

ElectricU

ElectricU – What Is It?

ElectricU is a lineworker training system consisting of four principle elements:

1. Learning courses delivered via a computer
2. Knowledge assessments
3. Performance Evaluation Criteria Guides (PECGs)
4. Performance Evaluation Forms (PEFs)

These four elements combine to complement a utility or contractor company's existing lineworker training program. They can also be used by a community college as part of their lineworker development program through MEA's Partners In Education.

ElectricU Development Background

The idea of ElectricU grew out of our work on the gas Operator Qualification, or OQ, materials developed more than a decade ago and used nationwide by hundreds of utilities and contractors. MEA has a substantial amount of experience in developing and delivering materials in collaboration with our members and this system worked very well for the gas industry where regulatory requirements for gas workers are quite stringent.

MEA had been developing various courses for electric workers for the past number of years, but it was not under a specific lineworker curriculum. About 3 years ago, MEA's Board of Directors approached us and asked if something like what was done for OQ could be done for electric lineworkers. MEA then began the process of

setting up a consortium of its members to define the lineworker curriculum and develop the materials that are now being released.

Why Develop ElectricU?

The drivers for ElectricU were primarily three: First, the wave of retirements that will be coming in the next 5 years. We are losing our most knowledgeable and capable lineworkers and the questions arise: How will we replace them? How will we train new, probably much younger workers? How do we train workers – young and old – and what role can technology play in doing this better and cheaper?

The second is the need for most utilities to update their materials. Much of existing training is old and almost 100% classroom and field. These materials are a good foundation, but we need updated materials and a way to train lineworkers that is less expensive.

Lastly, is the trend toward more – and documented – refresher training. Online materials are particularly well-suited to this as they allow quick, but comprehensive, reviews of key information and procedures. This is a low-cost means of making sure our Journeyman are up to date in their knowledge.

The big question remaining is the extent to which regulation will shape the electric landscape. The future of regulation in the electric industry is not at all clear. But given MEA's experience in developing the gas OQ materials, we decided early on to develop ElectricU materials under the same methodology. That is, utilizing industry-consensus materials and subject matter expert involvement. The testing and recordkeeping elements are obviously in line with meeting regulatory concerns. In all, utilities can feel good that these materials will provide training that has a strong development foundation.

ElectricU Development Process

At the outset, MEA convened a group of operations and training professionals from among our membership. These individuals formed the initial Steering Committee and were charged with three primary tasks: overall program guidance, strategic direction and subject matter expertise or access to that expertise at their company.

The team first set broad parameters for the project including scope, schedule, and process. All these, of course, were refined as the project developed. They then set about defining those elements which a lineworker should know and out of this developed the initial ElectricU curriculum

Once the curriculum was defined, the team began the process of identifying individual tasks associated with the curriculum. One of the key deliverables from this project is a set of Performance Evaluation Forms, or PEFs. PEFs identify the steps in a given task and how one would know if that step were done properly. These PEFs not only form the backbone of the courses, but they can be used by instructors as part of their field evaluations.

Enhanced Lineworker Development

ElectricU consists of four main elements: electronically-delivered learning courses, knowledge assessments, criteria guides (PECGs), and field performance evaluations (PEFs). The curriculum for the courses was developed by the steering committee and includes more than 200 tasks that the steering committee felt a lineworker should know. When all the courses are completed, we expect there will be more than 100-125 individual lineworker courses with associated PEFs and PECGs. This will be a substantial library of materials.

Several elements make ElectricU desirable. First, we are using industry-consensus materials and subject matter expert involvement – this means that the content will be updated and vetted. Second, the materials are easily customizable by the user so if a utility wants to add their particular procedure or some other element to a given course, they are able to do so. Lastly, MEA has years of experience in course development and retains professional course developers on staff. The courses

developed under ElectricU incorporate many different elements of adult learning to keep the learner engaged and increase the likelihood that the material will be understood and retained.

Utilizing The Materials

The courses can be accessed in one of two ways: via MEA's learning management system at www.ElectricU.org or on a company's internal learning management system in either a SCORM or A-I-C-C version.

How the courses are utilized will, obviously, be at the discretion of each company. However, we envision that utilities will make these courses an integral part of their apprentice and journeyman-refresher training programs. It is likely that utilities will require apprentices to take and pass a series of these courses prior to participating in their in-person training classes. We see a lot of benefit in doing things this way – it will make for a better prepared student and allow the instructor-led sessions to be more focused and valuable.

It is important to point out that these materials will complement, and certainly not replace, a utility's existing training program. There will be a need for classroom and field instruction, but with the addition of this online component, a utility gains a cost-effective way to have more knowledgeable and better prepared lineworkers.

Access To The Courses

So, let's talk for a minute about how your company can access these materials. A company can access these materials in one of three ways: First, as a non-member of MEA, we call this the Subscriber model. Second, as a member of MEA, but not a member of the ElectricU consortium. Or third, as an ElectricU consortium member of MEA. In general, it is cheaper to become an ElectricU consortium member of MEA and access the materials that way but, in some cases, the subscriber model or the MEA member-only model may be better.

The one-time consortium investment is modest, ranging from \$5,000 - \$30,000 for a utility. Note, however, that to join the consortium you must also be and maintain a Level II member in MEA and consortium members are asked to provide subject matter expertise to aid in the development and review of courses. The amount of SME involvement per company is pretty modest, but it is an integral element of ElectricU materials development.

As a consortium member you have a certain number of login credits to which your company can assign individual learners; the number of logins depends on the company size.

ElectricU Administrator

In whichever access model works for your company, an administrator within each company is responsible for assigning those logins to individual learners, or groups of learners, and for managing the recordkeeping function. This is an important role as integrating new materials and new learning modalities within a company is often a real challenge. But the rewards are substantial – better training delivered at a substantially lower cost.

Questions? Need More Information?

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