

EPEI ELECTRIC POWER RESEARCH INSTITUTE

Observations on Commercial Grade Item Dedication

Marc Tannenbaum Electric Power Research Institute Bhavesh Patel Progress Energy NRC Public Meeting August 1, 2011

Current Situation

- Licensees understand and are in compliance with existing regulations
- Clarity was established between NRC and Licensees in the late 1980s
- Enhanced guidance is available in NRC inspection plans (38703, 88114, 43004)

Current Situation

- Increased NRC communication with suppliers interested in new build opportunities has created:
 - -Some uncertainty about dedication process
 - -Perception that dedication is the only way to a "basic component"
 - Opportunity for previously resolved questions to resurface



Current Situation

- Dedication is used more frequently to address:
 Obsolescence
 - -Schedule demand (short lead times)
- New and existing suppliers are expanding application of dedication



Quality Requirements in Procurement Documents

- All orders for basic components are subject to Part 21
- Adequate guidance exists in ANSI N45.2.13 / NQA-1 for other technical and quality assurance requirements

Counterfeit, Fraudulent and Suspect Items

- Counterfeit, fraudulent and suspect items are a subset of nonconforming items
 - Utility investigates and reports for items accepted into stock
 - Supplier investigates and reports for items not accepted
- Reporting of defects and noncompliance for counterfeit and fraudulent items is implemented using the same processes and procedures as other nonconforming items



- EPRI will make EPRI training available to interested parties
- EPRI periodically revises existing guidance and training materials

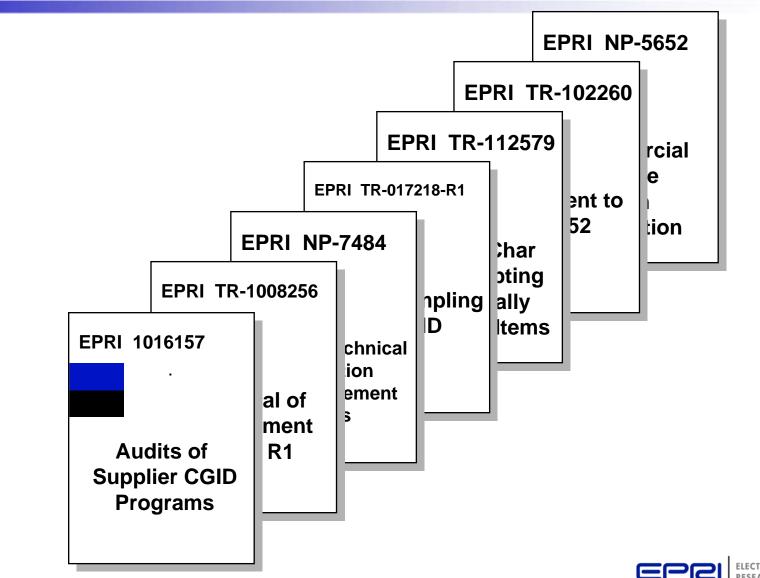


Regulatory Guidance on Dedication

- Regulatory guidance exists in:
 - Generic Letter 91-05
 - Inspection Procedures 43004, 38703, 88114
 - Information Notice 2011-01
- Industry guidance exists
 - ASME NQA-1, 2008 Edition / 2009 Addenda
 - EPRI NP-5652 (endorsed in GL 91-05) and others
- Existing guidance is incorporated in utility procedures
- EPRI guidance is currently available to suppliers



Relative EPRI Guidance is Publically Available



Definition of Dedication

- The current definition is appropriate and functional
- Key considerations
 - Restrictions noted in Generic Letter 91-05 apply
 - Receipt inspection and verification is always performed
 - Item and supplier history is used to select appropriate sampling plans



Definition of Commercial Grade Item

- The current definition is appropriate and well understood
 - Emphasizes that dedication is an acceptance process
 - Dedication may not be used for items when critical characteristics can not be verified after manufacturing



Two basic options exist to perform dedication

 Develop critical characteristics based upon the known safety function(s) of the item

- Critical characteristics are tied to safety function(s)

- Develop critical characteristics based upon design of the item and known uses
 - Critical characteristics are tied to design requirements
 - Broader scope of critical characteristics is required to address all possible functions
 - Scope of dedication (functions considered) should be clearly communicated



Dedication performed by third parties

- Scope of dedication must be clear
- Considerations
 - Knowledge of past dedications performed by the supplier
 - Utility review and approval of the dedication plan
 - Identification of safety function on purchase order and confirmation that supplier understands safety function
- Guidance is available in EPRI 1016157



EPRI Sampling Guidance

- Originally published EPRI NP-7218
- EPRI TR-017218-R1 (revision) clarifies
 - -Lot and batch formation for purchased items
 - -Use of destructive testing on small lots
- Current basis for most licensee sampling plans —Available to suppliers



EPER ELECTRIC POWER RESEARCH INSTITUTE

Questions?

Together...Shaping the Future of Electricity