# **Engineer In Training** Program 2015











we're on for you™

## **ENERGIZE YOUR CAREER**



Wouldn't it be great if your first job focused on helping you find a position that is right for you?

After years of giving all your energy to school, you deserve a career that will energize you.

That is exactly what the ENMAX Engineer in Training (EIT)

Program is all about!



## **ENERGIZE YOUR CAREER**

The EIT Program is designed so you have the option to rotate through different areas within **ENMAX**:

- System Operations
- Environment
- Generation
- Power Services
- Projects Group
- Substation Design
- T&D Asset Management

- Wholesale Energy
- Distribution & Network Planning
- Distribution Engineering
- Protection, Automation & Control
- Transmission Planning
- Distributed Generation
- System Automation



# **ENERGIZE YOUR CAREER**

This approach not only enables you to gain a variety of experiences, but also helps you discover what areas interest <u>YOU</u>.



## WHO ARE WE?

ENMAX is a vertically integrated energy and utility company that provides electricity, natural gas, renewable energy and value-added services to its customers.

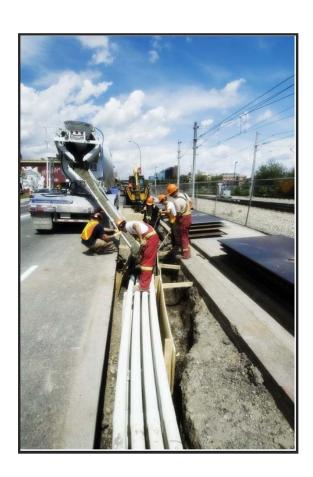
Essentially, ENMAX makes, moves and markets energy!





# **ENMAX CORE VALUES**

- Safety
- Accountability
- Trustworthy
- Responsible
- People Focus
- Operational Excellence
- Customer Focus





## **ABOUT ENMAX**



**ENMAX** is the largest seller of electricity in Alberta.

**ENMAX** is committed to providing safe, reliable and competitively priced electricity and natural gas to over 750,000 metered customer locations in the province.



# **CALGARY HIGHLIGHTS**



Calgary is one of the fastest growing economies in Canada with the population over 1.3 million people.



## **CALGARY HIGHLIGHTS**





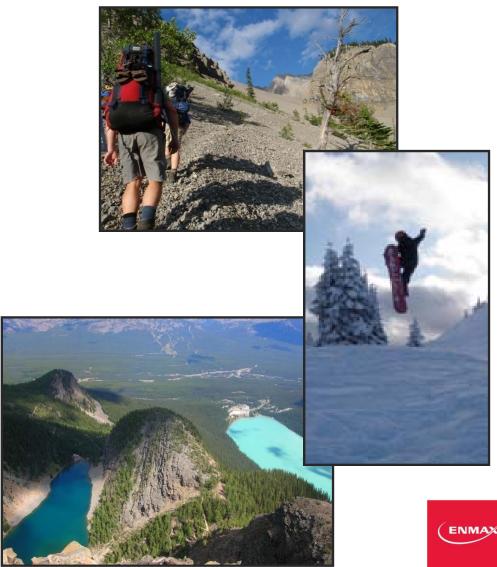
- Calgary is a great place to meet young professionals from all over Canada.
- The meridian age is 36.4 years.
- Calgary has the highest per capita income in Canada.
- Rated best Large City to live in Canada by MoneySense!
- Calgary has prime shopping, restaurants, concerts, nightlife, festivals and galleries.
- Calgary hosts the annual Calgary Stampede.



## **CALGARY HIGHLIGHTS**

Whether your idea of recreation is being active, enjoying a leisurely stroll or just plain relaxing, Calgary offers many choices to suit your lifestyle.

The city has over 8,000 hectares of parks and open spaces and the Rocky Mountains are only an hour away!



## **EIT PROGRAM**

Our **Engineer In Training (EIT) Program** offers recent **Electrical** Engineering graduates the opportunity to apply their academic experience in a practical work environment.

#### The program includes:

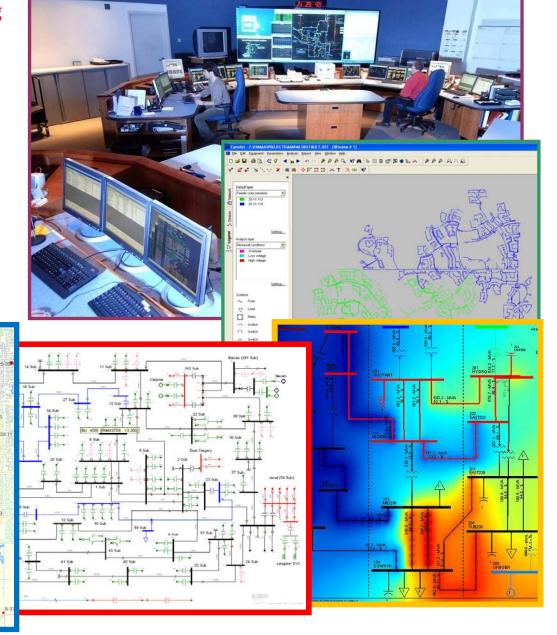
- A two week orientation session
- Four mandatory 9-week work rotations in different areas of your choice
- Permanent placement by applying for jobs available to EITs
- A variety of projects, tours, experiences and field work to build a solid portfolio of skills





#### **CONTROL CENTRE** – Operations Engineering

- ☐ Real-Time System Analysis
- System Disturbance Investigation
- Transmission & DistributionContingency Planning
- Field Work with Emergency Response Crews
- Customer Power Quality Analysis
- Reliability Tracking and Statistics
- Incident Management Command



#### SYSTEM AUTOMATION

- Designs, implements and maintains the Real time monitoring, control, and communications systems used to operate the EPC electrical system
- SCADA Master Station
- Substation Automation
- Distribution Automation
- Fibre Optic and RadioCommunications Systems



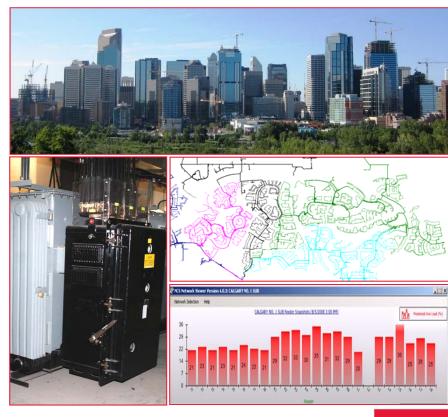






### **Distribution & Secondary Network System Planning**

- Keeping the lights on:
- Ensuring ENMAX remains able to meet the growing demand for power by identifying needs for new infrastructure and improvements to system reliability.
- Load Forecasting
- System Modeling and Assessment
- Capital Project Development
- Servicing plans for new customers
- 5 Year Plan Development





#### **GENERATION ENGINEERING**

- Operations Support for Existing Gas Fired Generators, District Energy and Wind Powered Generators
- Field Service and Construction Support on new projects and enhancements to existing generation facilities
- Support for new Business Development opportunities





#### **Distribution Engineering**

- Learn engineering/design standards and programs employed by ENMAX.
- Design new customer services in the Calgary area (including the downtown core).
- Work with designers on various projects including large scale system projects.
- Watch designs come to life,
  - Learn how shadow crews and witness cable splicing, cable pulling, manhole and vault construction.
  - Address technical issues as they arise during construction.







#### **POWER SERVICES**

#### **LRT & POWER**

- LRT Traction Power & Signals Design
- Utility Substation Design
- Project & Construction Management
  - Budgetary and Financial Planning
- Engineering Studies
  - Protection, Coordination, Arc Flash

#### **FIELD SERVICES**

- Construction & Maintenance
  - Commissioning, Testing,
  - New Installations, Retrofitting



# PROJECTS GROUP (Major Projects, Integrated Projects and Customer Projects)

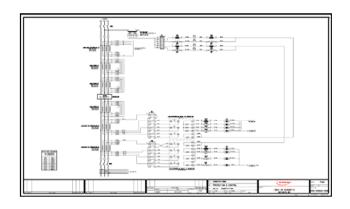
- Transmission, Substations,Distribution & Network Projects
- Project Management
- Develop and Monitor Scope,Schedule and Budget
- Manage Project Execution
- Networking with Internal and External Stakeholders
- Material Procurement
- Regulatory Reporting





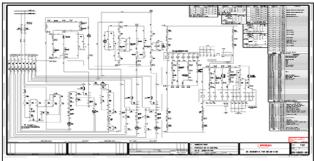
#### **SUBSTATION DESIGN GROUP**

- Substation Design
- Equipment & Material Specifications
- Drawing Packages & Reviews
- New Substation, Substation Upgrades, and Equipment Replacement Projects
- Project Estimation
- Field Work with Crews











#### **ENVIRONMENT**

- Work with EPC, EPSC and Generation to develop environmental programs, standards and procedures
- Investigate reuse / recycling opportunities for ENMAX equipment / materials
- Mitigate environmental impacts of ENMAX projects
- Emergency response opportunities

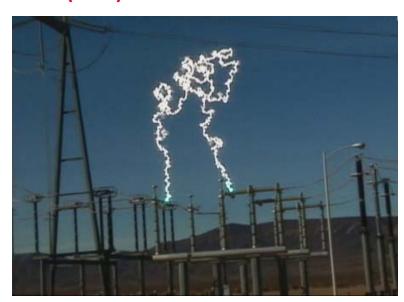






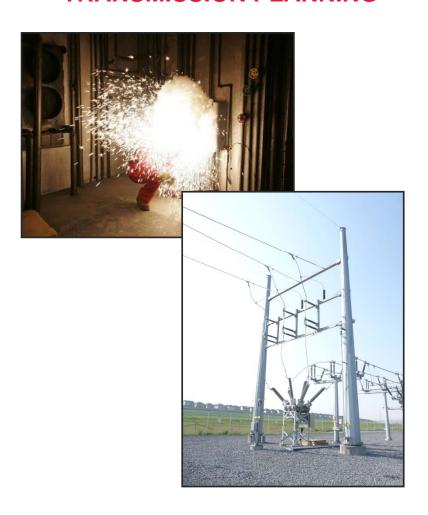
#### **SYSTEM OPERATIONS – PROTECTION and CONTROL (P&C)**

- Engineering Calculations for Relays
- Protection and Control Design
- Event Analysis and Reporting
- Relay Coordination Studies
- Substation Automation
- Implement Protection Philosophies
- Field Work with P&C Crews
- Evaluate New Products and Technologies
- Interpret AC, DC and Logic Schematics
- Customer Fault Data Requests





#### TRANSMISSION PLANNING



- Plan for future system growth, upgrades and reinforcement.
- Investigate and anticipate future problems in the transmission system and collaborate with third parties to come up with common solutions.
- Perform technical studies such as short circuit, arc flash, contingency analysis, insulation studies, power quality.
- Learn to use cutting edge software: PSS/E, SKM PowerTools, DSATools, PSCAD and ArcPro.



#### **T&D ASSET MANAGEMENT**

- Equipment Failure Investigation
- Development and Modification of Capital& Maintenance Programs
- Field Experience
- Networking Opportunities









#### **DISTRIBUTED GENERATION**

#### **Areas**

- Solar PV Systems
- CHP (Combined Heat & Power)

## **Examples of work**

- Project management of solar installations
- 3D modeling
- Sales & marketing
- New technology assessment & product development
- Market research







### **WHOLESALE ENERGY**

#### **Areas**

- Renewable Energy Wind
- Coal PPAs and Gas Assets
- Portfolio Management

## Examples of work

- Forecasting and Modeling
- Contracts Management
- Market Research and Technical Analysis
- Policy Advocacy, Negotiation, and Arbitration





ENMAX

# **EIT PROGRAM**

2014









# **EIT PROGRAM**



# Why the ENMAX EIT Program?

- Begin work as a group with other young enthusiastic EITs.
- Large network of experienced EITs to mentor you.
- Rotations allow you to learn about the whole company.
- Work is FUN!





#### **Competitive Salary**

ENMAX offers a competitive salary, compensation package and pension plan.

#### **Benefits**

ENMAX offers an excellent benefits package. You can expect coverage for **health** and **dental** - all available on a flexible plan so you can choose the coverage you need.



#### **Development Programs**

We also offer professional development programs including our management and leadership courses, or find your own studies (related to your work) and we will work with you to pay the fees.

## **Vacation & Flex Days**

We offer EITs three weeks vacation (four weeks if you have 10 years of work/life experience), ten flex days per year, and a one week Christmas break and all statutory holidays.



#### **ENMAX Women's Initiative Network (E-WIN)**

Initiative launched to provide women within ENMAX with role models, mentors and informal networks within the company. And it's not just for women! E-WIN is open to any employee interested in enhancing development, diversity and inclusiveness at ENMAX.

#### **Other Programs and Initiatives**

Toastmasters Club, Generate Choice and EV Pilot Program





#### Health & Wellness

We encourage health and wellness through on site fitness facilities and subsidized fitness classes, plus support for employee and family assistance planning.

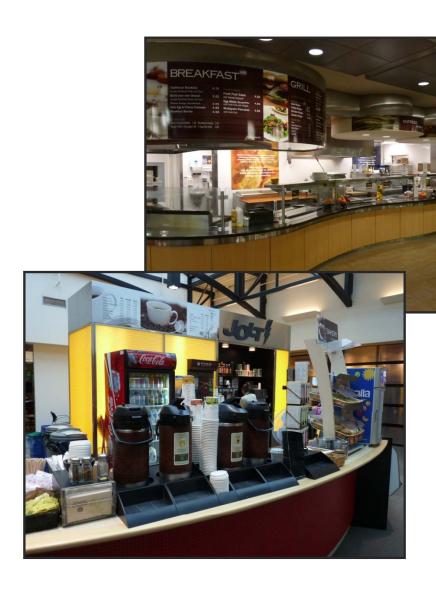






#### **ENMAX Perks**

- Free Parking
- Free Fitness Centre
- Starbucks Coffee Station
- Dry Cleaning
- Cafeteria
- Flexible Work hours
- On-Site Daycare (ENMAX Place)
- On-Site Massage Therapy





**ENMAX's** outstanding achievements have earned us recognition as one of Alberta's top 65 employers of 2014!





# IMPORTANT DATES TO REMEMBER



#### September 2014

- Job posting for the EIT Program will be on the ENMAX website starting September 2<sup>nd</sup>
- Applications for the EIT Program will be accepted until September 26<sup>th</sup>
- After the job posting closes, the EIT Management Team screens and selects candidates to interview
- Information regarding the program can be found online at www.enmax.com/eit and www.facebook.com/ENMAXEIT



# IMPORTANT DATES TO REMEMBER



#### October 2014

- First round of interviews occur in the first two weeks of October.
- A short list of candidates is determined after the first round of interviews. These candidates are invited to visit Calgary for a tour of ENMAX facilities and for a second interview.
- Final candidates are selected and offer letters are sent out near the end of October

#### **June 2015**

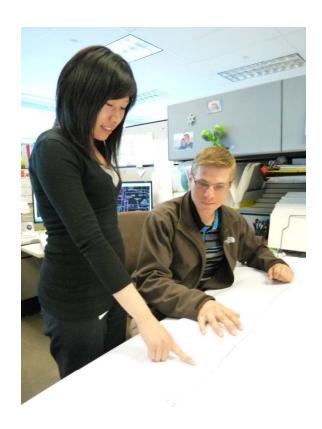
EIT Program starts June 15<sup>th</sup>.



## Who are we looking for?

#### Someone with:

- Strong organizational and leadership skills
- Motivation and looks to the future for good opportunities and professional growth
- Tremendous initiative
- Eagerness to face new challenges





## IMPORTANT INFORMATION



## To qualify for our EIT Program, you must be

- Graduating in December 2014 or May 2015 with a Bachelor of Science Degree in Electrical Engineering
- Willing to relocate to Calgary, Alberta
- Able to start June 15, 2015





## How do I apply?

- Submit your cover letter (listing your top three rotation preferences) and résumé to the job posting online.
- Only applications submitted online will be accepted.



## **CONTACT INFORMATION**

For questions relating to the EIT Program, please e-mail:

EITProgram@enmax.com

Or visit our website at:

www.enmax.com/eit

Or follow us on Facebook:

www.facebook.ENMAX EITs



