

ISG-06 Enclosure B Roadmap, Phase 2 Documents

Two variations of the roadmap are included in this attachment; both map the Phase 2 documents provided in Enclosures 4.1 and 6.1 of this submittal against ISG-06 Enclosure B:

1. ISG-06 Enclosure B Item mapped to the HCGS PRNM GEH Document(s)
2. HCGS PRNM GEH Document mapped to the ISG-06 Enclosure B Item(s)

HCGS PRNM Upgrade - ISG-06 Enclosure B Roadmap

ISG-06 Enc B to Phase 2 Document Mapping (Tier 2 Submittal)

Enc B # 2.1

ISG-06 Section: D.4.4.2.1

Volatile

Safety Analysis (D.4.4.2.1)

Phase 2 (GEH) Document

001N5787 HCGS PRNM System Safety Analysis Task Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.2

ISG-06 Section: D.4.4.2.2

Volatile

V&V Reports (D.4.4.2.2)

Phase 2 (GEH) Document

001N5721 HCGS PRNM System Verification and Validation Task Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.3

ISG-06 Section: D.4.4.2.3

Volatile

As-Manufactured, System Configuration Documentation (D.4.4.2.3)

Phase 2 (GEH) Document

001N5886 HCGS PRNM System Configuration Management Task Report (including System Configuration Management Status Accounting Spreadsheet)

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.4

ISG-06 Section: D.4.4.2.4

Volatile

Test Design Specification (D.4.4.2.4)

Phase 2 (GEH) Document

003N4828 HCGS PRNM Verification & Validation Test Summary Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.5

ISG-06 Section: D.4.4.2.4

Volatile

Summary Test Reports (Including FAT) (D.4.4.2.4)

Phase 2 (GEH) Document

003N4828 HCGS PRNM Verification & Validation Test Summary Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.6

ISG-06 Section: D.4.4.2.4

Volatile

Summary of Test Results (Including FAT) (D.4.4.2.4)

Phase 2 (GEH) Document

003N4828 HCGS PRNM Verification & Validation Test Summary Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.7

ISG-06 Section: D.9.4.2

Volatile

Requirement Traceability Matrix (D.9.4.2)

Phase 2 (GEH) Document

001N5721 HCGS PRNM System Verification and Validation Task Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.8

ISG-06 Section: D.9.4.2.1.1

Volatile

FMEA (D.9.4.2.1.1)

Phase 2 (GEH) Document

003N2569 HCGS PRNM Failure Modes and Effects Analysis Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.9

ISG-06 Section: D.4.4.3.5

Volatile

System Build Documents (D.4.4.3.5)

Phase 2 (GEH) Document

**001N5886 HCGS PRNM System Configuration Management Task Report
(including System Configuration Management Status Accounting Spreadsheet)**

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.11

ISG-06 Section: D.5.2

Volatile

Qualification Test Methodologies (D.5.2)

Phase 2 (GEH) Document

002N9894 HCGS PRNM Qualification Summary Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.12

ISG-06 Section: D.5.2

Volatile

Summary of Digital EMI, Temp., Humidity, and Seismic Testing Results (D.5.2)

Phase 2 (GEH) Document

002N9894 HCGS PRNM Qualification Summary Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.13

ISG-06 Section: D.9.2

Volatile

As-Manufactured Logic Diagrams (D.9.2)

Phase 2 (GEH) Document

NA-Incorrect ISG-06 Enc B Reference-as built system verified via other Phase 2 docs

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.14

ISG-06 Section: D.9.4.2.4

Volatile

System Response Time Confirmation Report (D.9.4.2.4)

Phase 2 (GEH) Document

003N4828 HCGS PRNM Verification & Validation Test Summary Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.15

ISG-06 Section: D.9.4.2.15, D.10.4.2.15

Volatile

Reliability Analysis (D.9.4.2.15, D.10.4.2.15)

Phase 2 (GEH) Document

003N2682 HCGS PRNM Reliability Analysis

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.16

ISG-06 Section: D.9.4.3.8

Volatile

Setpoint Calculations (D.9.4.3.8)

Phase 2 (GEH) Document

Per Phase 1 LAR Attachment 1, Section 4.8.4: The supporting calculations are available for NRC audit

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B # 2.17

ISG-06 Section: D.10.4.2.3.2

Volatile

Software Tool Analysis Report (D.10.4.2.3.2)

Phase 2 (GEH) Document

001N5721 HCGS PRNM System Verification and Validation Task Report

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

Enc B #

ISG-06 Section: D.10.4.2.4.2

Volatile

Commercial Grade Dedication Report(s) (D.10.4.2.4.2)

Phase 2 (GEH) Document

As discussed in Phase 1 LAR Appendix O Section 4.3.4.2

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix NA

HCGS PRNM Upgrade - ISG-06 Enclosure B Roadmap

Phase 2 Document to ISG-06 Enclosure B Mapping (Tier 2 Submittal)

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

001N5787 HCGS PRNM System Safety Analysis Task Report

Volatile

ISG-06 Enc B / Subject (Section)

Safety Analysis (D.4.4.2.1)

Enc B #

Section:

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

001N5721 HCGS PRNM System Verification and Validation Task Report

Volatile

ISG-06 Enc B / Subject (Section)

V&V Reports (D.4.4.2.2)

Enc B #

Section:

Requirement Traceability Matrix (D.9.4.2)

Enc B #

Section:

Software Tool Analysis Report (D.10.4.2.3.2)

Enc B #

Section:

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

001N5886 HCGS PRNM System Configuration Management Task Report (including System Configuration Management Status Accounting Spreadsheet)

Volatile

ISG-06 Enc B / Subject (Section)

**As-Manufactured, System Configuration
Documentation (D.4.4.2.3)**

Enc B #

Section:

System Build Documents (D.4.4.3.5)

Enc B #

Section:

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

003N4828 HCGS PRNM Verification & Validation Test Summary Report

Volatile

ISG-06 Enc B / Subject (Section)

Test Design Specification (D.4.4.2.4)

Enc B #

Section:

Summary Test Reports (Including FAT) (D.4.4.2.4)

Enc B #

Section:

Summary of Test Results (Including FAT) (D.4.4.2.4)

Enc B #

Section:

System Response Time Confirmation Report (D.9.4.2.4)

Enc B #

Section:

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

003N2569 HCGS PRNM Failure Modes and Effects Analysis Report

Volatile

ISG-06 Enc B / Subject (Section)

FMEA (D.9.4.2.1.1)

Enc B #

Section:

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

002N9894 HCGS PRNM Qualification Summary Report

Volatile

ISG-06 Enc B / Subject (Section)

Qualification Test Methodologies (D.5.2)

Enc B #

Section:

Summary of Digital EMI, Temp., Humidity, and Seismic Testing Results (D.5.2)

Enc B #

Section:

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix

003N2682 HCGS PRNM Reliability Analysis

Volatile

ISG-06 Enc B / Subject (Section)

Reliability Analysis (D.9.4.2.15, D.10.4.2.15)

Enc B #

Section:

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix NA

As discussed in Phase 1 LAR Appendix O Section 4.3.4.2

Volatile

ISG-06 Enc B / Subject (Section)

Commercial Grade Dedication Report(s) (D.10.4.2.4.2)

Enc B #

Section:

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix NA

NA-Incorrect ISG-06 Enc B Reference-as built system verified via other Phase 2 docs

Volatile

ISG-06 Enc B / Subject (Section)

As-Manufactured Logic Diagrams (D.9.2)

Enc B #

Section:

Rev No: LAR Phase 2 Supplement, Enclosure 4.1, NEDC-33872P Appendix NA

Per Phase 1 LAR Attachment 1, Section 4.8.4: The supporting calculations are available for NRC audit

Volatile

ISG-06 Enc B / Subject (Section)

Setpoint Calculations (D.9.4.3.8)

Enc B #

Section: