## COMMUNITY APPROPRIATE SUSTAINABLE ENERGY SECURITY

CASES Webinar Series: Introduction to Smart Grids November 17th, 2021 12-1pm Saskatchewan

In the last two decades, large-scale blackouts have occurred in many countries. These incidents have caused enormous national economic losses and affected millions of customers. Many countries have pushed forward the modernization of power systems with advanced technologies to make power grids smarter, which is increasingly being seen as a way to prevent power supply failures by ensuring efficient transmission and improving energy utilization. This smart grid—the electricity system of the future—will incorporate communications, sensors, automation, and computers to improve the flexibility, reliability, and efficiency of the power system and facilitate the massive usage of renewable energy resources.

This seminar will familiarize participants with the fundamentals of smart grids and microgrids, which are miniaturized smart grids. The traditional power systems will first be briefly reviewed, then their problems highlighted. This will be followed by an introduction to smart grids and microgrids. In particular, their components, functions, and advantages will be explained. Finally, the seminar will discuss the challenges and opportunities of smart grids and microgrids.

Join us on November 17th to hear more about Smart Grids!





## CASES PARTNERSHIP COMMUNITY APPROPRIATE SUSTAINABLE ENERGY SECURITY

PRESENTED BY: Dr. Tony C.Y. Chung, BEng(Hons), PhD, PEng, FIEEE, FEIC, FIET, FHKIE

Prof. Tony C.Y. Chung is a Professor, the NSERC/SaskPower Senior Industrial Research Chair in Smart Grid Technologies, and the SaskPower Chair in Power Systems Engineering in the Department of Electrical and Computer Engineering at the University of Saskatchewan, Canada. He is a prominent leader for advancing academic activities and applied research in power systems engineering development in the province of Saskatchewan. He is now leading a research team, supported by SaskPower and NSERC of Canada, to conduct cutting-edge and long-term smart grid research for SaskPower and address critical technical issues associated with smart grid technologies and their applications to real power systems.

Prof. Chung is a registered professional engineer in the Province of

Saskatchewan. He is a Fellow of IEEE, EIC, IET and HKIE. He is an IEEE PES Distinguished Lecturer and a Senior Editor of "IEEE Transactions on Power Systems". He is also the recipient of the 2021 IEEE Canada P.D. Ziogas Electric Power Award and the 2020-2021 Saskatoon Engineering Society (SES) Educator of the Year Award.

The presentation will be live through Zoom

November 17th 12-1pm Saskatchewan

Meeting link: https://usask-ca.zoom.us/j/93363457138?pwd=VE1SVUI4Z3BMdXpsWS9aQVFQVFN0QT09 Meeting number: 933 6345 7138 Password: 66121608

A recording will be made available on the CASES website:

https://renewableenergy.usask.ca/events/cases-webinar-series.php



