

ENGINEERING STANDARDS UPDATE

Because [Standards Know-How Isn't Just for Nerds](#)

Topics this month:

- **Suspect/Counterfeit Items**
- **New and Notable**
- **LANL Standards Issued in October**
- **O&M Criterion Changes – NEW**
- **Training**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

The Standards Homepage (on the LANL public website): <http://engstandards.lanl.gov/>

SUSPECT/COUNTERFEIT ITEMS

From [Nancy Tessmar](#), who runs LANL's S/CI Program: "The DOE's recently issued Suspect/Counterfeit Items Resource Handbook, [DOE-HDBK-1211-2016](#) is a useful tool to refer to when S/CI questions arise, and to help encourage the identification and reporting of S/CI's both within and outside of the LANL site. Individuals are encouraged to share the handbook with other associates both internal and external to the Lab. Keep in mind though, to still follow the requirements of the S/CI program per [P330-9](#) rev.5."

NEW AND NOTABLE

[First New US Nuclear Reactor in 20 Years Enters Operation](#)

By Devin Henry - 10/19/16 The Hill

The United States' first new nuclear generator in 20 years has entered commercial operation in Tennessee.

The Tennessee Valley Authority's 1,150-megawatt Watts Bar 2 reactor is officially online and producing electricity for to 650,000 homes and businesses, the company announced Wednesday.

Watts Bar 2 is the 100th nuclear reactor to operate in the United States, according to the Nuclear Energy Institute, and the first new reactor to open in 20 years.

The reactor formally connected to the grid in June, but the Tennessee Valley Authority (TVA) said Wednesday that it underwent testing and a slow ratcheting up of power before today...snip

The reactor is decades in the making.

Construction on the reactor began in 1973 but was put on hold in 1985. Officials restarted work on the project in 2007, and it was finally completed last year at a cost of \$4.7 billion. It is the first

reactor to meet stronger standards approved by the Nuclear Regulatory Commission after the Fukushima disaster in Japan in 2011.

Four other nuclear reactors are under construction in the United States, and the federal Energy Information Administration expects them to go online within the next four years.

LANL STANDARDS ISSUED IN OCTOBER

ESM STD-342-100	
Chapter 16 IBC Program	
Ch. 16, IBC-GEN, IBC General Requirements, Rev. 10	Incorporated streamlined graded admin approach of VAR-16-009 r1 altered for fire protection and circuit addition from VAR-2015-058. <u>Programmatic anchorage requirements revised. Required that design document the final design inputs (including Alt Level) and fire ratings of walls. Added CAD and CM-CE design reviews. Reduced seismically exempt anchor requirements,</u> incorporating CIR-16-002. Minor revisions for temporary and D&D.
Ch. 16, IBC-GEN, Att. B, LANL Existing Building Code, Rev. 8	Added anchorage to code of record exception at 301.1.
Ch. 16, IBC-IP, Inspection Process, Rev. 9	Moved some delegated tasks to LBO at 3.0.E. Modified inspection role at 4.0.I.

Drawings & Details STD-342-400	
Structural	
ST-Z1052-1-R1, Foundation Support System for Temporary Trailers-single wide	Updated table to correct errors from original calc; admin. changes to CAD Manual Rev#5 format. Thanks to POC Glen Pappas and Scott R. et al.
ST-Z1052-2-R1, Foundation Support System for Temporary Trailers-double wide	

O&M CRITERION CHANGES -- NEW

A new feature this month is a roundup of [O&M Criterion](#) changes issued by MSS-MP, the Maintenance Programs Group of Maintenance and Site Services Division.

The policy on these is that implementation is 30 days from issue date for Non-Nuclear Facilities and 60 days from issue date for Nuclear Facilities.

It's best use Internet Explorer to access them on the SharePoint site.

Going back to May:

O&M 504 R4: Low Voltage Electrical Equipment – (Supersedes O&M 504 R3)	Deleted out-of-date references, incorporated changes to NFPA 70, ANSI/NETA MTS-2015, and other standards, updated content to match most recent template, minor edits. Shows
--	---

	applicability to all facilities. (issued early May)
O&M 733 R6: Fire Protection System Impairment Control Program (Supersedes: 733 R5)	Renamed Appendix C, Fire Watch Training Requirements, to Attachment 3, and revised it per O&M variance No. MSS-2015-001 (8/31/2015). PFITS #205-3030 CA#3 to provide guidance for impairments to water supply systems' major components (section B.1c); revised criterion to match most recent template; changed all appendices to attachments; minor edits. (issued mid-May)
O&M 722 R2.1: Fire Protection Water Supply Systems (Supersedes: 722 R2)	Moved the second paragraph of 6.6.1.10 to 6.6.1.11; moved the second paragraph of 6.6.2.10 to 6.6.2.11; minor edits. (issued mid Nov)

TRAINING

Ethics for Engineers

The 2016 edition of this 1-hr, online course will be announced next month in time for the biennial P.E. scramble for PDHs.

DOE TECHNICAL STANDARDS ACTIONS

DOE Tech [Stds](#) activity in the past month:

[DOE-STD-1183-2016](#) Nuclear Safety Specialist Functional Area Qualification Standard. Establishes common performance competencies for all DOE Nuclear Safety Specialist personnel who provide assistance, direction, guidance, oversight, or evaluation of contractor technical activities that could impact the safe operation of DOE's defense nuclear facilities.

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

One facility had a discussion about flange tightness recently. There are ways to check them if it comes to that, but I don't recommend this one:



The picture was posted by David Little on LinkedIn. One safety analyst—from Aiken, SC where they actually have ‘gators—joked, “Now I guess I’ll have to add this to the hazard analysis process as a possible initiator for an accident.”

LAST MONTH'S UPDATE TOPICS

Miss an issue? The archive is at "Monthly Update" on the Standards homepage. Last month's topics:

- **Concrete Mix 15/15X Problems, Actions**
- **Training**
- **Boiler and Pressure Vessel Inspection, Repair, and Alteration**
- **Engineering Processes Changes**
- **LANL Standards Issued in September...and so far in October**
- **World Standards Week is Oct 24-28**
- **National Standards Changes**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

To request a change to this newsletter's distribution, please contact me.
The views expressed in this email are not necessarily those of my employer.

Tobin Oruch, Engineering Standards Mgr
Los Alamos Nat'l Lab, Conduct of Eng Program Office
ph (505) 665-8475 oruch@lanl.gov <http://engstandards.lanl.gov/>
Please consider the environment before printing this or any email