



NRC PERSPECTIVES ON COMMERCIAL-GRADE DEDICATION

**NUPIC Vendor Meeting
June 2007**



Topic Areas

- What has changed in the commercial-grade dedication process.
- Recent NRC Observations of commercial-grade dedication.



Commercial-Grade Dedication Process Changes...

- From a regulatory perspective...**NOTHING!!!!**



Commercial-Grade Dedication Process

- NRC perspective is that the rules have not changed.
- Rules for the vendor are the same as to the licensee.



Commercial-Grade Dedication Process

- ANSI N18.7-1976/RG 1.33
 - “Off the shelf” items may be similarly procured, but care must be taken to assure at least equivalent performance.
- EPRI NP-5652 “Guidelines for the Utilization of Commercial-Grade Items in Nuclear Safety-Related Application.”



Commercial-Grade Dedication Process

- Generic Letter 89-02
 - Characteristics of effective procurement and dedication program:
 - Engineering involvement in the procurement process.
 - Product acceptance program.
 - Dedication Program to EPRI NP-5652.
- Generic Letter 91-05
 - Reiterated that licensees should identify the important design, material and performance characteristics for each part, material, and service intended for safety-related applications, establish acceptance criteria, and provide reasonable assurance of the conformance of items to these criteria.



NRC Inspection of Commercial-Grade Dedication

- NRC is revising inspection procedures to consolidate existing guidance.
- Draft Inspection Procedure, “Inspection of Commercial-Grade Dedication Programs,” to be published soon.



Recent NRC Observations

- Design Bases:
 - Licensees should convey the component's design bases information to the dedicating entity.
 - If procuring to a “generic design bases,” the licensee should ensure its component meets all critical characteristics tests that the dedicating entity has in the qualification package.
 - Dedicating entities' Qualification packages should be considering the licensee's most limiting conditions to provide reasonable assurance.



Recent NRC Observations

- Surveys:
 - Commercial-grade surveys are not a generic programmatic review of a vendor's quality controls.
 - Licensees should determine that their design bases are met by the critical characteristics to be verified.



Recent NRC Observations

- A like-for-like replacement is:
 - An item purchased from the same manufacturer.
 - An item with the same model or part number.
 - An item manufactured in same time-frame.
- Item Equivalency:
 - Item equivalency is not a purchasing function; it is an engineering function.



Commercial-Grade Dedication Summary

- A safety function determination should:
 - Consider both design bases and parts classification (e.g., seismic and environmental qualification).
- An engineering evaluation should:
 - Identify design/performance attributes (critical characteristics) necessary to perform SSC's safety function.
- Procurement activities should:
 - Confirm the engineering evaluation (e.g., surveys, testing).



Commercial-Grade Dedication Summary

- No Changes
- Starting Point: Design Bases
- Engineering Involvement
- Questions?