AP1000 Documentation and Implementation of Regulatory Treatment of Non-Safety Systems (RTNSS)

Introduction

Matthew Evans

Westinghouse Electric Company

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Determination of RTNSS Components

- AP1000 SSCs included within the scope of RTNSS have been documented in WCAP-15985, Rev. 2 (APP-GW-GL-026)
  - Transmitted to the NRC on 09/09/2003 (ML032540843)
  - WCAP-15985, Rev. 2, reviewed as part of the AP1000 design certification per NUREG-1793, Chapter 22 (AP1000 FSER)

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Identification of RTNSS Components

- All RTNSS SSCs are Equipment Class ’D’ in accordance with the AP1000 Safety Classification process (DCD Section 3.2.2)
  - Equipment Class is depicted on P&IDs
  - Classification is documented in System SSDs (Appendix F)

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RTNSS Actions

- Most RTNSS SSCs are documented in the Investment Protection Short Term Availability Controls (IPSTACs) documented in DCD Chapter 16, Technical Specifications
- “Supplemental” Quality Assurance is applied to all SSCs included in the IPSTACs in accordance with DCD Table 17-1
  - QA Procedure APP-GW-GAM-200

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D-RAP / RTNSS Comparison

- D-RAP includes the vast majority of RTNSS SSCs
- The differences between D-RAP and RTNSS scope include:
  - DAS Sensors
  - Diesel Fuel Oil Pumps
  - AC Power Regulating Transformers
  - Non-1E DC Batteries
- All Equipment Class ‘D’ RTNSS SSCs have been administratively added to the D-RAP for simplification in design specification implementation

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Implementation of Regulatory Oversight Recommendations

- Seismic design considerations are documented in DCD Table 3.2-3 in accordance with WCAP-15985 recommendations
- For SSCs contained in the IPSTACs, inclusion in the D-RAP is identified in specifications and data sheets
  - Comparisons of D-RAP and RTNSS scope are documented in APP-GW-GRR-009
  - Requires application of APP-GW-GAM-200

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