IEEE Seminar:

Should Hong Kong Reduce its Electricity Reliability

Venue: Theater TU107, Hong Kong Polytechnic University
Date: 30 August (Friday)
Time: 18:30-20:30

Speaker: Professor C K. Woo
Head of the Economics Department at Hong Kong Baptist University
http://www.hkbu.edu.hk/~econ

Organizer:
IEEE (HK) Joint Chapter of Power & Energy Society, Industrial Application Society, Power Electronics Society and Industrial Electronics Society (PES/IAS/PELS/IES JC)

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Abstract:
Hong Kong has almost perfect electricity reliability, the result of substantial investments ultimately financed by electricity consumers who may be willing to accept lower reliability in exchange for lower bills. Should Hong Kong reduce its service reliability? To answer this question, we perform an ordered-logit-regression analysis of the responses by 1,876 households to a telephone survey conducted in June 2013. We find Hong Kong residents exhibit a statistically significant preference for their existing service reliability and rate. The widely dispersed costs for a 1-hour outage have an estimated mean of US$45 (HK$350), topping the estimates reported in ten of the 11 studies published in the last 10 years. Finally, Hong Kong's optimal load loss of load expectation (*LOLE*) that minimizes the sum of generation and customer outage costs is estimated to range from 23 to 80 minutes. The medium outage-cost scenario's *LOLE* is 47 minutes per year. Hence, absent additional compelling evidence, Hong Kong should not reduce its service reliability.

Biography:
C.K. Woo is Professor (Ph.D. Economics, UC Davis) and Head of the Economics Department at Hong Kong Baptist University and Senior Partner (now on leave) of Energy and Environmental Economics, Inc. (E3) in San Francisco. With over 30 years of industry experience and over 100 refereed articles, he is (a) the senior fellow of the United States Association of Energy Economics; (b) an associate editor of *Energy* and a guest editor of a 2006 special issue on electricity market reform and deregulation and a 2010 special issue on demand response resources; (c) a member of the editorial board of *The Energy Journal* and guest editor of a 1988 special issue on electricity reliability; and (d) a guest editor of a 2011 special issue on renewable energy for *Energy Policy*.

Note:
After the 60-minute presentation by Prof. CK Woo and the subsequent Q & A, there will be a 45-minute Panel discussion on the use of the loss of load probability (LOLP) and system average interruption duration index (SAIDI) as the performance indicators of both utilities in their Scheme of Control Agreement (SCA) signed in 2008 with the HKSAR Government,

Panelists:
Mr. T.F. Chow, Director (Power Systems), CLP Power HK Ltd.
Ir T.C. Yee, General Manager (Corporate Development), The Hongkong Electric Co. Ltd.
Prof. C.K. Woo, Acting Head of Department of Economics, The Hong Kong Baptist University
Mr. Jimmy Shih, Vice-Chair, Electrical Engineering Alumni Association of HK PolyU
Mr. Jacobus Ngai, Immediate Past Chair of IEEE (HK) PES/IAS/PELS/IES JC

Panel Moderator:
Dr. H.W. Ngan, Associate Professor, Electrical Engineering Dept., The HK Polytechnic University (PolyU)

No prior registration is required. For enquiry, please contact Dr. C.T. Tse by eecttse@polyu.edu.hk. Certificate of attendance will be issued to all participants. The Seminar is supported by the Electrical Engineering Department of Hong Kong Polytechnic University.