# EPRI Update

## Procurement and Supply Chain

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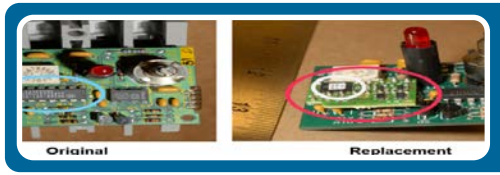
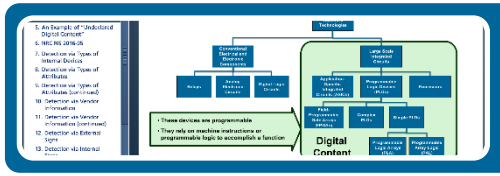
Technical Leader

**RAPID Conferences**
May 5, 2017

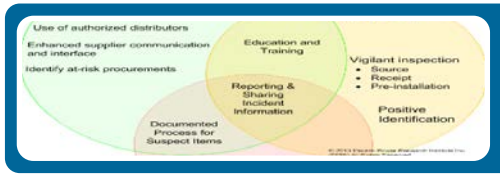
# Recently Completed  EPRI Products (www.epri.com)




Prevention and Detection of Undeclared Digital Content – 3002008010




Undeclared Digital Content CBT, version 1.0– 3002009558




Counterfeit, Fraudulent, and Suspect Items CBT (CFI), version 2.0 - 3002007381

Digital Equivalency Evaluation: Screening Checklist and Considerations - 3002007023

Technical Specialist Training 2.1 - 3002006989

Procurement Engineering Basics CBT – 3002005397

# EPRI Project Line-up for 2017 (Supply Chain & Procurement Engineering)

*Reverse Engineering Guidance* - Expand existing EPRI guidance on reverse engineering to include information on engineering evaluation necessary to accept reverse engineered items for use

*Technical Evaluation Efficiency Improvement* - Develop information that can be used to decrease the amount of time required to complete certain types of procurement engineering evaluations

*Advanced Commercial Grade Dedication Seminar* - Instructor-led seminar that presents the detailed commercial grade dedication process in its entirety and provides students with the opportunity to complete a dedication technical evaluation over the course of the seminar.

*Safety Classification Computer-based Training* - A computer-based training course that communicates the basis concepts and methodology involved in performing safety classification of spare and replacement items

*Critical Spares Implementation and Lessons Learned* - Build on EPRI 1019162 via benchmarking and critical spares program experience. Focus on identification of critical spares and how to best make them available for use. Research will consider elements of INPO's parts quality and availability best practices document

# Other Industry Initiative-Related Work in 2017 (Supply Chain & Procurement Engineering)

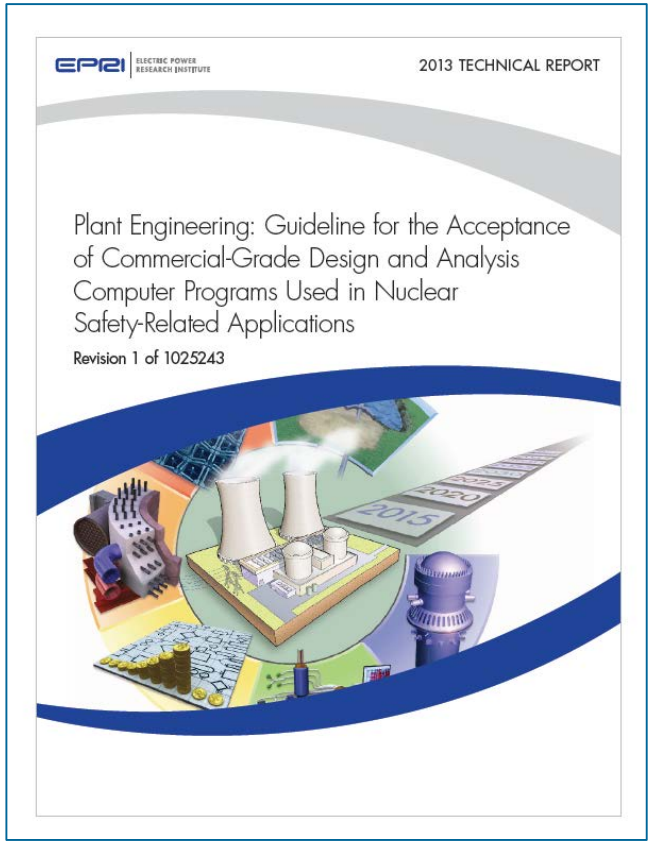
*Standard Equivalency Evalution Procedure* – Development of a procedure that can be used by all licensees to promote standard equivalency evaluation practices and facilitate sharing of completed evaluations

*Risk-based Safety Classification and Procurement Treatment* – Determine appropriate procurement treatment for items that are classified as safety-related, low-risk

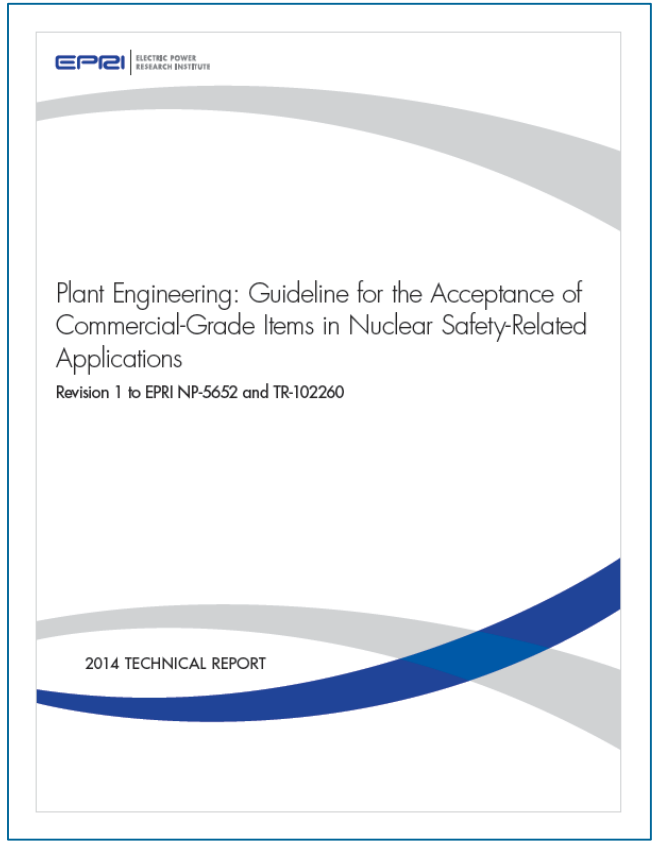
# NRC review/endorsement of EPRI dedication guidance

- There are two (2) guidance documents

Dedication of Design/Analysis Computer Programs
3002002289




Dedication of Commercial Grade Items
3002002982



# NRC review/endorsement of EPRI dedication guidance

## 3002002289 Dedication of Design & Analysis Computer Programs

- NRC DG 1305
- Endorsement complete as of January 3, 2017
- NRC RG 1.231, Acceptance of Commercial-grade Design and Analysis Computer Programs Used in Safety-related Applications for Nuclear Power Plants
- Several regulatory positions
  - Not for plant process applications
  - Applies to dedication, not safety classification
  - “should” means “shall”

## 3002002982 Dedication of Commercial Grade Items

- NRC DG 1292 (eventually RG 1.164)
  - http://www.nrc.gov/docs/ML1531/ML15313A425.pdf
- Review in progress
- NRC staff review of public and staff comments is underway
- Anticipated completion is Spring of 2017
- Anticipated regulatory positions
  - Endorsement does not include several referenced digital and seismic EPRI guidelines

# RG 1.231 Regulatory Conditions (EPRI 3002002289)

## Computer Programs

- Not acceptable dedication methodology for process (installed or embedded) computer programs or software tools *associated with process computer* programs.

- Use *limited to design and analysis applications*.
  - NRC's limited acceptance *is not meant to preclude a user from using the guidance for other applications, but the RG expresses no position on the capability or acceptability of the EPRI guidance in such applications*.

- "Should" means "Shall"

# DG 1292 Regulatory Conditions (EPRI 3002002982)

**Items**

- Reference is made in 3002002982 to:
  - EPRI NP NP-7874 “Seismic Technical Evaluation of Replacement Items for Nuclear Power Plants (STERI)” (Ref. 14), and
  - EPRI TR 105849, “Plant Support Engineering: Generic Seismic Technical Evaluations of Replacement Items for Nuclear Power Plants,” Revision 1 (Ref. 15).
  - “*The NRC does not find these two EPRI documents to be acceptable for use, and in general does not find the use of generic testing data bases acceptable as a means for maintaining or providing seismic qualification of seismically sensitive replacement components*. The results of previously performed and properly documented and controlled seismic testing may be applied where an equivalency evaluation has been performed to ensure that no changes have been made to the component in question since the original testing was completed
- Reference is made in 3002002982 to:
  - EPRI TR-106439, “Guideline on Evaluation and Acceptance of Commercial-Grade Digital Equipment for Nuclear Safety Applications”
  - EPRI TR-107330, “Generic Requirements Specification for Qualifying a Commercially Available PLC for Safety-Related Applications in Nuclear Power Plants
  - *EPRI 1025283, “Commercial-Grade Digital Equipment for High-Integrity Applications: Oversight and Review of Evaluation and Acceptance Activities” (Ref. 18);*
  - *EPRI TR-107339, “Evaluating Commercial Digital Equipment for High-Integrity Applications: A Supplement to EPRI Report TR-106439” (Ref. 19)*
  - *EPRI 1011710, “Handbook for Evaluating Critical Digital Equipment and Systems” (Ref. 20);*
  - *EPRI TR-103291 “Handbook for Verification and Validation of Digital Systems” (Ref 21)*

  The first two have been reviewed and endorsed by the NRC in letters dated July 17, 1997 (Ref. 16) and July 30, 1998 (Ref. 17), respectively, as an acceptable approach for meeting an NRC requirement. *The remaining four guidance documents, have not been approved by the NRC as an acceptable approach for meeting an NRC requirement.*

- NEI, EPRI, and others have provided comments to NRC staff that are considered during preparation of the regulatory guide.

# Summer 2017 JUTG


# August 1-3, 2017

## SandPearl Hotel

## Clearwater Beach, Florida

# Winter 2018 JUTG

- January 30 to February 1
- Orlando, Florida

# Summer 2018 JUTG

- August 7-9
- Charlotte, NC

# Procurement-Related Instructor-Based Training in 2017 Open Sessions at EPRI in Charlotte, NC

| Course | Dates |
|---|---|
| Nuclear Utility Procurement | May 9-11 |
| Nuclear Utility Procurement | July 10-12 |
| Procurement of Pressure Boundary Items | July 13-14 |
| NUPIC Audit Team Leader (members only) | August 15-17 |
| Nuclear Utility Procurement | December 5-7 |

*Courses are also available on-site*
*Please contact Lynette Evans at aevans@epri.com for more information*

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