ADDENDUM
to
MEMORANDUM OF UNDERSTANDING
Between
U.S. NUCLEAR REGULATORY COMMISSION
and
ELECTRIC POWER RESEARCH INSTITUTE, INC.
on
COOPERATIVE NUCLEAR SAFETY RESEARCH
Related to
LONG-TERM OPERATIONS BEYOND 60 YEARS

I. Introduction

This Addendum to the Memorandum of Understanding (the Addendum) is entered into by and between the U.S. Nuclear Regulatory Commission (NRC) and the Electric Power Research Institute (EPRI) effective as of the date of signature of the last of the parties to execute this Addendum (the Effective Date). NRC and EPRI are parties to that Memorandum of Understanding on Cooperative Nuclear Safety Research dated March 14, 2007, (the MOU). Pursuant to the MOU, the parties agreed to encourage cooperation in nuclear safety research, which provides benefits for NRC, the nuclear power industry (the Industry), and the public.

This Addendum to the MOU is authorized pursuant to Section 31 of the Atomic Energy Act (AEA) and/or Section 205 of the Energy Reorganization Act (ERA). The roles, responsibilities, terms, and conditions of this Addendum to the MOU should not be interpreted in a manner inconsistent with and shall not supersede applicable Federal laws and regulations.

This Addendum describes a cooperative aging management research and development (R&D) program between EPRI and NRC's Office of Nuclear Regulatory Research (RES) in the area of nuclear power plant (NPP) long-term operations (LTO) in the second, and subsequent, license renewal periods beyond 60 years ("Life Beyond 60").

II. Objectives

The objective of the cooperative LTO R&D program is the development of tools, data, and technical information useful to NRC and Industry in the areas related to NPP aging management. The specific objective of this cooperative program is to ensure the timely exchange of information (e.g., objectives, milestones, technical data, and results) on planned and ongoing aging management research activities.

This cooperative program has the following specific objectives:

1. Ensure the timely exchange of information (e.g., objectives, milestones) on planned and ongoing aging management research activities.

2. Ensure the timely sharing of aging management technical data needed by the RES and EPRI LTO R&D program.

3. Develop LTO analysis methods, tools, and/or data to support the second, and subsequent, extended licensing periods.

4. Ensure the timely sharing of LTO R&D results and tools.

5. Access the capabilities of current and future aging management technology, methods, and tools.

III. Scope and Plan

This program includes a wide variety of collaborative activities (including information exchange meetings, support for expert panels, jointly-sponsored projects and research) aimed at achieving the preceding objectives.

The program elements are as follows:

1. Programmatic Information Exchange. Both parties will exchange information concerning the objectives, project scopes, milestones, planned approaches, and schedules for their ongoing and planned aging management/LTO R&D tasks.

2. Technical Information Exchange. Both parties will facilitate the exchange of technical information between researchers and project managers. This technical exchange is particularly important in cases where, to avoid unnecessary duplication of research efforts, EPRI and RES agree to a division of effort on the basis of complete exchange of research results. It also includes support of working meetings between researchers (on an agreed-upon as-needed basis).

3. Collaborative Research on Aging Management Issues. EPRI and RES are supporting a number of initiatives aimed at aging management/LTO at commercial nuclear facilities. Initial collaborative efforts to minimize unnecessary duplication of efforts will be associated with the following areas:

   a. Coordination of efforts related to the routine updating of EPRI's Materials Degradation Matrix (MDM) and NRC's Proactive Materials Degradation Assessment (PMDA, NUREG/CR-6923).

   b. Joint sponsorship of recurrent NRC/Industry Workshops on status of operating experience from the initial renewal term and industry research activities to address aging management technical issues for a subsequent license renewal.

   c. Investigations of aging management through analysis of data, development of methods, and demonstration of technical tools.

4. Other Parties. EPRI and RES will solicit participation by other nuclear industry groups in this effort. Recommendations concerning the participation of other parties, whether domestic or international, will be jointly developed and reviewed with EPRI and RES management.

5. Future Collaborative Areas. Additional aging management/LTO R&D activities to be identified and added as appropriate. EPRI and RES will continue to jointly participate, when appropriate, in the identification of additional areas of mutual interest for joint collaborative activities that will be added to this Addendum.

All technical information will be managed through a designated point of contact for each party. All EPRI data and materials subject to commercial or other use restrictions will be submitted to RES under a general affidavit addressing all documents, data, and materials to be shared with RES pursuant to this Addendum and requesting that such documents, data, and materials be withheld from disclosure to the public pursuant to Title 10, Section 2.390 of the *Code of Federal Regulations* (10 CFR 2.390) as provided in the MOU. Should RES reject EPRI's request to withhold such documents, data, and materials from public disclosure, the project will not proceed.

IV. Period of Performance

The initial period of performance will be from the effective date through September 30, 2016, to be extended in writing if mutually agreeable to EPRI and RES.

V. Project Direction and Coordination

All technical interactions will be managed through a single designated point of contact for each party (the Project Contacts). Technical meetings to coordinate this effort and to discuss project progress will be arranged through the respective Project Contacts. The Project Contacts are:

NRC: C.E. (Gene) Carpenter, Group Lead for Aging Management Issues Office of Nuclear Regulatory Research U.S. Nuclear Regulatory Commission		EPRI: John Gaertner, Technical Executive Nuclear Sector Electric Power Research Institute

VI. Costs and Schedules

EPRI and RES are responsible for their respective costs in implementing this Addendum. This Addendum does not create any binding obligation or enforceable right of action of any kind on the part of either party. This Addendum does not obligate any funds and is subject to the availability of appropriated funds.

The costs of this cooperative program (above and beyond the costs associated with the existing aging management/LTO R&D programs of both parties) are associated with the support of (1) working meetings among researchers and (2) management review meetings for the purpose of programmatic and technical information exchange and identification of collaborative R&D projects. These meetings will be held on an as-needed basis.

Until such time as specific collaborative projects are identified and agreed to, no specific milestones have been established.

VII. Disputes

If a dispute arises out of or relating to this Addendum or any breach thereof, the parties will first attempt to settle the dispute through direct negotiation between the Project Contacts. If the Project Contacts cannot settle such a dispute, the dispute shall be submitted to the Senior Management Contacts (as defined in the MOU) for resolution.

AGREEMENT

Brian W. Sheron

Brian Sheron, Director
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission

Date: April 30, 2010

Neil Wilmshurst, Vice President and
Chief Nuclear Officer
Electric Power Research Institute, Inc.

Date: 5-6-2010.