



## Turkey Point Unit 3 and Unit 4

# Reactor Protection System Engineered Safety Feature Actuation System Nuclear Instrumentation System Replacements

**Safety System Replacement Project LAR  
NRC 4th Presubmittal Meeting Telecon**

**April 8, 2021  
OPEN MEETING**

# Agenda – Open and Closed Sessions

- **Open Session**
  - Action Items From Feb 18th Presubmittal Meeting
  - Vendor Oversight Procedure Implementation
  - Next Pre-submittal Meeting Content and Schedule
- **Closed Session**
  - Architecture Overview
  - Human System Interface Overview
  - Human Factors Engineering Program Plan
  - Cybersecurity Overview
  - Technical Specification Surveillance Extension/Reduction
  - Lifecycle Schedule

# Introductions – Project Team

- **FPL Nuclear Licensing**
  - Steve Catron – Licensing Fleet Manager
  - Jarrett Mack – Fleet Licensing Lead
  - David Stoia – Turkey Point Site Licensing Lead
  - Bill Maher – Improved Technical Specification Project Director
- **FPL Nuclear Engineering**
  - Brian Dunn – Fleet Design Director
  - Phil Barnes – Design Engineering Manager
  - Wes Frewin – Fleet Digital Design Supervisor
  - Warren Busch – Project Engineer
- **FPL Nuclear Oversight**
  - Rich Baird – Nuclear Oversight & Assessment Director
- **FPL Information Technology**
  - Brian Derrico – Cybersecurity Manager
- **Framatome**
  - Ron Legrand – Project Manager
  - Brian Haynes – Licensing Lead
  - Taha Abdelnaeem - Engineering Lead
  - Ted Quinn – Licensing Engineer
  - Jerry Mauck – Licensing Engineer
  - Ron Jarrett – Licensing Engineer
  - Rick Turk – Licensing Engineer (HFE)
  - Bill Hannaman – Licensing Engineer (HFE)
- **Sargent & Lundy -Third Party Review**
  - Pareez Golub

# Open Items from February 18th Open Meeting

- **Vendor oversight implementation procedure information**
- **Coordination with ITS submittal and approval process**
- **Lessons learned from NRC workshop Feb 10<sup>th</sup>**
  - Feedback on additional information from NRC on inspection procedures
- **LAR Presentation (recommended for future meeting)**
  - Method of PSAI info presentation
  - Tech Spec Extension/Reduction structure - compartmentalized
  - LAR commitments
- **Establishment of e-reading room at the time of LAR submittal**

# Vendor Oversight Plan - Implementing Procedures

- **Follow-up from previous pre-submittal meetings to provide detail on oversight activity implementation**
- **Vendor Oversight Plan content**
  - Describes the implementation of vendor oversight activities within the structure of FPL procedures
  - Lists procedure actions required that are oversight activities
  - Identifies programmatic plans and procedures, activities, and documents included in the scope of oversight activities
  - Identifies regulatory and industry guidance on acceptance criteria that flow down to document reviews
  - Includes references to documentation of oversight activity completion
- **Procedures directly involved**
  - Quality Assurance
  - Engineering
  - Project Management
  - Information Technology (Cyber Security)

# Vendor Oversight Plan – Implementing Procedures

- **Quality Assurance**

- Scope of QA oversight activities consistent with applicable portions of NRC Inspection Manual, Inspection Procedure 35017, Quality Assurance Implementation Acceptance
- Audit Topic Selection and Scheduling – Defines scope, activities, protocol
- Performance of Nuclear Assurance Audits – audit preparation, execution and documentation of audit reports and finding resolution

- **Engineering Procedures**

- Implementation and Design Output Criterion, ML19087A230
- Control of Design Interfaces – control of receipt, distribution, review of vendor prepared documents, adequacy of deliverables
- Hardware Supplier Oversight – tabulates programmatic elements, deliverables, and acceptance criteria for activities performed at vendor facilities. Includes software development
- Engineering Risk Assessment and Mitigation – identify and address risk significant technical work, management oversight and 3<sup>rd</sup> party reviews
- Cyber Security Controls for Systems Development Lifecycle – review approval of technical and management cyber security controls
- Standard Design Process/Design Change Packages – Stakeholder reviews of evaluations and implementation documents

# Vendor Oversight Plan – Implementing Procedures

- **Project and Risk Management Procedures**

- Nuclear Contract Management – requires document reviews by appropriate plant departments, challenge boards with senior management, field activity monitoring plan for installation phase
- Project Management – assessment of project risk and mitigation, oversight quality plan including vendor oversight, stakeholder reviews of implementation documents, readiness challenge prior to installation
- Nuclear Project Risk Management – evaluation of risks including vendor capability and performance, mitigation including vendor oversight and 3<sup>rd</sup> party reviews. Senior site management and vendor status meetings

- **Information Technology**

- Cyber Security Process – review of vendor configuration management and secure environment, review of design and assessments
- Information Security Requirements for the Procurement of Data and Services – trustworthiness of vendors, protection of supply chain from cyber threats

End of VOP Procedure slides

# Future Pre-submittal Recommended Meeting Agenda Items

- **Any open items from todays meeting, follow-up on existing open items**
- **License Amendment Request overview presentation**
  - Method for addressing Plant Specific Action Items
  - Technical Specification extension/reduction structure/format
  - LAR commitments
- **Diversity and Defense in Depth Evaluation Update**
- **Simulator and Training Plan and Schedule**

Thank you!

**Questions/Comments?**

# Acronym List

Actuation Logic Test	ALT
Anticipated Operational Occurrence	AOO
Channel Calibration Test	CCT
Channel Check	CC
Channel Operational Test	COT
Digital Input/Digital Output	DI/DO
Engineered Safety Features Actuation System	ESFAS
Factory Acceptance Test	FAT
Florida Power and Light	FPL
Functional Requirements Analysis	FRA
Framatome USA	Framatome
Human Factors Engineering	HFE
Human System Interface	HSI
Implementation Plan	IP
Independent Verification and Validation	IV&V
Institute of Electrical and Electronic Engineers	IEEE
Improved Standard Technical Specifications	ITS
Interim Staff Guidance	ISG

# Acronym List

License Amendment Request	LAR
Limiting Condition for Operation	LCO
Nuclear Instrumentation System	NIS
Operating Experience	OE
Reactor Protection System	RPS
Safe Development and Operational Environment	SDOE
Specified Acceptable Fuel Design Limits	SAFDL
Safety Evaluation Report	SER
Surveillance Frequency Control Program	SFCP
Safety Video Display Unit	SVDU
Technical Specification	Tech Spec (TS)
Tricon Communication Module	TCM
Tricon PLC	Tricon
Triple Modular Redundant	TMR
Turkey Point Nuclear Plant Units 3 & 4	T.P. 3&4
United States Nuclear Regulator Commission	NRC
Updated Final Safety Analysis Report	UFSAR
Vendor Oversight Plan	VOP

