Nuclear Risk Research Center (NRRC)
Central Research Institute of the Electric Power Industry (CRIEPI)
1-6-1 Otemachi, Chiyoda-ku, Tokyo, 100-8126, Japan

Dr. George Apostolakis
Director

June 14, 2023

Mr. J.W. Stetkar, Chairman
Technical Advisory Committee

Subject: TAC Report titled “PRELIMINARY NRRC RESEARCH PLAN FOR FISCAL YEAR 2024” dated May 30, 2023

Dear Chairman Stetkar:

We appreciated the interactions with TAC throughout the review of our research plan and the Committee’s insights. The NRRC reply to the TAC conclusions and recommendations is as follows.

1. Research plan for fiscal year 2024

In the subject report, the Committee stated, “The overall scope of research plan for fiscal year 2024 and the technical objectives of the individual projects within each major research area remain consistent with the NRRC short-, intermediate-, and long-term goals.”
We are gratified to receive this comment.

2. Research activity for risk integration

We greatly appreciate the comments and inputs on this subject presented by TAC during the meeting. We will continue our challenging survey and investigation and share the project progress status in future TAC meetings.

3. Recommendations for individual research activities in the Discussion section

With regard to the three recommendations on individual research activities, we will consider them in the plans for fiscal year 2024 and beyond. Details are as follows.

(1) Development of Risk-Informed Decision-Making Guidance

Thank you for the two categories of RIDM. We understand that there are two categories of risk-informed activities: those related to regulations (Category I) and those that can be voluntarily implemented by utilities not related to regulations (Category II). For realization of Category I in Japan, we believe it is important to show the regulators the implementation status of Category II. In order to achieve steady-state Category II by utilities, our team will be developing a guidance to support the RIDM program.

(2) Spent Fuel Risk Assessment

We understand that integrating the analyses of spent fuel risk with PRA models of fuel damage in the reactor core during full power, low power, and shutdown modes is important to the scope of this study. In the PRA model development for SFP, scheduled to begin in FY2024, we will conduct this research with the goal of establishing a methodology for the integrated assessment of risk from spent fuel damage in all plant operating modes.

(3) High Wind Risk Assessment

As to the research plan for the development of a high-wind PRA technique, we will discuss with the utilities to revise the current plan, which considers typhoons (high winds) next to tornadoes, to also begin a review of existing studies on typhoon PRA.

Sincerely,

George Apostolakis