

# Careers at the AESO

*As an independent system operator, the AESO leads the safe, reliable and economic planning and operation of Alberta's interconnected power system. The AESO also facilitates Alberta's fair, efficient and openly competitive wholesale electricity market, which in 2010 had about 175 participants and approximately \$5 billion in annual energy transactions.*

## ***Power Systems Simulation Engineer***

### **Position Summary**

The role and responsibilities require a minimum of 5 years knowledge and experience on EMS/DTS, power system operation, simulation, and analysis.

The person will be responsible for the maintaining of DTS environment, DTS database and display update, trouble-shooting of DTS problems, and supporting of system controllers in training on various system events including system restoration.

### **Accountabilities and Responsibilities**

Responsibilities include:

- Proven ability to work in a team environment to successfully maintain and ensure the smooth operation of the DTS.
- Proven analytical ability to trouble-shoot, assess test results, propose and evaluate the pros and cons of different options in problem-solving.
- Proven skills in verbal and written communications through presentations, reports, and constructive working relationship with various stakeholders.
- Tuning of power flow in a DTS environment with large power systems model.
- Maintain the DTS environments, update of DTS databases, displays, and scenarios.
- Collaborate and coordinate with EMS team to maintain EMS/DTS database periodically.
- Analyze and compare the simulation results with actual post-event system response and make recommendations on improvement of dynamic simulation parameters.
- Attention to details during the creation of simulation environment and training scenarios.
- Work with other stakeholders to create plans for training, organize and provide training to system controllers, and produce reports for the training.
- Make recommendations for DTS enhancements for system upgrade.
- Provide inputs and support to various projects that have an impact on DTS.
- Documenting the processes which include DTS database/display maintenance, best practices, training, trouble shooting, etc.

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## Education

- Bachelor degree in Electrical Engineering with emphasis on power systems; postgraduate degree in power system engineering is an asset.

## Knowledge, Skills, Abilities and Experience Required

Must have's:

- Registered Professional Engineer with minimum of 5 years experience in power systems operation, simulation, or analysis.
- Experience in working in teams and proven skills in providing customer support and resolving urgent issues.
- Multiple tasking and be able to work with project deadlines.
- Good knowledge on the methodologies for power system simulations.
- Working knowledge on EMS/DTS and understanding of databases for EMS/DTS. Experience with Alstom EMS/DTS is an asset.
- General knowledge on the function of Automatic Generation Control (AGC), network applications, protective relays, Remedial Action Schemes, and the operation of power market.
- Well organized, self-starter with a planned and structured approach to project delivery.
- Sufficient knowledge on IT and programming skill is an asset.
- Comfortable making speeches and presentations to large size of audience.

**If you are interested in the above position, please email your resume in confidence to [careers@aeso.ca](mailto:careers@aeso.ca) in order to be considered.**

**The AESO is unable to accept unsolicited agency resumes. Any resumes submitted become the sole property of the Alberta Electric System Operator.**

**The AESO would like to thank all applicants for their interest; however, only those candidates selected for interviews will be contacted.**

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