

**Homework: Paper 1**  
**USA Nuclear Energy Systems Strategy**  
**(Topic of Lecture 1)**

Assignment Due: October 11, 2006

Your assignment is to present a strategy for Nuclear Energy System Development/Deployment for

- The USA
- The first 50 years of this century (with its impact on the next 50 years considered)
- Energy (not just electricity)

The paper length must be 10 pages or less including text, figures and talks.

Your answer should be prepared and justified based on the references provided or additional materials you find, as well as quantitative and qualitative evaluations of your own. Your strategy, at a minimum, should address the four main areas of modern nuclear energy design policy: economics, safety, proliferation, and waste. As well, your strategy may be expressed in phases covering the short and longer terms of the prescribed 50 year timescale. If you do propose phases, then also describe the transition strategy between such phases. In any event, be sure to present a transition from the current situation to your proposed strategy.

Developing a completely new or innovative strategy, while welcome, is not the goal of this exercise. Rather, this exercise is intended for you to comprehensively assess the current US situation and develop a strategy to meet future needs.

It is not necessary to deeply address the regulatory matters associated with your strategy – this will be covered later in this course in more detail. However, a consideration of the current and likely future regulatory environment should be a factor in your proposed solution.

This exercise is purposely somewhat open-ended. It is designed to challenge you to comprehensively think about these issues.

You may use any resource that you feel is appropriate.