THE UNIVERSITY OF CHICAGO | EPIC Energy Policy Institute at Chicago

Small Modular Nuclear Reactors: Parametric Modeling of Integrated Reactor Vessel Manufacturing Within A Factory Environment

Xuan Chen, Arnold Kotlyarevsky, Andrew Kumiega
Jeff Terry, and Benxin Wu
Illinois Institute of Technology

Stephen Goldberg and Edward A. Hoffman
Argonne National Laboratory

Harris School of Public Policy
August 29, 2013 | 1:00 – 2:30 p.m.
Room 289A

Jeff Terry, associate professor at the Illinois Institute of Technology and the Scientific Director of the Advanced Test Reactor National Scientific User Facility, will present the part II of the research on the economic drivers of the potential Small Modular Reactor (SMR) Industry.

The goal of their work was to model the cost drivers of Integrated Reactor Vessel (IRV) manufacturing of an SMR using pressurized water reactor (PWR) technology. A model for the manufacturing of an IRV using a dedicated vendor factory was developed. This model was specifically designed to allow for future optimization of the fabrication of SMR components starting with the IRV from a Generic SMR design, and a series of Monte Carlo calculations allowed researchers to compare the variances over a spectrum of reactor cost estimates using slightly different parameters such as labor rate and material quantity. Speaker will address this research and issues related to it.

This lecture will also be live-streamed at:

http://phoenix.harrisschool.uchicago.edu/Panopto/Pages/Viewer/Default.aspx?id=03569592-3bd8-4d6e-b3b2-69c54cfc7385

The link will NOT be live until the event has begun.