



Combined License Application Review STP Units 3 and 4

Safety Panel 1

November 19, 2015

Panelists

- **Tom Tai – Senior Project Manager**
- **Richard Turtill – Senior Financial Analyst**
- **Dinesh Taneja – Senior Electronics Engineer**

Departures Summary

- **Total departures – 275**
- **Departures – Tier 1, Tier 2*, Tier 2 and Technical Specifications (TS)**
- **Tier 1, Tier 2*, and TS departures require NRC approval**
- **Tier 2 departures generally do not require NRC approval**

Tier 1 and TS Departures

- **Tier 1 departures – depart from certified portion of design**
- **TS departures – depart from ABWR Technical Specifications**
- **Exemptions are required for Tier 1 and TS departures**

Tier 2* and Tier 2 Departures

- **Tier 2* departures require NRC approval but do not require an exemption**
- **Tier 2 departures use 50.59-like change process**
- **One Tier 2 departure required prior NRC approval**

Tier 2 Departures

- **Staff confirmed it was reasonable that Tier 2 departures do not require NRC approval**
 - **Applied 50.59-like criteria**
 - **Examined applicant's process**
 - **Some requests for additional information**

Exemptions

- **Exemption request for material control and accounting**
- **Exemption request for financial qualifications**

Examples Covered In This Presentation

- **Exemption request – financial qualifications**
- **Tier 1 departure – STD DEP 3.4-1, Safety Related I&C Architecture**

Current Regulatory Framework for Financial Qualifications

- **Current requirements in 10 CFR 50.33(f) and Part 50, Appendix C**
- **COL applicants must possess or have reasonable assurance of obtaining the funds to cover construction and operation costs**

Challenges With Current Standard

- **Applicant could not meet current requirements and requested a more flexible approach**
- **SECY-13-0124 provided policy options for Commission action**

SRM on SECY-13-0124

- **Change Part 50 by rulemaking to use Part 70 standard**
- **Applicants can rely on license conditions**
- **Consider granting exemptions during pendency of rulemaking, but exemptions must anticipate the outcome of the rulemaking**

Draft Regulatory Basis

- **Draft Regulatory Basis addressed new Part 70 standard**
- **Staff discussed draft proposed requirements with public and solicited comment**
- **Comments supported change in financial qualification standard**

Financial Capacity

- **Reflects applicant's understanding of project size and scope**
- **Is not a predictive finding that applicant will obtain financing**
- **Supports staff's determination that applicant appears to be financially qualified**

NINA Exemption Request

- **NINA provided:**
 - **Reasonable cost estimates for construction and operation**
 - **Acceptable Financial Capacity Plan**
 - **License conditions ensuring adequate funding prior to construction and operation**

NINA Exemption Request

- **NINA meets the proposed standards in the Draft Regulatory Basis**
- **NINA satisfies the requirements for an exemption**
- **NINA's exemption request should be granted**

Tier 1 Departure On I&C Architecture

- **Selection of digital instrumentation and control (I&C) platforms resulted in changes to I&C architecture**
- **Data communication design changed the most**

Tier 1 Departure On I&C Architecture

- **Diverse digital platforms are used for the Engineered Safety Features System and the Reactor Trip System**
- **Changes enhance protection against failures**

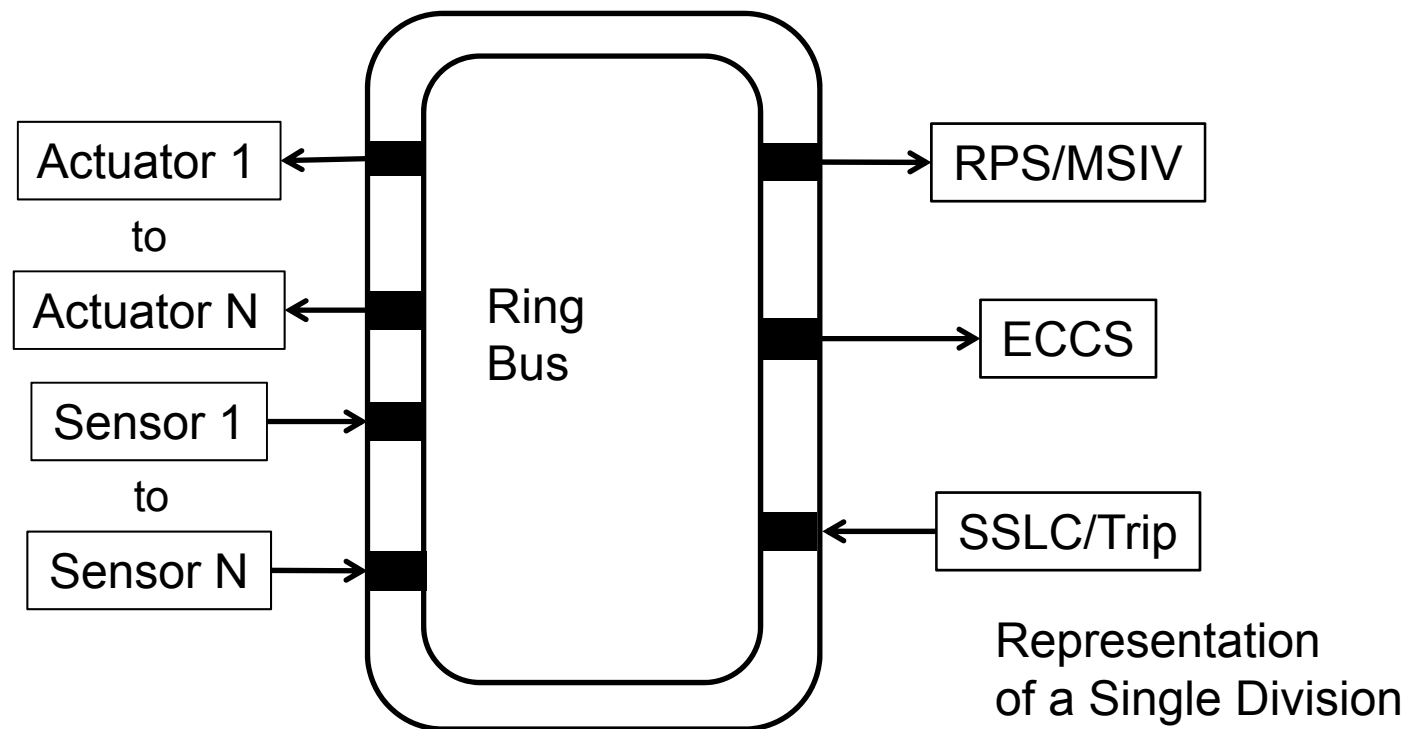
Tier 1 Departure On I&C Architecture

- **Review based on current regulations and staff guidance**
- **Staff concluded the modified I&C design conforms with current requirements**

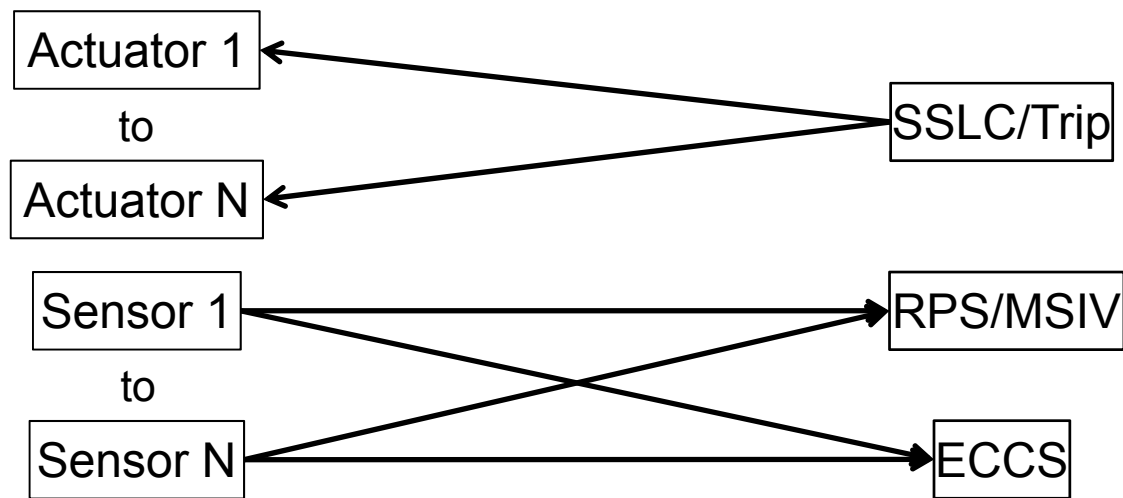
Questions?

Backup Slides

Certified U.S. ABWR Ring Bus Design



STP Point-to-Point Data Communication Design



Representation
of a Single Division