

**Dept of Industrial & Systems Engineering, NUS, Singapore**  
**&**

**Dept of Decision Sciences**

**JOINT SEMINAR**

**on**

***Operations Research Opportunities in Electric Power  
Generation Business***

**Speaker:** Dr S.H. Sim, Decision Sciences Department, NUS Business School

**Date:** 9 July 2004 (Friday)

**Time:** 10:00 a.m. to 11:00 a.m.

**Venue:** EA-06-02, Faculty of Engineering, NUS

**Abstract:**

In Canada, Operations Research methodology was first introduced to the electric power generation business in the early 1950s. During the 1970s and 1980s, operations research models have been implemented to improve and optimize the efficiency and reliability of power generation. This presentation will provide a review of operations research applications in the electric power generation business. The topics covered include thermal generation, hydro-electric power generation, nuclear power generation and functional areas such as material management, debt management and project prioritization.

**About the Speaker:**

Dr. S. H. Sim is a research scientist with more than twenty years of full-time industry experience in the applications of analytical techniques to investment portfolio management, credit card business management, debt management, financial/investment product development, electric power generation (hydroelectric, nuclear and coal-fired), reserve planning, material management, electrical energy conservation, manpower planning, project prioritization, nuclear safety, reliability and maintenance problems in North America.

Dr. Sim graduated with B.A.Sc., M.A.Sc. and Ph.D. degrees from the University of Toronto, Canada. He has been associated with the University of Toronto for over ten years as an adjunct associate professor and a member of the Industrial Engineering Program Advisory Board. He has published about twenty research papers in academic journals such as European Journal of Operational Research and IEEE Transactions on Reliability.

Dr. Sim is a fellow of Canadian Securities Institute and a registered professional engineer. He was a Colombo Plan scholar and has received several academic awards in Canada including a research grant and a postgraduate scholarship from the Natural Sciences and Engineering Research Council of Canada, Ontario Graduate Scholarship, University of Toronto Open Fellowship, Connaught Scholarship (most prestigious entrance award to attract international graduate students) and the W. S. Wilson Medal (for highest standing in the B.A.Sc. Industrial Engineering graduation class). His current interests include investment portfolio management, credit card business management and applied probability.

Currently, Dr. Sim is visiting the Decision Sciences Department at NUS Business School. He is the course instructor for the two newly created graduate courses in financial services. These courses are “BMA5272 Management Science Applications in the Credit Card Industry” and “BMA5273 Fund Development and Portfolio Management”.

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