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(55FR29043)

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November 1, 1990

Mr. Samuel J. Chilk
Secretary of the Commission
USNRC
Washington, DC 20555

Attention: Docketing and Service Branch

Subject: Proposed Rule - Nuclear Power Plant License Renewal (55FR29043)

Dear Mr. Chilk:

The American Nuclear Society (ANS) is pleased to offer comments on the Nuclear Regulatory Commission's proposed rule for nuclear power plant license renewal (55FR29043, dated July 17, 1990). The ANS is a professional society with over 16,000 members involved with nuclear science and technology throughout the world. The ANS supports the NRC's efforts to establish the requirements for nuclear energy plants to extend their operating licenses. The original 40 year license period was an arbitrary choice based on the fact that fossil fueled generating units generally had about a 40 year effective service life.

Electricity from America's 112 nuclear energy plants makes a major contribution to U.S. energy supply, economic growth, energy security, energy efficiency, consumer well-being, and environmental protection. Renewing the operating licenses of these plants will ensure that Americans continue to receive these benefits. More specifically, these benefits include the following:

- Nuclear energy plants account for nearly 20 percent of the total U.S. electricity supply.

- Nuclear energy plants are essential to U.S. economic growth. There is a continuing relationship between U.S. electricity consumption and economic growth as measured by the U.S. Gross National Product. Even with license renewal, new electric generating capacity planned for the 1990's will not satisfy the demand expected. Without license renewal, the electric supply problem will be significantly worse.

- Electricity from nuclear energy plants reduces our growing dependence on unreliable energy supplies from foreign sources. By renewing the licenses of operating nuclear plants, the U.S. can help protect itself against increasing dependence on imported oil.

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- The nuclear energy plants now operating in the U.S. have saved American consumers billions of dollars. In the 17 years since the 1973 oil embargo, U.S. nuclear energy plants have saved consumers 45 billion dollars compared to the other fuels -- coal, oil, and natural gas -- that would have been used to supply electric power.

- Nuclear energy plants do not pollute the atmosphere with emissions of sulfur oxides, nitrogen oxides, particulate matter, or "greenhouse" gases such as carbon dioxide. The waste by-products of nuclear energy are small in volume and, given to the special care with which they are managed, represent no threat to the environment. The cost of electricity from nuclear energy fully internalizes the social and environmental costs of producing it.

The ANS believes that the two key principles upon which the license renewal rule is based are sound. The first principle being that, with the exception of age-related degradation, the current licensing basis for each reactor provides an acceptable level of safety for operation during any renewal period. The second principle is that each plant's current licensing basis must be maintained during the renewal period, in part, through a program of age-related degradation management for important systems, structures, and components.

Although a plant's licensing basis can and does change, the proposed rule appropriately clarifies that changes to the plant's current licensing basis that are unrelated to age-related degradation need not be considered by the Commission during the renewal process. Indeed, the Commission noted that "to preclude the renewal proceeding from developing into a general reconsideration of a plant's current licensing basis," the proposed rule was written to specifically target age-related degradation during the renewal period. We agree with this approach.

ANS also agrees that because age-related degradation is the principal issue associated with license renewal, the proposed rule should only require that applicants take actions to ensure that the plant will continue to meet an acceptable level of safety during the renewal term. Appropriately, under the proposed rule, each renewal applicant is required to address age-related degradation in an integrated plant assessment which demonstrates that degradation of the facility's systems has been identified, evaluated, and accounted for to ensure that the facility's licensing basis will be maintained throughout the term of the renewed license. The required assessment consists of a screening process to select equipment important to license renewal, based on the intended safety functions; an evaluation and demonstration of the effectiveness of the ongoing licensee actions under existing regulatory requirements and plant-specific programs to address aging concerns; and the implementation of supplemental programs to prevent or mitigate age-related degradation during the renewed license term. We believe that this is a prudent and technically sound approach to license renewal.

The Society appreciates the opportunity to provide the above comments in support of the NRC's efforts to ensure the continued safe operation of the nation's nuclear energy plants.

Sincerely,

M. Jack Ohanian
President

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