

**Secretary of Energy Advisory Board
Nuclear Energy Task Force
Terms of Reference**

Scope & Objectives:

The task force shall assess the issues and determine the key factors which must be addressed if the Federal government and industry are to commit to the financing, construction, and deployment of new nuclear power generation plants to meet the nation's electric power demands in the 21st Century. The task force shall also provide the Secretary of Energy Advisory Board with an actionable plan to resolve these issues, resolve barriers and facilitate the deployment of new nuclear generation facilities. Because of the importance that nuclear power be considered in the relatively near-term, the task force will consider only issues associated with thermal reactor systems using the current once-through fuel cycle. The scope of the task force shall include, but not be limited to, the assessment of the following issues and key factors contributing to future electric utility and vendor decisions to deploy new nuclear generation plants and the development of an actionable plan for industry and government to resolve them:

- Federal and state regulatory uncertainties and related risks;
- Plant performance and operating-cost competitiveness issues and related risks;
- Construction cost and schedule uncertainties and related risks;
- Financing uncertainties and related business financial risks in a deregulated power market;
- Nuclear fuel and enrichment cost stability and related risks;
- Long-term waste disposal and spent fuel uncertainties and risks;
- Public acceptance uncertainties and risks; and
- Liability and accident indemnification uncertainties and risks.

Background:

Nuclear power has had a substantial role in the supply of electric power in the United States for over thirty years. The United States currently has 103 nuclear power reactors producing approximately 20 percent of the electricity consumed by the nation. Over the past twenty years the average capacity factor for U.S. nuclear power plants has increased from 60 percent to over 90 percent. Over this same period nuclear safety has increased, operating and maintenance costs have decreased, radioactive waste quantities have decreased as have worker exposures to radiation, and steady progress has been made on issues such as the long-term disposal of spent nuclear fuel. Despite this record of achievement and the fact that nuclear power generation does not result in greenhouse gas emissions, no new nuclear power plants have been ordered in the United States since 1973. The rapid economic growth of the 1990's, the successful operation of existing plants over the last 15 years, increased oil and natural gas prices, and societal concerns over greenhouse gas emissions have all rekindled interest in nuclear-produced electricity as a means of meeting the nation's growing need for safe, clean and economical electricity generation.

In response to this growing interest, the Department of Energy has launched a series of initiatives designed to pave the way for new nuclear power plants and Congress has considered various incentives to prompt utilities to place orders for new plants. However, while some progress has been made, the financial issues, market challenges, and regulatory uncertainties have continued to discourage U.S. power companies from proceeding to order the next U.S. plant.

Description of the Task Force's Duties:

The task force shall prepare a report assessing the issues and determine the key factors which must be addressed if the United States is to commit to the building, financing and deployment of new nuclear power generation plants to meet the nation's electric power demands in the 21st Century. The task force should take full note of, but not be bound by existing efforts pursued by the Department in this area of work. The task force shall provide the Secretary of Energy, through the Secretary of Energy Advisory Board, with an actionable plan to resolve these issues, resolve barriers and facilitate the deployment of new nuclear generation facilities.

Reporting:

The task force shall report to the Secretary of Energy Advisory Board.

Estimated Number and Frequency of Meetings:

This task force shall meet as required to assess the issues and determine the key factors which must be addressed if the United States is to commit to the building, financing and deployment of new nuclear power generation plants to meet the nation's electric power demands in the 21st Century. An estimated five meetings will be required to address this scope and prepare a final report.

Membership:

The task force shall have approximately fifteen members, including at least two individuals who are also members of the Secretary of Energy Advisory Board. The Task Force shall be bipartisan and co-chaired by former officials with broad public policy, regulatory or nuclear power experience. Members shall represent a balance of viewpoints pertinent to the scope and objectives of this study. The Chairman of the SEAB, in consultation with the Secretary of Energy, shall appoint the Chair (or Co-Chairs), as well as all other members.

Duration and Termination Date:

The task force shall serve for approximately six months, subject to the extension or dissolution by the Chairman of the SEAB.