Power Systems, Substation Electrician Training

With upgrades to the Alberta Power Grid System estimated in the BILLIONS of dollars and 10 years of work, we have a way for you to become involved.

We are launching our Power System Electrician Training Programs starting January 17, 2011.

Our first course for all Journeyman Construction Electricians is the 40 hour program we are calling “Substation Construction”

This course is designed to introduce you to working in Medium and High Voltage Substations.

It will bring you up to speed on what the work entails such as, Civil Work, Below Grade construction, Above Grade Construction, and lots of Safety.

Upon completion and taking a call to a Contractor you will be able to enter the Power System Electrician apprenticeship as a 3rd year level. Only 2 years to complete that program and receive a certification as a Journeyman.

The next program we have built is a 40 hour course we call, “Substation Commissioning”. During your time here you will learn how to perform acceptance testing on Medium Voltage Switchgear. There are 7 Modules in the course covering:

1. Overview
2. Medium Voltage Switchgear Assemblies
3. Commissioning Switchgear assemblies
4. Commissioning Instrument Transformers
5. Commissioning Power circuit Breakers
6. Commissioning Air Switches
7. Commissioning Transformers

By the end of this course you will have the basic knowledge to perform commissioning and acceptance testing of the Medium Voltage Switchgear using safe work practices and referencing the NETA Standards as a guideline.

Are you interested so far?

Keep reading there is lots more.

Our objective is to train Members so our Union and Contractors can provide a “Turnkey” Substation Project. To accomplish this we need to have manpower available to do the Protective Relay Testing.

We have built 4 programs to meet this demand and have implemented a path for Journeymen Electricians to have the opportunity to get into this field of work.

Turn to page 2 to find out what your Training centre has developed.

Points of Interest
- Substation Training
- Protective Relays
- Travel Assistance
- PACT Graduation
- Penny Power

Inside this issue:
- Substation Construction 1
- Substation Commissioning 1
- Substation Protective Relay Training 2
- Travel Assistance Policy 2
- PACT Graduation 3
- Trade Winds 4
- Penny Power 4
### Substation Protection Relays Training

For Journeyman Construction Electricians to enter into the Protective Relay world, we have developed two ways to make this happen.

Since the Technical knowledge and Math required is at a higher level we have developed a course we call “Protection Skills for Electricians."

This is a 40 hour course covering:

1. Basic Relay Elements
2. NEMA Device Numbers
3. Protection Terms
4. Target Schemes
5. Relay Based Protection
6. Line Protection
7. Math Upgrade

Following this course you would qualify to take a 40 hour program on Control and Line Drawings.

The other stream is to challenge a test. Upon successful completion of this evaluation you can enter directly into the Multilin Relay program.

GE Multilin Relay commissioning Course is a 40 hour program designed to provide Electricians with the knowledge to perform acceptance testing.

The skills learned can be applied to other makes and models of protective Relays. This practical course will cover:

1. Basic software and communication setup
2. The digital logic for the protection elements
3. The test methods and test procedures
4. The connection and operation of test sets
5. The test forms and data analysis

The training is specific to the SR339 Motor protection, SR345 Transformer Protection and the SR750 Feeder Protection.

Our advanced Protection Relay course will be on Sweitzer SEL321 Line Protection Relays.

As the Math and Technical knowledge is at a very high level we have to restrict registrations for this course to Technicians, Engineers or Journeymen referred to the program by an Employer.

This is also a 40 hour course.

Rounding off our development, at this time, we will be offering a SCADA Course. As this program is still under development we can’t give too many details at time of writing this Newsletter.

For more information on the courses please contact the Edmonton Training Centre.

(780) 462-5729

We will be posting dates for the various courses on the IBEW Web Page under Training, have a look.

### Travel Assistance Policy

**IMPORTANT**

You must apply for Travel Assistance Before taking any Training Courses that you can not get at the Training Centre in your area.

As of January 1, 2011 the Board of Trustees will not approve any late applications for Travel.

We recommend discussing this with the Admin staff when registering for a course.
Our Heat Tracing training. If you are looking at the Kearl Lake Project for the future and want to do EHT work get the training now.

With Billions of work coming in the Alberta Grid system we have developed a series of programs to get into Substation and Commissioning jobs. The work in this sector could last 8 to 10 years.

Along with the Substation work we are looking at the Powerline Technician training. We will need Linemen to do all the construction of the Transmission and Distribution Lines.

IBEW Local 424 wants to capture this market for our members. It is our intention to prepare our members with all the training necessary to make this happen.

Our QA/QC Training will be another program we will be scheduling during the week.

Your Training Centre Staff have been very busy preparing for the upcoming year with new courses.

With the slowdown in the Industrial Construction coming up, we will be offering day programs during the week starting in the New Year.

If you are unemployed, now is the time to prepare yourself for the future upgrading your skills now before it hits the fan.

EHT Training: With the support of Thermon we now have Imperial Oils approval for our Heat Tracing training. If you are looking at the Kearl Lake Project for the future and want to do EHT work get the training now.

With Billions of work coming in the Alberta Grid system we have developed a series of programs to get into Substation and Commissioning jobs. The work in this sector could last 8 to 10 years.

Along with the Substation work we are looking at the Powerline Technician training. We will need Linemen to do all the construction of the Transmission and Distribution Lines.

IBEW Local 424 wants to capture this market for our members. It is our intention to prepare our members with all the training necessary to make this happen.

Our QA/QC Training will be another program we will be scheduling during the week.

On December 3, 2010 we graduated our 25th PACT Class. Over the years the PACT Program has grown into what we believe is the best tool for bringing competent starters to our Union and Contractors. We would like to thank the I.B.E.W. Local 424 and the Unionized Contractors of the ECAA for their support. Also we would like to congratulate all the participants that completed our training and are now carrying our flag.

We would like to welcome Joel Fundytus to the Training Centre Staff. As a PACT graduate, Joel is passing on his knowledge and skills as our new PACT Instructor. Say hi to him next time you are visiting us.
Your Training Centre Staff had a wonderful idea the other day during a coffee break. What do we all do with those cumbersome PENNIES. If you are like me they end up in a jar, bottle, jewelry box or some containers around the house. We would like to suggest our members donate their collection to a Fund that would distribute the money to the Communities we live in. Sometimes we as Union Workers are not recognized as caring, responsible citizens of our communities. What we suggest is to collect pennies all year and form a committee responsible for distributing funds. The catch, only IBEW Members would be able to apply for funds for projects etc in their communities, not for large charities. Projects like things for retirement homes, playgrounds for kids, possibly meals for the needy, anything that involves our taking part in the lives of others in our communities wherever they are in Alberta. If you are interested bring your pennies to your nearest Training Centre or Union Office, mine are already here.