



April 10, 2008

Private-public partnership supports Alberta power research *New chair seeks innovative solutions for power-grid efficiency*

Calgary – Dr. Wilsun Xu is on a mission to bring information technology and Alberta’s power companies together to develop innovative solutions for Alberta’s power grid. As the newly appointed NSERC/iCORE Alberta Power Companies Industrial Research Chair in Power Quality, his success is both recognized and strengthened.

The Alberta government is partnering with the Natural Sciences and Engineering Research Council of Canada (NSERC) and the five-company Alberta Power Industry Consortium, through the Informatics Circle of Research Excellence (iCORE) to fund Dr. Xu’s engineering and research projects at the University of Alberta. The five companies are the Alberta Electric System Operator (AESO), AltaLink Management Ltd., ATCO Electric Ltd., EPCOR, and FortisAlberta Inc.

“Dr. Xu’s research will have a direct impact on Alberta’s power systems,” said Doug Horner, Minister of Advanced Education and Technology. “Dr. Xu, his team, and the partners are bringing a new level of innovation to improving the efficiency and integrity of our power systems and enhancing the sustainability of both our environment and economy, something Albertans have told us they want.”

As Dr. Xu explains, “A power system not only transmits energy to power industry processes but, also integrates many forms of energy sources for efficient energy production and consumption. In Alberta, the electric power system has become increasingly important because of our massive development and rapidly increasing population, and it is imperative to provide reliable and quality power to support the growing provincial economy.”

Dr. Xu will lead a team of researchers in using modern information and communication technologies (ICT) to enhance the performance of the Alberta Integrated Electric System, thereby increasing the reliability and diversity of Alberta’s energy infrastructure.

NSERC Industrial Research Chairs, such as Dr. Xu’s, are prestigious appointments, intended to assist universities build on existing strengths to achieve the critical mass required for a major research endeavour in science and engineering of interest to industry and assist in the development of research efforts in fields that have not yet been developed in Canadian universities but for which there is an important industrial need.

“Alberta’s energy infrastructure is critical to the economic prosperity of this province and is one of the most fertile grounds to apply ICT due to its vast industry base,” says Randy Goebel, president and CEO, iCORE. “Coordinating the operation of a power system over a vast geographical area and with a wide variety of energy sources, in a secure manner, is a very complex and challenging informatics task that we believe Dr. Xu can help accomplish.”

Conducting industry-oriented research, especially applying ICT to large-scale power systems, was instrumental in Dr. Xu making Alberta his research base. “I conduct most of my research in collaboration with the power and energy industry,” Dr. Xu explains. “My industry background helps me identify significant research issues faced by the industry, which I then formulate into manageable research subjects. By working closely with industry partners, the research results and technologies developed are transferred to applications.”

Currently, Dr. Xu and his team are working on four projects in sensor network based power grid decision support systems, three projects in intelligent devices for power system control and operation, and four projects in sustainable energy systems. “The value of this partnership is that the research being done is on real world applications, specific to Alberta,” said EPCOR’s John Byron on behalf of the industry team. “The partnership gives researchers valuable experience, provides industry with applications that can be put to use, and facilitates innovations that will improve the electrical system benefiting all Albertans.”

“This outstanding support of Dr. Xu’s chair by Alberta’s power industry is further evidence of the close partnerships our faculty forges with industry,” says Dr. David Lynch, Dean of Engineering for the University of Alberta. “Dr. Xu’s work is a continuation of the strong ties our professors, students and alumni have had to the development of Alberta’s power industry, and is an excellent example of the impact of engineering research and education on society’s challenges.”

Dr. Xu’s research chair is supported by an iCORE Industry Chair Establishment (ICE) grant of \$750,000 over five years, an NSERC Senior Industrial Research Chair in the area of power and energy systems for \$900,000 and \$900,000 in matching support from the Alberta Power Industry Consortium.

-30-

Media Availability

Dr. Wilsun Xu, Dr. Randy Goebel, Dr. David Lynch and John Byron (EPCOR) will be available for media opportunities through April 10th and 11th 2008.

Media enquiries may be directed to

Ms. Sho Sengupta
Media Relations
iCORE
Phone: (403) 606-7284
Email: sengupta@icore.ca

Earl McKenzie
Public Affairs Officer
Alberta Advanced Education and Technology
Phone (780) 415-0891
Email: earl.mckenzie@gov.ab.ca
To call toll-free within Alberta dial 310-0000