



NUC E 590 SEMINAR

Nuclear Engineering

Thursday, April 17, 2008

Seminar at 4:00 p.m.—135 Reber

(Reception at 3:30 p.m. in lobby of Reber Building)

Dr. Pradip Saha

GE Hitachi Nuclear Energy,

Wilmington, NC

Thermal Hydraulics and Safety of ESBWR

This lecture will focus on the thermal hydraulics and safety of the Generation III+ 4500 MWt ESBWR developed by GE Hitachi Nuclear Energy and currently at the advanced stage of design certification with the U.S. Nuclear Regulatory Commission.

The topics of discussion are:

- Evolution and General Description of ESBWR
- Natural Circulation/Normal Operation
- Stability and Startup
- Passive Safety Systems and Tests Performed
- Samples of Transient and Accident Analyses
- Enhanced Operating Domain

Brief Bio: Dr. Pradip Saha

Dr. Pradip Saha is currently a Principal Engineer at GE Hitachi Nuclear Energy Wilmington, North Carolina.

Dr. Saha received his Ph. D. in Mechanical Engineering (1974) from Georgia Institute of Technology, Atlanta, GA. Dr. Saha is a recognized expert in Two-Phase Flow, Stability, Reactor thermal hydraulics and safety with experience in BWR, PWR, PHWR and Gen IV reactor concepts such as SCWR and GFR. He has over 100 publications and delivered many invited lectures at Academic Institutions and Professional Societies.

His work experience includes:

- Two years (1974-76) at General Electric Co., San Jose, CA
- Nine years (1976-85) at Brookhaven National Lab., Upton, NY
- Sixteen years (1986-2002) as the Founder and CEO of Flotherm Consultants in India
- Two years (2003-05) at MIT, Cambridge, MA
- Last three years at GE Hitachi Nuclear Energy, primarily in the area of ESBWR Engineering

Dr. Saha is a 2006 **Fellow** of the American Society of Mechanical Engineers (ASME) and recipient of GE Engineering Award (2007) and Brookhaven National Laboratory Distinguished Service Certificate (1985).