

Nuclear Energy Advisory Committee (NEAC) - Task 2009-1

1. **Project Title** – Establish the Standing Subcommittee on Office of Nuclear Energy (NE) Nuclear Operations and Management
2. **Responsible Office of Nuclear Energy (NE) Program Office** – Office of Nuclear Power Deployment, NE-3
3. **Statement of Work** – NE is requesting NEAC to establish a standing subcommittee to provide independent advice on NE's nuclear operations and management activities. NE will provide NEAC with requests for specific advisory tasks for the subcommittee to perform.
4. **Background** – The Assistant Secretary for NE has determined that it would be beneficial to obtain independent advice on NE's nuclear operations and management activities. The primary areas of interest are operations and activities at the nuclear reactors and other nuclear facilities at the Idaho National Laboratory (INL). This advisory subcommittee will respond to specific requests for advice from the Assistant Secretary for NE.

The Department of Energy (DOE) established a standing advisory committee, NEAC, in 1998 (formerly called the Nuclear Energy Research Advisory Committee (NERAC)). This committee provides expert independent advice on national policy and scientific aspects of nuclear issues of concern to DOE. NEAC also provides periodic reviews of the various program elements within the NE and DOE nuclear programs and provides recommendations based thereon. Therefore, the Assistant Secretary for NE wishes to build upon the existing advisory committee structure and is requesting NEAC to establish a subcommittee to provide independent advice on NE's nuclear operations and management activities. A proposed detailed subcommittee work scope is defined in the attached draft charter.

5. **Performance Period Requested** – NEAC should establish the subcommittee as soon as possible to respond to specific requests from the Assistant Secretary for NE.
6. **Description of Desired Deliverable(s)** – Periodic meetings, site visits, and reports to be determined by NEAC.
7. **Special Instructions (optional)** – none

References – Reference 1 – Draft Charter, NEAC Subcommittee on Office of Nuclear Energy Nuclear Operations and Management

Nuclear Energy Advisory Committee (NEAC) - Task 2009-2

1. **Project Title** – Review the Idaho National Laboratory (INL) Advanced Test Reactor (ATR) Life Extension Project (LEP) and Safety Margin Improvement (SMI) initiatives.
2. **Responsible Office of Nuclear Energy (NE) Program Office** – Office of Nuclear Power Deployment, NE-3
3. **Statement of Work** – NE is requesting NEAC to review and provide advice on the ongoing INL ATR LEP and SMI initiatives.
4. **Background** – In fiscal year (FY) 2006, INL formalized the ATR LEP with the intent of returning the ATR plant and supporting systems and documentation to its originally intended conditions. The Department of Energy previously commissioned several independent reviews (2003 and 2005 reviews by the Office of Assessment and 2004 and 2006 reviews by the ATR Planning Assessment Team). These studies found that the ATR reactor plant and supporting systems needed attention to support continued safe operations.

The first phase of the LEP was completed in FY 2008 and consisted of those assessment activities necessary to support a broad-based understanding and definition of the needed work scope. For example, the Design Basis Reconstitution Assessment (one of several related tasks) involved assessing the original design requirements, the safety analysis report, physical plant configuration, and identifying any deficiencies. The second phase, the Deficiency Correction Phase, is now being planned and implemented and is expected to take several years to complete.

In March 2006, INL and the Idaho Operations Office received the results of an internal review that focused on how to improve the ATR safety margins. This review was conducted by the ATR Advisory Review Panel, which was composed of noted industry experts. The results of this review have prompted the initiation of the SMI initiative. The SMI is focused on making the ATR more contemporary with commercial nuclear safety practices to provide a safe and reliable response to potential accidents, improve safety for both workers and public, increase operating reliability to fulfill current and future missions, and support pre-conceptual design, engineering, and system analysis of primary coolant system.

INL is finalizing the establishment of the ATR Nuclear Safety Oversight Committee (NSOC), which is composed mainly of members from the former ATR Advisory Review Panel. It is suggested that the newly established NEAC Subcommittee may wish to interface with the NSOC.

5. **Performance Period Requested** – The NEAC subcommittee is requested to conduct their review and provide a report containing their advice to NEAC by September 30, 2009.

6. **Description of Desired Deliverable(s)** – A report containing the subcommittee’s advice.

7. **Special Instructions (optional)** – none

References –

Reference 1 – Draft Charter, Nuclear Energy Advisory Committee (NEAC) Subcommittee on Office of Nuclear Energy Nuclear Operations and Management

CHARTER

SUBCOMMITTEE ON OFFICE OF NUCLEAR ENERGY NUCLEAR OPERATIONS AND MANAGEMENT

NUCLEAR ENERGY ADVISORY COMMITTEE (NEAC)

1. Subcommittee's Official Designation:

NEAC Subcommittee on Office of Nuclear Energy (NE) Nuclear Operations and Management

2. Subcommittee's Objectives and Scope of Activities and Duties:

As requested by the Assistant Secretary for NE, the NEAC Chairperson will direct the subcommittee to perform specific advisory activities, which may include the following:

a. Review and Evaluation of Standards. The subcommittee may review and evaluate the application and implementation of the standards (e.g. requirements, programs, processes, and procedures) relating to the design, construction, operation, and decommissioning of nuclear reactors and nuclear facilities managed by NE. The subcommittee shall advise NEAC regarding specific measures that should be adopted to improve performance and continued operations at the nuclear facilities and ensure that people and property are adequately protected from those operations.

b. Investigations. The subcommittee may investigate specific events, conditions, activities, or practices at an NE reactor or nuclear facility that may impact operations or adversely affect safety, health, or the environment.

The purpose of a subcommittee investigation is to review and assess performance of the Idaho National Laboratory (INL) contractor and/or the Idaho Operations Office (DOE-ID) in determining the probable causes, contributing factors, and appropriate actions to preclude recurrence. The subcommittee may use staff from NE or DOE-ID to assist in data gathering, order compliance reviews, performance/event evaluations, or other technical or administrative support needs.

c. Analysis of Design and Operational Data. The subcommittee may have access to all facilities, data, and records. It also may have access to facility personnel to make written or verbal statements consistent with security and privacy requirements of the Department of Energy (DOE).

d. Review of Facility Design and Construction. The subcommittee may review the design of a new NE reactor and nuclear facility, or any significant modifications thereto, before construction of or modification to the facility begins. It may advise the NEAC Chairperson of revisions or improvements to the design that the subcommittee considers necessary to improve safety performance so that people and property are adequately protected.

3. Time Period Necessary for the Subcommittee to Carry Out the Purpose:

In view of the goals and purposes of the subcommittee, it is expected to be continuing in nature.

4. Official to Whom this Subcommittee Reports:

The Subcommittee will report to the Chairperson of NEAC, who will report subcommittee activities to the Assistant Secretary for NE.

5. Agency Responsible for Providing Necessary Support for this Subcommittee:

DOE will provide all necessary support for this subcommittee. Primary support shall be furnished by NE and DOE-ID and may include independent technical experts and administrative staff.

6. Description of Duties for which the Subcommittee is Responsible:

The duties of the subcommittee are solely advisory and are stated in paragraph 2, above. The committee shall conform to all of the requirements set forth by the full NEAC and by Public Law governing Federal advisory committees.

7. Estimated Number and Frequency of Meetings:

The subcommittee will meet periodically, typically two to four times per year, preferably at INL or in Washington, D.C.

8. Subcommittee's Termination Date (if less than Two Years from Date of Establishment or Renewal):

Not applicable, standing subcommittee.

9. Members:

Subcommittee members shall be appointed by the NEAC Chairperson, with the approval of the Assistant Secretary for NE, and do not have to be a member of NEAC. The subcommittee shall normally consist of five members, and the members shall serve staggered three-to-seven-year terms to ensure continuity.

Members shall be experts in their respective fields and be appointed as special Government employees or representatives of entities such as including, among others, the commercial nuclear power industry, the naval nuclear propulsion program, nuclear research facilities, nuclear safety academic and policy-centered institutions, and Government nuclear safety regulatory organizations. Members should be appointed consistent with the subcommittee's specific tasks.

11. Chairperson:

The Subcommittee Chairperson shall be appointed by the NEAC Chairperson based upon the simple majority recommendation of the full committee.

This Charter for the Advisory Subcommittee named above is hereby approved on:

Date

Carol A. Mathews
Acting Committee Management Officer

Date Filed