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Dr. George E. Apostolakis, Chairman  
Advisory Committee on Reactor Safeguards  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Dear Dr. Apostolakis:

This letter provides an industry perspective on the July 23 ACRS letter to Chairman Meserve on the subject of Regulatory Guide 1.174 revisions. The industry, NRC staff, and the ACRS have invested considerable time and resources toward regulatory improvements that utilize risk insights. While we commend the Committee's intent to further the progress of risk-informed initiatives, your letter raises several issues that warrant further discussion.

First, with regard to recommendations 1 and 3 of the July 23 letter, while we agree that the proposed changes to Regulatory Guide 1.174 are minor, Revision 1 should be issued. Substantive new guidance will be provided in a separate regulatory guide, DG-1122, that is being developed to supplement Regulatory Guide 1.174 on PRA technical adequacy. The new regulatory guide will provide a process to address the requirements of the ASME PRA standard using existing industry peer review results, supplemented by self-assessments. We have had constructive interactions with the NRC staff developing the draft regulatory guide. This guidance will provide that PRAs used for risk-informed regulatory changes should generally meet ASME Category II (industry peer review grade 3) requirements.

With regard to recommendation 2, we believe Regulatory Guide 1.174 already emphasizes the need for consideration of all sources of risk from internal and external initiators. It also addresses the need to consider parametric and model uncertainties. These considerations may involve qualitative methods or bounding estimates, and we fully agree that use of these methods should be justified. The risk metrics developed for Regulatory Guide 1.174 provide considerable margin to the quantitative health objectives to account for unquantifiable factors, which would need to be considered regardless of the scope of PRA.

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The industry shares the committee's goal of improving the scope and rigor of PRAs. We believe that such improvements are best encouraged by demonstrated success in regulatory applications and standards development. Incentives exist to expand the scope of PRA models through applications (e.g., Option 2, risk management technical specifications) that are tailored to provide more benefit to those plants that can quantify risk impacts beyond internal events at power. In addition, finalization of PRA standards will provide the stability and certainty necessary to support such investments.

Finally, as you are aware, there are many activities underway within the NRC, industry and academia, to improve our state of knowledge and capability to model risk. We will continue to evolve our understanding and use of risk methods, and in no way believe Regulatory Guide 1.174 has inhibited this effort. On the contrary, by providing the framework for attaining actual regulatory improvements, it has fostered these activities. We would appreciate the opportunity to brief the ACRS in this regard.

Sincerely,



Anthony R. Pietrangelo

C: Samuel J. Collins, NRC/NRR  
Ashok C. Thadani, NRC/RES  
John T. Larkins, ACRS