Dynamic Thermal Line Rating: Using the Weather to Increase Transmission Line Capacity

Presented by Leanne Dawson of the University of Calgary

Co-sponsored by TransAlta

As more renewable generation is being added to the grid, utilities are looking for solutions to integrate the new generation without adding new infrastructure. One potential solution is to use Dynamic Thermal Line Rating (DTLR). DTLR uses actual weather conditions to calculate a real-time thermal rating, compared to using conservative assumptions to calculate a static rating. This presentation will provide a brief overview of what DTLR is and the current state of the art, along with the DTLR research presently being conducted at the University of Calgary.

Location: 110 - 12th Avenue SW

TransAlta "T1" building, Room: T1-Auditorium

Calgary, Alberta

Participants must sign-in at the Security Desk in the T2 Building prior to the seminar, and must sign-out upon leaving.

Date and Time: Monday, January 20, 2020

> 6:30PM to 8:30PM (2 hours) All times are: Canada/Mountain

Agenda:

5.45pm: Doors open

5:45-6:20pm: Networking and a Light Meal

6:20-6:30pm: Opening comments 6:30-8.25pm: Main presentation 8:25-8:30pm: Closing comments

Register at: https://events.vtools.ieee.org/m/211758

> Registration closes Jan 16, or once full. Register early, as space is limited.

Advance registration only. Registration at the door is not

available for this presentation.

Leanne Dawson received her BSc and MSc in Electrical Engineering from the University of Calgary in 2013 and 2016, respectively. She is currently a PhD candidate in Electrical Engineering at the University of Calgary. Both her MSc and PhD have been focused on researching the implementation of Dynamic Thermal Line Rating, and she has multiple publications on this subject.