Transfer open |
| Containment Pressure Sensors | PCS-012, 013, 014 | Sense pressure |
| RCS Wide Range Pressure Sensors | RCS-191A, B, C, D | Sense pressure |
| SG1 Wide Range Level Sensors | SGS-011, 012, 015, 016 | Sense level |
| SG2 Wide Range Level Sensors | SGS-013, 014, 017, 018 | Sense level |
| Hydrogen Monitors | VLS-001, 002, 003 | Sense concentration |
| Hydrogen Igniters | VLS-EH-01 through 64 | Ignite hydrogen |
| Containment Electrical Penetrations | P01, P02, P03, P06, P09, P10, P11, P12, P13, P14, P15, P16, P18, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32 | Maintain containment boundary |

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2. System Based Design Descriptions and ITAAC

AP1000 Design Control Document

| Table 2.3.5-2 Inspections, Tests, Analyses, and Acceptance Criteria | | |
|---|---|---|
| Design Commitment | Inspections, Tests, Analyses | Acceptance Criteria |
| 1. The functional arrangement of the MHS is as described in the Design Description of this Section 2.3.5. | Inspection of the as-built system will be performed. | The as-built MHS conforms with the functional arrangement as described in the Design Description of this Section 2.3.5. |
| 2. The seismic Category I equipment identified in Table 2.3.5-1 can withstand seismic design basis loads without loss of safety function. | i) Inspection will be performed to verify that the seismic Category I equipment identified in Table 2.3.5-1 is located on the Nuclear Island. ii) Type tests, analyses, or a combination of type tests and analyses of seismic Category I equipment will be performed. iii) Inspection will be performed for the existence of a report verifying that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions. | i) The seismic Category I equipment identified in Table 2.3.5-1 is located on the Nuclear Island. ii) A report exists and concludes that the seismic Category I equipment can withstand seismic design basis loads without loss of safety function. iii) A report exists and concludes that the as-built equipment including anchorage is seismically bounded by the tested or analyzed conditions. |
| 3.a) The polar crane is single failure proof. | i) Validation of double design factors is provided for hooks where used as load bearing components. Validation of redundant factors is provided for load bearing components such as: <ul style="list-style-type: none"> Hoisting ropes Sheaves Equalizer assembly Holding brakes ii) Testing of the polar crane is performed. iii) Testing of the polar crane is performed. | i) A report exists and concludes that the polar crane is single failure proof. A certificate of conformance from the vendor exists and concludes that the polar crane is single failure proof. ii) The polar crane shall be static-load tested to 125% of the rated load. iii) The polar crane shall lift a test load that is 100% of the rated load. Then it shall lower, stop, and hold the test load. |

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2. System Based Design Descriptions and ITAAC

AP1000 Design Control Document

| Table 2.3.5-2 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria | | |
|--|---|--|
| Design Commitment | Inspections, Tests, Analyses | Acceptance Criteria |
| 3.b) The cask handling crane is single failure proof. | <p>i) <u>Validation</u> of double design factors is provided for hooks where used as load bearing components. Validation of redundant factors is provided for load bearing components such as:</p> <ul style="list-style-type: none"> • Hoisting ropes • Sheaves • Equalizer assembly • Holding brakes <p>ii) <u>Testing of the cask handling crane is performed.</u></p> <p>iii) <u>Testing of the cask handling crane is performed.</u></p> | <p>i) <u>A</u> report exists and concludes that the cask handling crane is single failure proof. A certificate of conformance from the vendor exists and concludes that the cask handling crane is single failure proof.</p> <p>ii) <u>The cask handling crane shall be static load tested to 125% of the rated load.</u></p> <p>iii) <u>The cask handling crane shall lift a test load that is 100% of the rated load. Then it shall lower, stop, and hold the test load.</u></p> |
| 3.c) The equipment hatch hoist is single failure proof. | <p>i) <u>Validation</u> of double design factors is provided for hooks where used as load bearing components. Validation of redundant factors is provided for load bearing components such as:</p> <ul style="list-style-type: none"> • Hoisting ropes • Sheaves • Equalizer assembly • Holding brakes <p>ii) <u>Testing of the equipment hatch hoist is performed.</u></p> | <p>i) <u>A</u> report exists and concludes that the equipment hatch hoist is single failure proof. A certificate of conformance from the vendor exists and concludes that the equipment hatch hoist is single failure proof.</p> <p>ii) <u>The equipment hatch hoist holding mechanism shall stop and hold the hatch.</u></p> |

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Comment [tw10]: 24

Deleted: The cask handling crane shall be static-load tested to 125% of the rated load.¶ The cask handling crane shall lift a test load that is 100% of the rated load. Then it shall lower, stop, and hold the test load.

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Comment [tw11]: 24

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Deleted: The equipment hatch hoist holding mechanism shall stop and hold the hatch.

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2. System Based Design Descriptions and ITAAC

AP1000 Design Control Document

| Table 2.3.5-2 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria | | |
|--|---|--|
| Design Commitment | Inspections, Tests, Analyses | Acceptance Criteria |
| 3.d) The maintenance hatch hoist is single failure proof. | i) Validation of double design factors is provided for hooks where used as load bearing components. Validation of redundant factors is provided for load bearing components such as: <ul style="list-style-type: none"> • Hoisting ropes • Sheaves • Equalizer assembly • Holding brakes ii) Testing of the maintenance hatch hoist is performed. | i) A report exists and concludes that the maintenance hatch hoist is single failure proof. A certificate of conformance from the vendor exists and concludes that the maintenance hatch hoist is single failure proof. ii) The maintenance hatch hoist holding mechanism shall stop and hold the hatch. |
| 4. The cask handling crane cannot move over the spent fuel pool. | Testing of the cask handling crane is performed. | The cask handling crane does not move over the spent fuel pool. |

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2. System Based Design Descriptions and ITAAC

AP1000 Design Control Document

| Table 2.3.8-1 | | | |
|---|--------------|-------------------------|------------------|
| Equipment Name | Tag No. | Display | Control Function |
| Service Water Pump A (Motor) | SWS-MP-01A | Yes (Run Status) | Start |
| Service Water Pump B (Motor) | SWS-MP-01B | Yes (Run Status) | Start |
| Service Water Cooling Tower Fan A (Motor) | SWS-MA-01A | Yes (Run Status) | Start |
| Service Water Cooling Tower Fan B (Motor) | SWS-MA-01B | Yes (Run Status) | Start |
| Service Water Pump 1A Flow Sensor | SWS-004A | Yes | - |
| Service Water Pump 1B Flow Sensor | SWS-004B | Yes | - |
| Service Water Pump A Discharge Valve | SWS-PL-V002A | Yes (Valve Position) | Open |
| Service Water Pump B Discharge Valve | SWS-PL-V002B | Yes (Valve Position) | Open |
| Service Water Pump A Discharge Temperature Sensor | SWS-005A | Yes | - |
| Service Water Pump B Discharge Temperature Sensor | SWS-005B | Yes | - |
| Service Water Cooling Tower Basin Level | SWS-009 | Yes | - |

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Note: Dash (-) indicates not applicable.

2. System Based Design Descriptions and ITAAC

AP1000 Design Control Document

| Table 2.3.13-2 | | |
|----------------------------------|--------------|-------------------------------|
| Equipment Name | Tag No. | Control Function |
| Hot Leg 1 Sample Isolation Valve | PSS-PL-V001A | Transfer Open/Transfer Closed |
| Hot Leg 2 Sample Isolation Valve | PSS-PL-V001B | Transfer Open/Transfer Closed |

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Deleted: Reactor Coolant System (RCS) Sample Isolation Valve A

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2. System Based Design Descriptions and ITAAC AP1000 Design Control Document

| Table 2.5.1-4 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria | | |
|--|---|--|
| Design Commitment | Inspections, Tests, Analyses | Acceptance Criteria |
| 3.g) The DAS signal processing cabinets are provided with the capability for channel testing without actuating the controlled components. | Channel tests will be performed on the as built system. | The capability exists for testing individual DAS channels without propagating an actuation signal to a DAS controlled component. |
| 3.h) The DAS equipment can withstand the room ambient temperature and humidity conditions that will exist at the plant locations in which the DAS equipment is installed at the times for which the DAS is designed to be operational. | Type tests, analyses, or a combination of type tests and analyses will be performed on the equipment. | A report exists and concludes that the DAS equipment can withstand the room ambient temperature and humidity conditions that will exist at the plant locations in which the DAS equipment is installed at the times for which the DAS is designed to be operational. |
| 4. The DAS hardware and any software are developed using a planned design process which provides for specific design documentation and reviews during the following life cycle stages: a) Development phase for hardware and any software b) System test phase c) Installation phase The planned design process also provides for the use of commercial off-the-shelf hardware and software. | Inspection will be performed of the process used to design the hardware and any software. | A report exists and concludes that the process defines the organizational responsibilities, activities, and configuration management controls for the following: a) Documentation and review of hardware and any software. b) Performance of tests and the documentation of test results during the system test phase. c) Performance of tests and inspections during the installation phase. The process also defines requirements for the use of commercial off-the-shelf hardware and software. |
| 5. The DAS manual actuation of ADS, IRWST injection, and containment recirculation can be executed correctly and reliably. | See Tier 1 Material, Table 3.2-1, item ii. | See Tier 1 Material, Table 3.2-1, item ii. |

Deleted: An evaluation will be made to confirm that the operator actions can be performed within the specified times.

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2. System Based Design Descriptions and ITAAC

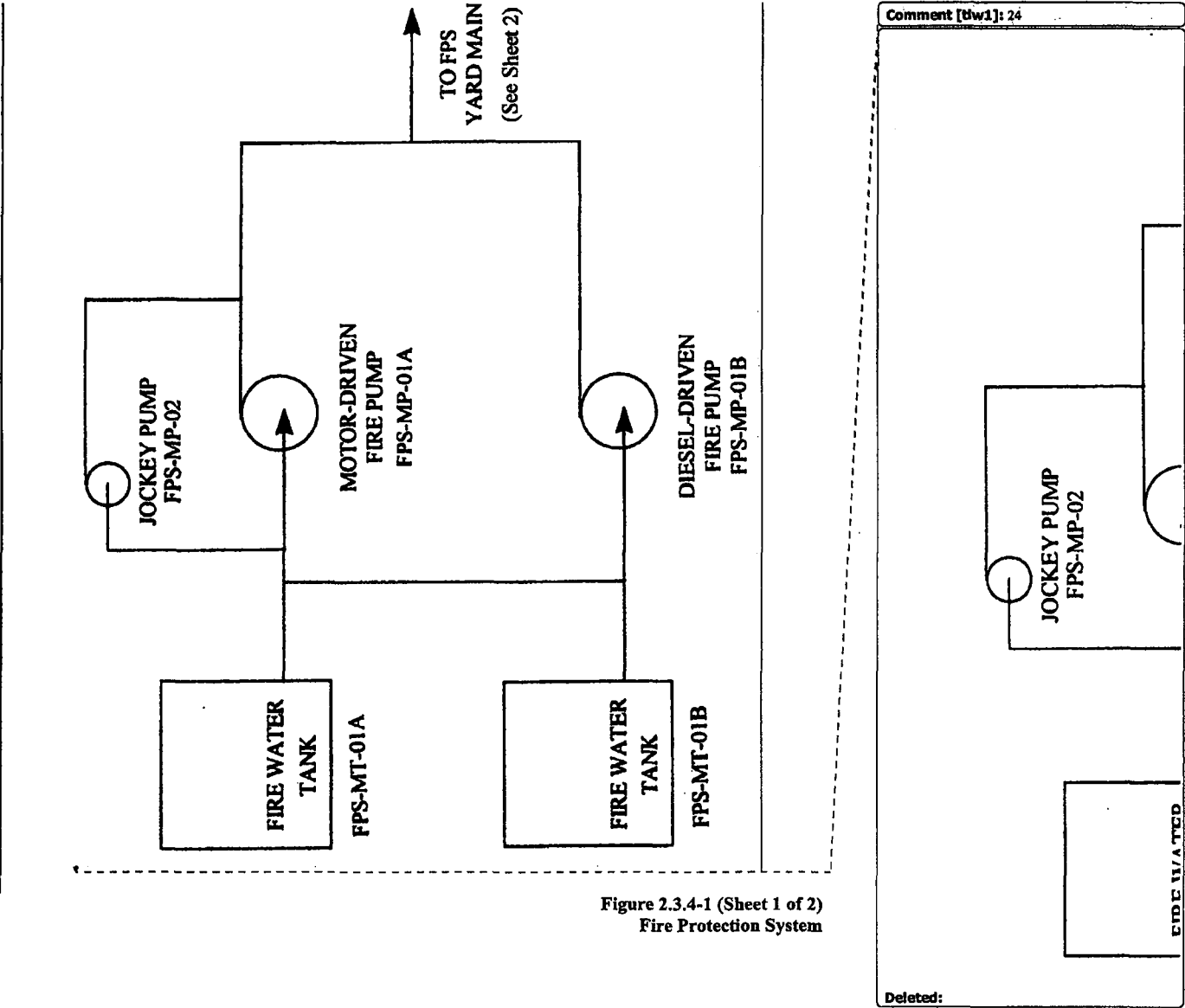
AP1000 Design Control Document

| Table 2.6.5-1 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria | | |
|--|--|---|
| Design Commitment | Inspections, Tests, Analyses | Acceptance Criteria |
| 5. The normal lighting can provide 50 foot candles at the safety panel and at the workstations in the MCR and at the RSW. | i) Testing of the as-built normal lighting in the MCR will be performed. | i) When adjusted for maximum illumination and powered by the main ac power system, the normal lighting in the MCR provides at least 50 foot candles at the safety panel and at the workstations. |
| | ii) Testing of the as-built normal lighting at the RSW will be performed. | ii) When adjusted for maximum illumination and powered by the main ac power system, the normal lighting in the RSW provides at least 50 foot candles at the safety panel and at the workstations. |
| 6. The emergency lighting can provide 10 foot candles at the safety panel and at the workstations in the MCR and at the RSW. | i) Testing of the as-built emergency lighting in the MCR will be performed. | i) When adjusted for maximum illumination and powered by the six Class 1E inverters, the emergency lighting in the MCR provides at least 10 foot candles at the safety panel and at the workstations. |
| | ii) Testing of the as-built emergency lighting at the RSW will be performed. | ii) When adjusted for maximum illumination and powered by the six Class 1E inverters, the emergency lighting provides at least 10 foot candles at the RSW. |

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2. System Based Design Descriptions and ITAAC
AP1000 Design Control Document



3. Non-System Based Design Descriptions & ITAAC

AP1000 Design Control Document

| Table 3.2-1 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria | | |
|--|---|---|
| Design Commitment | Inspections, Tests, Analyses | Acceptance Criteria |
| | <p>c) (ii) Tests and analyses of the following plant evolutions and transients, using a facility that physically represents the MCR configuration and dynamically represents the MCR HSI and the operating characteristics and responses of the AP1000 design, will be performed:</p> <ul style="list-style-type: none"> - Normal plant heatup and startup to 100% power - Normal plant shutdown and cooldown to cold shutdown - Transients: reactor trip and turbine trip - Accidents: <ul style="list-style-type: none"> - Small-break LOCA - Large-break LOCA - Steam line break - Feedwater line break - Steam generator tube rupture | <p>c) (ii) A report exists and concludes that: The test and analysis results demonstrate that the MCR operators can perform the following:</p> <ul style="list-style-type: none"> - Heat up and start up the plant to 100% power - Shut down and cool down the plant to cold shutdown - Bring the plant to safe shutdown following the specified transients - Bring the plant to a safe, stable state following the specified accidents |
| d) Issue resolution verification | d) An evaluation of the implementation of the HFE design issue resolution verification will be performed. | d) A report exists and concludes that: HFE design issue resolution verification was conducted in conformance with the implementation plan and includes verification that human factors issues documented in the design issues tracking system have been addressed in the final design. |
| e) Plant HFE/HSI (as designed at the time of plant startup) verification | e) An evaluation of the implementation of the plant HFE/HSI (as designed at the time of plant startup) verification will be performed. | e) A report exists and concludes that: The plant HFE/HSI, as designed at the time of plant startup, is consistent with the HFE/HSI verified in 1.a) through 1.d). |

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3. Non-System Based Design Descriptions & ITAAC

AP1000 Design Control Document

| Table 3.3-6 (cont.) Inspections, Tests, Analyses, and Acceptance Criteria | | |
|---|---|--|
| Design Commitment | Inspections, Tests, Analyses | Acceptance Criteria |
| 13. Separation is provided between the structural elements of the turbine, annex and radwaste buildings and the nuclear island structure. This separation permits horizontal motion of the buildings in the safe shutdown earthquake without impact between structural elements of the buildings. | An inspection of the separation of the nuclear island from the annex, radwaste and turbine building structures will be performed. The inspection will verify the specified horizontal clearance between structural elements of the adjacent buildings, consisting of the reinforced concrete walls and slabs, structural steel columns and floor beams. | The minimum horizontal clearance above floor elevation 100'-0" between the structural elements of the annex and radwaste buildings and the nuclear island is 4 inches. The minimum horizontal clearance above floor elevation 100'-0" between the structural elements of the turbine building and the nuclear island is 12 inches. |
| 14. The external walls, doors, ceiling, and floors in the main control room, the central alarm station, and the secondary alarm station are bullet-resistant to at least Underwriters Laboratory Ballistic Standard 752, level 4. | Type test, analysis, or a combination of type test and analysis will be performed for the external walls, doors, ceilings, and floors in the main control room, the central alarm station, and the secondary alarm station. | A report exists and concludes that the external walls, doors, ceilings, and floors in the main control room, the central alarm station, and the secondary alarm station are bullet-resistant to at least Underwriters Laboratory Ballistic Standard 752, level 4. |
| 15. Deleted. | | |
| 16. Secondary security power supply system for alarm annunciator equipment and non-portable communications equipment is located within a vital area. | An inspection will be performed to ensure that the location of the secondary security power supply equipment for alarm annunciator equipment and non-portable communications equipment is within a vital area. | Secondary security power supply equipment for alarm annunciator equipment and non-portable communication equipment is located within a vital area. |
| 17. Vital areas are locked and alarmed with active intrusion detection systems that annunciate in the central and secondary alarm stations upon intrusion into a vital area. | An inspection of the as-built vital areas, and central and secondary alarm stations are performed. | Vital areas are locked and alarmed with active <u>intrusion detection systems</u> and intrusion is detected and annunciated in both the central and secondary alarm stations. |
| 18. Deleted. | | |

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ENCLOSURE 3

Redacted Version, Withheld Under 10 CFR 2.390d

Figure 3.3-14

**3. Non-System Based Design
Descriptions & ITAAC**

AP1000 Design Control Document

Redacted Version - Withheld Under 10 CFR 2.390d

SRI

**Figure 3.3-14
Nuclear Island Dimensions at
Elevation 66'-6"**