

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 and process equipment within them. [[IMP 341](#)]

Topics this month:

- **Master Spec Use**
- **LANL Standards Issued in September**
- **DOE Technical Standards Actions**

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

MASTER SPEC USE

Questions sometimes arise regarding design agency responsibilities and the LANL Master Specifications. LANL has almost 200 such Masters that contain detailed requirements for work results in various disciplines. These results are normally construction work in the field, but they can also be procured products (e.g., glovebox gloves) or equipment designs (e.g., a glovebox). There are also a few spec sections in Division 01-General Requirements spanning all disciplines (e.g., how engineering-approved equals are allowed).

These specs are templates that the designer must start from, not finished products. Designers must tailor these Masters to the project's needs and add needed verbiage (this is particularly true for those nuclear and high hazard projects that need additional rigor beyond the ordinary). Designers must also delete portions that in no way apply to the project, but they may not reduce LANL Master requirements without permission of the LANL Standards POC (via simple email).

Because most projects require specs for work results beyond what the LANL Masters cover, creating additional specs is normally also required. Competent engineering firms have their own office masters they draw from and/or they access commercial masters like MasterSpec or SpecText (LANL currently subscribes to both).

Ultimately, the designer must produce a clear, concise, complete, and correct project specification. It's understood that this can involve a fair bit of work but, much as we'd like to, it's impossible to develop and maintain enough LANL Masters to meet every need with current budgets.

Additional requirements and guidance on the use and modification of LANL Master Specs is contained in Engineering Standards Manual Chapter 1 Section Z10 on specifications, including extra steps for ML-1 and ML-2 specs. Spec wording matters are addressed LANL Master Specifications Manual Section 200. Links to these documents are at <http://engstandards.lanl.gov/>. For specific technical questions on a spec, please contact the owning POC.

LANL STANDARDS ISSUED IN NOVEMBER

LANL Master Specifications Manual http://engstandards.lanl.gov/New_Home.html#spec
26 2713 R1, Electricity Metering

1. Added a less expensive digital electrical power meter for use on projects with three-phase services 800 amperes or smaller.
2. Clarified that the construction subcontractor will furnish and install the meter products; the LANL SSS will inspect, test, and program the installed meters.
3. Added requirements for construction submittals of shop drawings and wiring diagrams.
4. Clarified requirements for the meter display units.
5. Clarified requirements for meter cabinets.
6. Added installation requirements for meters mounted in meter cabinets.
7. Added installation requirements for meters mounted in switchgear.
8. Added requirements to connect meter to the telecommunication system.

DOE TECHNICAL STANDARDS ACTIONS

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

New or Revised DOE Tech Stds this past month:

DOE-STD-1107-97 (CN1), Knowledge, Skills, and Abilities for Key Radiation Protection Positions at DOE Facilities, http://www.hss.energy.gov/std1107/DOE-STD-1107-97_CN1.pdf

DOE-STD-1185-2007, Nuclear Explosive Safety Study Functional Area Qualification Standard (39 pages) < <http://www.hss.energy.gov/std1185/doe-std-1185-2007.pdf> >

DOE-STD-1183-2007, Nuclear Safety Specialist Functional Area Qualification Standard (41 pages), < <http://www.hss.energy.gov/std1183/doe-std-1183-2007.pdf> >

DOE-STD-1138-2007, Industrial Hygiene Functional Area Qualification Standard (33 pages), < <http://www.hss.energy.gov/std1138/doe-std-1138-2007.pdf> >

DOE-STD-1170-2007, Electrical Systems and Safety Oversight Functional Area Qualification Standard, (47 pages), < <http://www.hss.energy.gov/std1170/doe-std-1170-2007.pdf> >

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:

- **How Not to Screw Up, Part I**
- **How Not to Screw Up, Part II -- Structural Steelwork**
- **LANL Standards Issued in September**
- **DOE Technical Standards Actions**

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

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