IEEE Power & Energy Society
Winnipeg Section
PRESENTS…A LUNCHEON MEETING

TOPIC:	**Applications of Power Electronics in Windfarms**
PRESENTER:	**Jacob Wiebe**
TIME AND DATE:	**12:00 Noon, Tuesday, September 18, 2012**
LOCATION:	**Holiday Inn South, 1330 Pembina Highway, Winnipeg**

◊ Cash bar available at Noon.
◊ Lunch served at 12:15 PM.
◊ Meeting concluded at 1.30 PM.
◊ Cost of the meal (payable at the door).

Early registration(*On or Before 14th Sept.*)
IEEE Members - **$15.00**
Non-Members - **$19.00**

Late registration (*After14th Sept.*)
IEEE Members - **$17.00**
Non-Members - **$21.00**

The IEEE PES Winnipeg Chapter must guarantee a minimum attendance to the hotel, so please take a moment to register early by RSVP to **Jieping Shao** by **Friday Noon, 14th September 2012**, in one of the following ways:

Phone: 360-7347
Email: **JShao@hydro.mb.ca**
Fax: 360-6142

Abstract:

The earliest wind turbine generators used induction generators without power electronics. In the early 1990's , power electronics were first applied extending from the induction generator to doubly fed induction generators. In North America, any use of power electronics was covered by patents and these limited application of power electronics to wind turbine generators. Feeders from wind farms to the main ac network may be ac transmission, ac transmission with series capacitors, and now with dc transmission except for the one supplier who owns the patents. There are issues where various configurations of power electronics and their controls have a significant impact on performance on whether the wind farm will even function, Conventional transient stability studies cannot always predict how wind farms will respond through various contingencies. Advanced EMT tools are needed with detailed models of the wind farms with their power electronics represented exactly.

Biography:

Jacob Wiebe received his B.Sc.(E.E.) from the University of Manitoba in 2012. Jake first joined the team at Electranix in 2009. He has undertaken system impact, feasibility, and pre-feasibility studies using PSSE and PSLF. Additionally, He has undertaken electromagnetic transient studies including transient over voltage, and energization studies using PSCAD and E-TRAN.

Re: IEEE PES Luncheon Meeting at 12:00 Noon on Tuesday, September 18, 2012

Name: _____ Any Diet Restrictions: _____

Company: _____

Telephone no.: _____ Number in party: _____

Please visit our website: **http://winnipeg.ieee.ca/pes .**