

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 to ensure that the design, repair, and alteration of LANL facilities, and the programmatic equipment within them. [\[IMP 342\]](#)

Topics this month:

- **Spec Renumbering**
- **Drafts for Labwide Review**
- **Electrical Standards Course Feb 13**
- **February Standards Manual Changes**
- **LANL Standards Issued in January**
- **DOE Tech Standard Changes**

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

### **SPEC RENUMBERING**

As noted previously, LANL is changing its Master Spec sections to a 50 division, 6-8 digit numbering scheme. Final posting is expected in February.

The new specs will all start at Rev 0 and have a spec date of 1/6/06 or later. The new spec numbers are 6- or 8-digits and are segmented; e.g., 31 2000 and 31 2323.33 are Div 31 specs. The new specs/numbers should be used for new project starts once the new sections are renumbered and posted.

Crosswalks -- to locate a new spec using its old number (and visa-versa) -- are provided on the specs [webpage](#). Old spec versions (dating back a few years) are available from the History/Archive link on this webpage.

The Rev 0 specs will be dated 1/6/2006 and be technically identical to their superseded, pre-2006 ancestors. Two exceptions: the specs on Filters and Surge Protective Devices were split up into two separate specs addressing dissimilar parts of the original spec scope (see crosswalk for mapping), and other technical changes were made.

Additional spec splitting may occur in the future -- e.g., since there are now multiple mechanical divisions, each may get a spec on hangers and supports versus the single spec that was put in the division where it is most used.

### **DRAFTS FOR LABWIDE REVIEW**

Two documents are available for lab wide review until Feb 14:

1. ESM Chapter 9-Security -- a new chapter. POC is Robert Gonzales, S-1, [rlg@lanl.gov](mailto:rlg@lanl.gov)
2. ESM Chapter 7 Electrical Section D5090, Other Electrical Systems, Rev 2. POC is David Powell, [dpowell@lanl.gov](mailto:dpowell@lanl.gov).

Summary of changes: Added requirement for NRTL listing of engine-generator systems (EGS); added reliability and maintainability requirements for EGS; added requirement for air starting system for EGS 1000 kVA and larger; added EGS system survivability requirements; added requirement for UPS selection based on load profile; added UPS system survivability requirements; added NFPA 70E as a design requirement for battery rooms and enclosures; added battery power system survivability requirements; added personnel lightning protection for open shelters; updated references.

These documents are available on the [homepage](#) via the bold [Drafts in Review](#) link near the lower right. Please send comments to the POCs above; the comment form is on the Drafts webpage.

### **ELECTRICAL STANDARDS COURSE FEB 13**

LANL Electrical Engineering Standards Course 17998 will be taught from 8am-4pm in White Rock on Mon, Feb 13, by POC David Powell. There is no cost.

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.

[http://eshtraining.lanl.gov/pls/gencouraxs/Cour\\_By\\_Number?CourseNumber=17998](http://eshtraining.lanl.gov/pls/gencouraxs/Cour_By_Number?CourseNumber=17998)

### **FEBRUARY STANDARDS MANUAL CHANGES**

Today the Engineering Standards Board approved revisions to the following ESM sections; expect them to be posted within the next few days:

- Chapter 1 Section Z10, General Requirements for all Disciplines
- Chapter 7 Electrical, Section D5030, Communications
- Chapter 13, Vol. 1 General Welding Standards -- GWS 1-02, Administrative Control, and 1-11, Inspector Qualification

Minor revisions to the Equipment/Component Functional IDs (acronyms) in Chapter 1 Section 230 will also be posted.

### **LANL STANDARDS ISSUED IN JANUARY**

#### **LANL Master Specs, ISD 342-2**

23 4133 r0 -- High Efficiency Particulate Filtration (replaces 15865 Filters)

43 3113.37 r0 -- High Efficiency Gas Purification Filters (replaces 15865 Filters)

#### **LANL Standard Details, ISD 342-3**

##### Civil

ST-G30GEN-1 R3 (1 sheet) Bollard Detail

ST-G3010-4 R2 Sheet 1- Fire Hydrant Gate Shut-Off Valve Detail

ST-G3010-4 R2 Sheet 2- Fire Hydrant Detail Notes  
ST-G3020-2 R5 (Sheet 3)- Exterior Sewage Lift Station  
ST-G3040-1 r3 (Sheet 1)- Steam/Condensate Tie-in Detail  
ST-G3040-2 r2 (Sheet 1) Site Steam Drip Leg Detail  
G-3060-2 R3 (5 sheets):  
Sheet 1 - Gas Regulator Station Detail Two Stage, Low Flow  
Sheet 2 Gas Regulator Station Detail Two Stage, High Flow  
Sheet 3- Gas Regulator Station Detail Single Stage, Low Flow  
Sheet 4 - Gas Regulator Station Detail Single Stage, High Flow  
Sheet 5 Gas Regulator Station Detail Design Notes

#### Mechanical

D-3020-2 r3 (Sheet 1) Steam (PRV) Station-Single Stage  
D-3020-2 r3 (Sheet 2) Steam (PRV) Station-Dual Stage  
D-3020-2 r3 (Sheet 3) Steam (PRV) Station- Parallel  
D-3020-2 r2 (Sheet 4) Design Notes

#### **DOE TECH STANDARD CHANGES**

[DOE-HDBK-1188-2006, "Glossary of Environment, Safety and Health Terms"](#) is a new standard that has been approved as of January 1, 2006.

It is available as a PDF file through the Technical Standards Program Home Page at <http://tis.eh.doe.gov/techstds/> This URL will take you to the "DOE Technical Standards Full-Text Documents" section of the Technical Standards Home Page. Clicking on "Approved Standards", or "Recently Approved" on the left margin takes you to "Online Approved DOE Technical Standards." Locate the appropriate document number ([Glossary of Environment, Safety and Health Terms](#)).

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To request a change to this newsletter's distribution contact Tobin Oruch, [oruch@lanl.gov](mailto:oruch@lanl.gov).

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