Technical Advisory Committee of the Nuclear Risk Research Center Central Research Institute of Electric Power Industry 1-6-1 Otemachi, Chiyoda-ku, Tokyo, 100-8126 Japan

November 15, 2015

Dr. George Apostolakis Head, Nuclear Risk Research Center Central Research Institute of Electric Power Industry 1-6-1 Otemachi, Chiyoda-ku Tokyo, 100-8126 Japan

SUBJECT: COMMENTS ON THE PROPOSED NRRC RESEARCH PLAN FOR FISCAL YEAR 2016

Dear Dr. Apostolakis:

During the fourth meeting of the Technical Advisory Committee (TAC) of the Nuclear Risk Research Center (NRRC), October 26-30, 2015, we met with NRRC staff to review its proposed research plan. The purpose of our review was to provide comments on the technical merit of the research plan and its relevance for supporting NRRC's current mission.

CONCLUSION

Based on the prepared presentations, supplemental discussions with the NRRC researchers, the current state of knowledge in Japan, and the current needs of the Japanese utilities, we conclude that the presented research topics are appropriate and are supportive of the NRRC's mission.

BACKGROUND

One of the most important objectives of the research plan is to present the background and significance of the research needs including the proposed rationale, current state of knowledge, and potential contributions and significance of the research to the objectives of the center. The presentations provided a formal statement of the objectives, gaps, and milestones of research activities that clearly and concisely described what the proposed research is intended to accomplish.

Our review of the NRCC research plan was limited to the review of the stated purpose and desired outcome of the activities and did not include a detailed review of the milestones or the completion time frame.

DISCUSSION

During the fourth TAC meeting, the NRRC staff provided a high level presentation of the center's research plan for our review and comment. The presentation mainly concentrated on activities that are to be started in Fiscal Year 2016. These activities focus primarily on applied scientific research that is concentrated on finding answers to a specific problem. They include exploratory research topics and fact-finding (gathering information). In the non-external events technical areas, with one exception, the primary objective of the proposed applied research areas is to collect and interpret currently available information (e.g., circuit analysis or fire frequency estimations). The exception is the Human Reliability Analysis research area, which is a combination of information gathering and state-of-knowledge improvement. The natural external events research topics, which include seismic, tsunami, tornado/typhoon, and volcano are exploratory (e.g., testing and understanding causal relations) and predictive research.

Based on the prepared presentations, supplemental discussions with the NRRC researchers, the current state of knowledge in Japan, and the current needs of the Japanese utilities, we conclude that the presented research topics are appropriate and are supportive of the NRRC's mission.

Sincerely,

John W. Stillen

John W. Stetkar Chairman

REFERENCES

- 1. "FY 2016 Research Plan Risk Evaluation Team," Presentation to NRRC Technical Advisory Committee, October 27-28, 2015, Proprietary.
- 2. "R&D Related to Natural External Events," Presentation to NRRC Technical Advisory Committee, October 27-28, 2015, Proprietary.