



# IEEE Canada

## Northern Canada Section



### IEEE-NCS, IAS/PES Presents

Tuesday, February 7<sup>th</sup>, 2017, 6:00 to 8:30pm, doors open at 5:30pm

## **Technical Seminar:**

### *“Considerations in the Design, Construction, and Interconnection of Cogeneration Facilities”*

#### **Technical Seminar Abstract:**

With the gradual retirement of coal fired generation in Alberta, gas fired generation and renewables are growing. In 2016 and for the first time in the history of power generation in Alberta, gas fired generating units installed capacity exceeded coal fire generating units' capacity. A significant part of the existing and planned gas fire generation in Alberta is configured as cogeneration with high efficiency and with dual forms of energy outputs (in many cases electricity and steam).

This presentation will discuss topics associated with cogeneration such as main configurations, Pros and Cons of available configurations, connections to the Alberta Interconnected System and experience and lesson learned.

#### Outline:

- Introduction, definitions and overall review
- Critical aspects of the “process” of cogeneration
- Critical aspects of the “Electrical” systems in cogeneration plants
- Interconnection with the Alberta Interconnected Electrical System
- Experience with installation, commissioning and operation of cogeneration facilities
- Wrap up and conclusions



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### About the Speakers:



**Mark Heigold**, P.Eng. is the Process Engineering Department Manager at Jacobs Canada. He has over 22 years of experience in the oil and gas and power industries. His cogeneration / power experience ranges from front-end studies through detail design and commissioning. Mr. Heigold has worked with a number of gas turbine models and a variety of heat recovery and cogeneration modes.



**Rasheek Rifaat**, P.Eng., IEEE Life Fellow has over 40 years of work experience in electrical power generation, transmission, distribution and industrial systems and protection systems. He has been involved in thermal power-generating plant and cogeneration projects since 1981. Mr. Rifaat published more than 25 papers on cogeneration plant protection, operation and economics.



**Fred Ritter**, P.Eng., IEEE Life Senior Member is the Chief Engineer for the Alberta Electric System Operator (AESO) and he is responsible for providing technical counsel to the CEO, the Executive Team, and AESO staff as well as providing professional leadership and mentorship to engineering staff. Mr. Ritter has over 43 years of utility and system operation experience and took a keen interest in cogeneration, system overall operating aspects including system stability, and security.



**Brian Wagner**, P.Eng., IEEE Member has nearly 30 years of electrical engineering and project management experience in both owner and contractor positions. He has worked on a diverse portfolio of power system projects including those in the Oil sands industry and in the power generation facilities. Mr. Wagner participated in the commissioning, start-up, and operation of numerous co-generations and combined cycle power generation facilities. He is the principal consultant at Annapolis Power Systems Corp.



## Women In Engineering (WIE) Presentation

*“Management Tools for the success of projects and teams”*

### **Abstract:**

Management of projects and teams is always one of the greatest challenges, for large and small organizations. In this presentation, some key factors will be analyzed, which are flexible to adjust, for achieving maximum success level, both in projects and teams.

### **About the Speakers:**



**Shagufta Tasneem** is Electrical Specialist with strong educational background. She has Master's Degree in Electrical and Computer Engineering from University of Western Ontario. She is Engineering Intern Member of State of North Carolina, USA. She has worked in Oil and Gas industry, as Electrical Specialist, in Calgary. She has great deal of experience in Retail Management as well. She is an active member of IEEE & PES/IAS and is volunteering for PES/IAS. She is Executive Committee Member of WISER (Women in Engineering, Science and Research) and Executive Committee Member of AWSN (Alberta Women Science Network).




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When: Date: 7-February-2017 Time: 5:30PM to 8:30PM All times are: Canada/Mountain	
Where: Four Points by Sheraton Edmonton South 7230 Argyll Road, Edmonton, Alberta T6C 4A6	
Agenda: 5.30pm: Doors open and light meal 6:00pm: Announcements 6:05pm: WIE Opening Talk 6:20pm: Break 6:30pm: Technical keynote presentation	

### Online Registration (Open from January 6 to January 30, 2017)

<https://events.vtools.ieee.org/m/43033>

#### Early bird online registration fee

IEEE Members: \$20  
Non-IEEE members: \$30  
IEEE Student Members: Free  
IEEE Life Members: Free

#### At the Door Registration - (Payable by cash or cheque)

IEEE Members: \$30  
Non-IEEE members: \$40  
IEEE Student Members: \$10  
IEEE Life Members: \$5

Please have your **IEEE membership card** ready to obtain the discount.

If you require any help with event registration support or have any questions, please contact the event organizers:

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