



Seminar by IEEE Ottawa IMS, PES, and RS&PEL Chapters, Educational Activities, and Algonquin College Student Branch

The IEEE Ottawa Section is inviting all interested IEEE members and nonmembers to a seminar

Acceptance and efficiency testing of newly installed hydro generators

by

Emmanuel Côté and David Jarry-Bolduc Hydro-Québec, Montreal, Quebec

DATE: Thursday, January 17, 2013.

TIME: Refreshments, Registration and Networking: 5:30 p.m.; Seminar: 6:00 p.m. – 7:30 p.m.

PLACE: Algonquin College, <u>T-Building</u>, Room T102, <u>1385 Woodroffe Ave.</u>, Ottawa. **PARKING:** No fee after 5 p.m. at the Parking Lots 8&9. Please respect restricted areas.

Abstract Acceptance and efficiency testing is a practice that utilities use worldwide in order to ensure the proper performance and contractual guarantees of newly installed hydro generators. Hydro-Québec's generation testing department has the primary mission of performing these tests. The department is composed of a multidisciplinary team of engineers, technologists, and computer specialists who are deployed province-wide in order to accomplish their mission. Every generating station being unique, this implies that every testing solution must also be unique. Over the years their work has resulted in significant savings in the operating schemes of the generation equipment, as well as early detection of potentially critical design flaws. This presentation will start with a brief history of Hydro-Québec's testing department, followed by an overview of how they integrate different instrumentation and measurement equipment in order to increase the reliability and accuracy of their results. The presentation will end with different examples to demonstrate how these methods resulted in a success story for Hydro-Québec.

Speakers' Bios

Emmanuel Côté, Eng., graduated in Mechanical Engineering from the University of Sherbrooke in 2007. He has worked for Hydro-Québec Production's testing department since 2008 and has conducted many tests of hydraulic turbine performance using the department's main test methods - including the currentmeter, acoustic transit-time, pressure-time and thermodynamic methods as well as different index tests. He currently drives the mechanical acceptance tests for the commissioning of the new power-plant "La Sarcelle".

David Jarry-Bolduc received his Bachelor's degree in electrical engineering with a specialization in the power engineering IGEE from McGill University. He is currently team leader for the generation commissioning and special testing department at Hydro-Quebec. In the past years he has been involved in several Hydro-Quebec power plants commissioning and has done numerous field tests. He has done commissioning tests on small and large generators in power plants such as Chute Allard (11 MVA) and Sainte-Marguerite 3 (440 MVA).

Admission: Free. Registration required.

Please register by e-mail contacting: almuhtadi@ieee.org.