ELECTRIC POWER RESEARCH INSTITUTE

January 16, 2008

To: Nuclear Power Council

From: Chris Larsen

SUBJECT: Final LWR R&D Strategic Plan and Results of Utility Executive Survey on Long-Term Plant Operation

Attached are two documents relevant to the Council presentation next week on Long-Term Plant Operation. Please take time to review these materials prior to the meeting.

- "INL / Nuclear Power Industry Strategic Plan for Light Water Reactor Research and Development: *An Industry-Government Partnership to Address Climate Change and Energy Security*"
- Long-Term Operation of Nuclear Power Plants: Summary of Executive Interviews

The first of these documents was discussed in my 7 and 20 November letters, the latter of which requested your review of the final draft prior to a forwarding endorsement by NPC Chairman Mano Nazar. As you recall, this Strategic Plan, intended to form the basis for new funding in the DOE-Nuclear Energy FY2009 Budget, is focused on two "stretch goals" for nuclear energy:

- Life extension of the current fleet beyond 60 years (e.g., what would it take to extend all lives to ~80 years?)
- Strong, sustained expansion of new nuclear plants throughout this century (e.g., what would it take to proceed uninterrupted from first new plant deployments in ~2015 to sustained build rates approaching 10/year?)

The second attachment is a summary of the results of an extensive survey that EPRI conducted over the last two months related to the first of these two "stretch goals." A total of 47 interviews were completed, with input from one or more utility executives at 23 nuclear utilities, including many of you.

The preliminary results of this survey revealed a high degree of interest and enthusiasm regarding the need to make this nuclear energy option a reality. Respondents identified a number of obstacles to success, but few felt that any of these obstacles were unmanageable. Clearly, most respondents envision this option as a likely element of their long-range business planning, if industry can collectively address the obstacles.

Please note that a final report of those survey results is being prepared without attribution of specific comments to individuals. As such, we believe this survey can become a very useful tool as we work with the industry and discuss the importance and viability of this option.

Both efforts should help industry, and especially EPRI, define priorities for future LWR R&D. Both will likely play an important role in an upcoming NRC-DOE workshop on "Life Beyond 60," scheduled for 19-21

3420 Hillview Avenue, Palo Alto, CA 94304-1338 USA • 650.855.2329 • Fax 650.855.8759 • cblarsen@epri.com

February 2008. EPRI experts and advisors are being asked to participate in this workshop. Similarly, NEI will hold a Nuclear R&D Summit on 27-28 February, which will also likely focus at least in part on the content of the Strategic Plan.

Next week we will have the first opportunity to apprise the Council of these results and are interested to hear your views as to what this information means to the EPRI Nuclear Power Sector portfolio.

Thanks,

CBL/tw

Attachments