

NUPIC General Membership Meeting

June 2016

NRC Vendor Inspection Update

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QA Vendor Inspection Branch 1

Office of New Reactors

AGENDA

- New items
- Update on other initiatives
- Recent NRC vendor inspections
- Specific inspection insights
- Questions

NEW ITEMS

Topics

- Regulatory Guide 1.231 (Software-CGD)
- RIS 2016-01 / Callaway SE (Use of ILAC accreditation)
- Vendor workshop overview - Thursday

NEW ITEMS

Regulatory Guide 1.231

- First software-specific CGD Guidance
 - Design and analysis computer programs
 - Non-process computer programs
- History:
 - Revision 1 of EPRI 1025243
 - Draft Regulatory Guide 1305
 - RG 1.231 in final internal reviews
- Expected next steps

NEW ITEMS

Regulatory Guide 1.231

- What regulatory requirements does it meet?
- What are the proposed regulatory positions?
- What is different / special about the guidance?
- What changes with existing programs when it is issued?
- Is it required to be implemented?
- More info - Track 1 at Vendor Workshop



NEW ITEMS

RIS 2016-01

Regulatory Issue Summary (RIS) 2016-01

- Expansion of ILAC accreditation process:
 - Domestic and international labs
 - Calibration and testing services
- NRC expectations for use of expanded process:
 - NEI 14-05A acceptable methodology
 - Provides (2) conditions to use ILAC accreditation process in lieu of commercial-grade survey as part of dedication
- <http://www.nrc.gov/docs/ML1532/ML15323A346.pdf>

NEW ITEMS

Callaway SE

- Callaway Unit 1 Safety Evaluation (SE)
 - Change to operating QAM under 10 CFR 50.54(a)
 - Reduction in commitment for use of ILAC process
 - <http://www.nrc.gov/docs/ML1608/ML16089A167.pdf>
- Accepted QA alternative under 10 CFR 50.54(a)(3)(ii)
- May be applicable to other licensees - bases evaluation
- More info - Track 2 at Vendor Workshop



UPDATES

Topics

- Draft DG-1326 (RG 1.28 update)
- Draft DG-1291 (Part 21 reporting guidance)
- Draft DG-1292 (Use of EPRI-5652, Rev 1 for CGD)
- SONGS major plant mod pilot inspections
- Communication initiatives

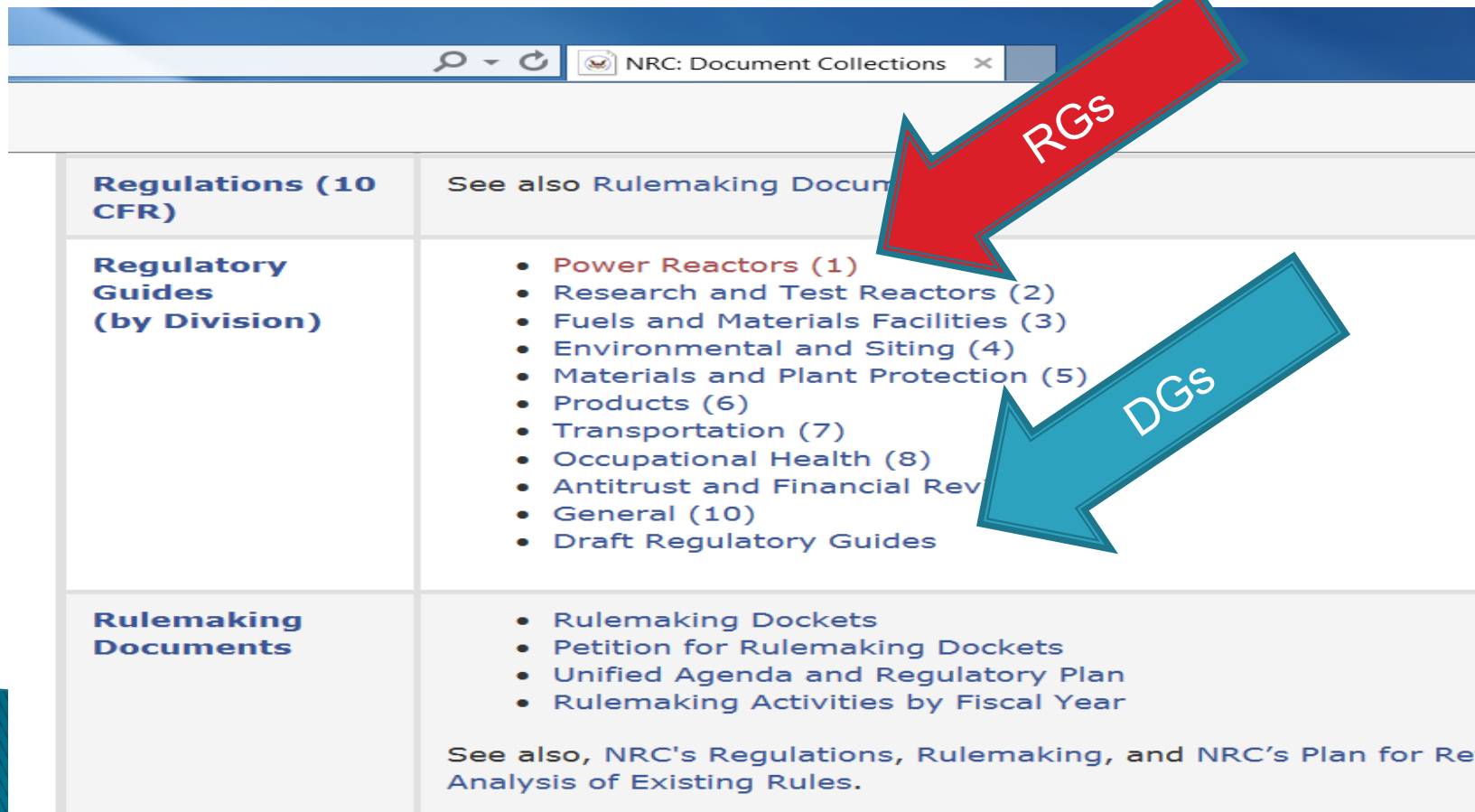
UPDATES

All the Draft DGs

- Draft DG-1326:
 - Update of RG 1.28, Rev 4 (NQA-1-2008 with 2009a)
 - Use of NQA-1-2011b, 2012, and 2015
- Draft DG-1291:
 - Accepts NEI 14-09, Rev 1 for Part 21 reporting
- Draft DG-1292:
 - Accepts EPRI NP-5652 / TR-102260, Rev 1 (aka - EPRI 3002002982) for CGD
 - Proposed regulatory positions

UPDATES

Finding the DGs



The screenshot shows a web browser window with the address bar displaying 'NRC: Document Collections'. The main content area is a table with three rows. A red arrow labeled 'RGs' points to the 'Regulatory Guides' row, and a blue arrow labeled 'DGs' points to the 'Draft Regulatory Guides' entry in the list.

Regulations (10 CFR)	See also Rulemaking Documents
Regulatory Guides (by Division)	• Power Reactors (1) • Research and Test Reactors (2) • Fuels and Materials Facilities (3) • Environmental and Siting (4) • Materials and Plant Protection (5) • Products (6) • Transportation (7) • Occupational Health (8) • Antitrust and Financial Review (9) • General (10) • Draft Regulatory Guides
Rulemaking Documents	• Rulemaking Dockets • Petition for Rulemaking Dockets • Unified Agenda and Regulatory Plan • Rulemaking Activities by Fiscal Year See also, NRC's Regulations, Rulemaking, and NRC's Plan for Retrospective Analysis of Existing Rules.

UPDATES

Major plant mod pilot

- Recommendation from SONGS Lessons Learned
- Five pilot design-aspect vendor inspections
- First inspection – ENSA April 2016
 - Design and fabrication of Steam Generators
 - 3 findings (Criterion III, IX and VII)
- Control of sub-suppliers:
 - International suppliers
 - Evaluation of supplier Part 21 programs



UPDATES

Communications

Annual vendor newsletter:

<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-insp/vendor-newsletters.html>

Quality Assurance FAQ:

<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/qual-assure-faqs.html>

Categories of Notice of Nonconformance (NON) or Notice of Violation (NOV):

<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/nonconformances-violations.html>

Vendor Inspection Program (VIP) Plan:

<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-insp/vendor-insp-prog-plan.html>



NRC QA website:

<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance.html>

UPDATES

Communications

Vendor inspection information:

<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-insp.html>

NRC Vendor Workshops:

<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-oversight.html>

Trip reports issued for the NUPIC audit observations:

<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/nupic-industry.html>

Advanced reactors and small modular reactors:

<http://www.nrc.gov/reactors/advanced.html>



NRC QA website:

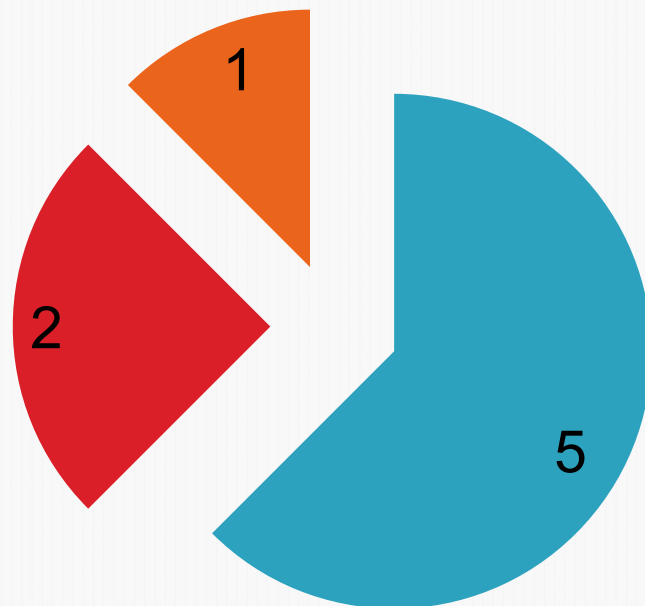
<http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance.html>

VENDOR INSPECTIONS

- Cameron Measurement Systems, City of Industry, CA – February 2016
- Westinghouse Electric Company, Warrendale, PA – February 2016*
- ASCO Valve, Inc., Aiken, SC – February 2016
- Carboline Corporate, St. Louis, MO – March 2016
- Exelon Power Labs, Coatesville, PA – March 2016
- Electros witch, Weymouth, MA – April 2016
- Equipos Nucleares, S.A. (ENSA), Cantabria, Spain – April 2016^
- Lisega, Inc., Kodak, TN - April 2016*
- GE Oil & Gas, Pineville, LA – May 2016*

INSPECTION FINDINGS

Findings



■ III: "Design Control"

■ VII: "Control of Purchased Material, Equipment, and Services"

■ IX: "Special Processes"

INSPECTION RESULTS

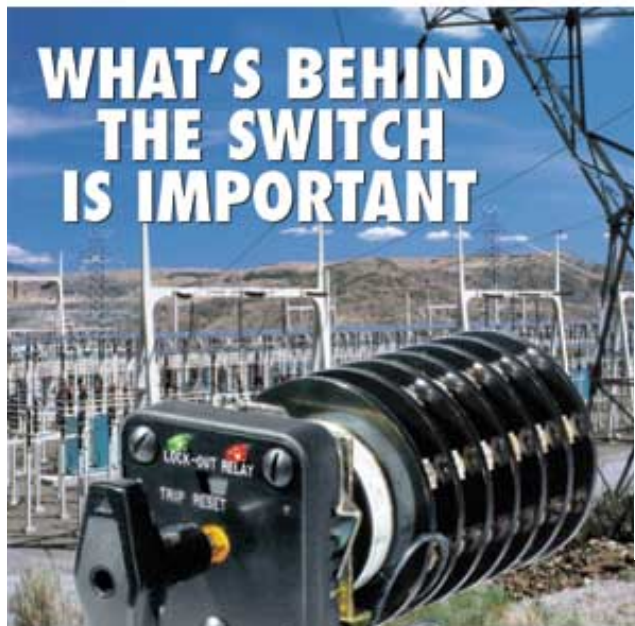
C&D Technologies Inspection

- NUPIC audits: JUN 2012, NOV 2013 (LSA), APR 2015
- NRC: All MAR 2014 findings remain open (Criterion III, XVI, XV)
 - Qualification, corrective actions, non-conformances
- NRC: 2 new SEP 2015 findings (Criterion XVI, I)
- NRC: 3 potential SEP 2015 apparent violations (Part 21)
- NRC: Confirmatory order – APR 2016
 - 1) Compliance with Part 21
 - 2) Internal communications
 - 3) Work processes
 - 4) Training

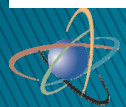
INSPECTION RESULTS

Electroswitch Inspection

(examples of products-from website)



"Never A Doubt"

 **U.S.NRC**
United States Nuclear Regulatory Commission
Protecting People and the Environment



INSPECTION RESULTS

Electroswitch Inspection

- NUPIC audit: MAR 2015 (10 findings)
- NUPIC: Repeat finding in CGD. Repeat issues with internal audits.
- NRC: Two new APR 2016 findings (Criterion III)
 - Qualification
 - CGD
- Part 21 # 2016-19 issued May 11, 2016 (large scope)
- Letter discontinuing Appendix B program – March 24, 2016

INSPECTION RESULTS

ASCO Inspection

- NUPIC audits:
 - 2010: 2 CGD findings (closed)
 - 2012: 1 CGD finding (closed)
 - 2015: 0 CGD issues
- NRC inspection - FEB 2016 (Criterion III)
 - CGD multiple deficient areas
 - Inadequate commercial-grade surveys
 - Inadequate implementation of acceptance methods
 - Justification for sampling plans
 - CGD similar to previous NUPIC findings

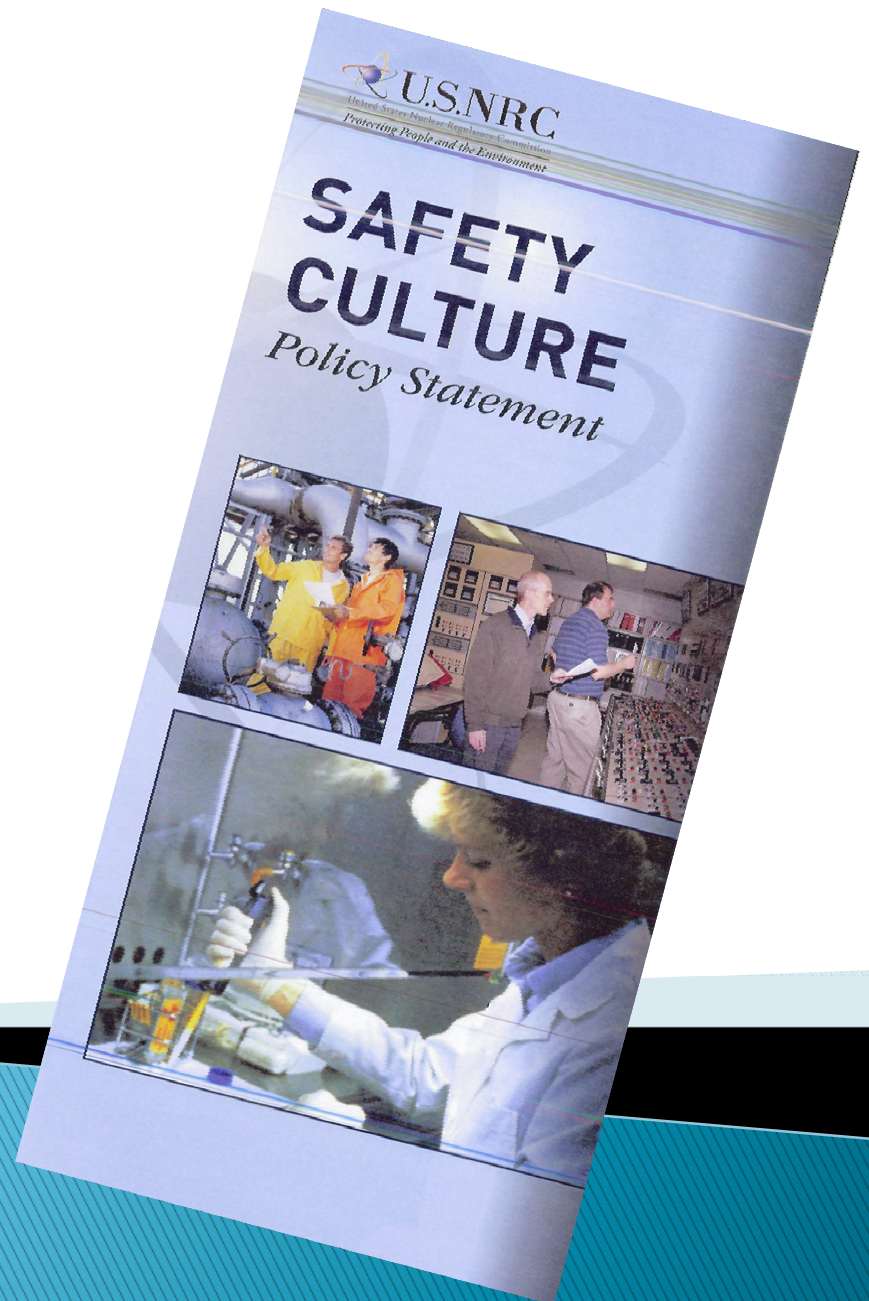
INSPECTION RESULTS

Inspection insights

- Early identification in NUPIC audits:
 - CGD deficiencies
 - Corrective action program deficiencies
- Continued identification in NRC inspections:
 - CGD deficiencies
 - Qualification deficiencies
 - Corrective actions / Part 21 deficiencies
- Thoroughness of vendor corrective actions
- Thoroughness of vendor internal audits

The Commission defines **nuclear safety culture** as the core values and behaviors resulting from a collective commitment by leaders and individuals to emphasize safety over competing goals to ensure protection of people and the environment.

NUREG/BR-0500, Rev. 3, March 2015



Questions

