

This is the monthly newsletter of the LANL Engineering Standards Program. The Standards are mandatory documents that define the minimum design criteria, fabrication, and installation practices for the alteration, repair, and construction of LANL facilities and the programmatic equipment within them. [[IMP 341](#)]

Topics this month:

- **New Seismic Criteria have Project Impact**
- **Appendix G Mods**
- **Electrical Standards Course**
- **LANL Standards Issued in June**
- **DOE Technical Standards Actions**

The Standards Homepage: <http://engstandards.lanl.gov/>

### **NEW SEISMIC CRITERIA HAVE PROJECT IMPACT**

As discussed previously, LANL has performed a ten-year update to the site-specific seismic hazards assessment. The results indicate that the seismic hazard at Los Alamos is higher than previously believed; consequently, the earthquake design basis ground motions for LANL have increased. LANL has implemented the new ground motion spectra through a revision of the Engineering Standards Manual Structural Chapter dated June 19, 2007. Future projects and some projects underway are affected. More discussion is in the transmittal letter at <http://int.lanl.gov/orgs/ceng/>. For assistance contact Structural Standards POC Mike Salmon of D-5 at 665-7244.

### **APPENDIX G MODS**

LANS Contract [Mod #A022](#) dated 6/11/07 updated the Contract's Appendix G listing of DOE Directives and other mandates. Changes of possible interest to readers were the incorporation of two Order revisions:

DOE O 413.3A, Program and Project Management for the Acquisition of Capital Assets and  
DOE O 433.1A, Maintenance Management Program for DOE Nuclear Facilities

### **ELECTRICAL STANDARDS COURSE**

[LANL Electrical Engineering Standards](#) is being taught Monday, July 16.

It covers the electrical engineering standards in Chapter 7 of the LANL Engineering Standards Manual and discusses mandatory requirements and good practices for those involved in electrical design. Strongly suggested for electrical designers, electrical engineers, electrical safety officers, and facility managers. Over 300 trained. Taught by David Powell, Electrical Stds POC. No charge. Course 17998, 8 hours Reserve through CT-ESH using links above or call 7-0059 or e-mail [esh-registration@lanl.gov](mailto:esh-registration@lanl.gov).

The full suite of mostly-free standards-related courses is on the Standards Homepage at the "[Standards Courses at LANL](#)" link.

## **LANL STANDARDS ISSUED IN JUNE**

### **LANL Engineering Standards Manual**

- Chapter 1 General Section Z10 General Requirements for All Disciplines -Rev 5 Re-instituted NM building code compliance in Codes and Stds; clarified PE overstamping and fire exemptions in Design Outputs; added details discussion in Specs section; adjustment for new ML level definitions; minor clarifications throughout and in App A, B, and E.
- Chapter 2 Fire Section D40 -- Admin change to highlight new seismic criteria.
- Chapter 5 Structural Rev 4. Revised all Sections to add risk evaluation for projects underway due to increased seismic design basis from 2007 PSHA update, incorporate new seismic hazard analysis results into the seismic design parameters, and add appendices on concrete anchor design.
- Chapter 7 D5000 General Electrical, Rev 1 -- Admin change to clarify use of ESM Chapter 5 and 16 IBC amendments at 8.0.B.1.
- Chapter 13 Welding & Joining, Volume 1, GWS 1-03 Reference Material. Updated "LANL-approved CWIs, SMEs, Test Supervisors, and Instructors" 6/29/07.
- Chapter 14 Sustainable Design, Rev 4 -- Buildings must now achieve 30% better than ASHRAE 90.1-2004 through modeling per 10 CFR434. LANL to pay LEED fees directly.

### **Chapter 16 IBC Program**

- IBC-GEN, R1 General IBC Requirements -- Added approval of certain design changes and material qualification section, organization and ML level changes; minor clarification. App A--Added NM Bldg Code; Ch.34 App A. Org Changes. Format changes to Attachments 1 & 2.
- IBC-IP, R1 IBC Inspection Process -- New App. G for structural observation. ML level, reordering, other minor changes. App. B, E reformatting.
- IBC-TIA, R1 Test and Inspection Agency Approval Process -- Some testing excluded in scope. ML level changes. Minor changes to Att. B.

IBC-FAB, R1 Steel Fabricator Approval Process -- ML level changes

**LANL Master Specifications Manual**

01 4000 Quality Requirements Rev 1 -- Design professional to start inspection plan, constructor now completes.

23 2113 Hydronic Piping, Rev 2 -- Model No. change in 2.14.

**DOE TECHNICAL STANDARDS ACTIONS**

<http://www.hss.energy.gov/NuclearSafety/techstds/standard/recappts.html>

Issued [DOE- STD -1187-2007](#), Beryllium-Associated Worker Registry Data Collection and Management Guidance (revision of 2005)

**LAST MONTH'S UPDATE TOPICS**

Miss an issue? The archive is at "[Monthly Update](#)" below the Google search on the Standards [homepage](#). Last month's Update topics were:

- **Happy Birthday to CENG**
- **Online National Standards Seminar**
- **Electrical Standards Course**
- **LANL Standards Issued in June**
- **DOE Technical Standards Actions**

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To request a change to this newsletter's distribution please contact me.

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