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December 3, 1996

Mr. John Hoyle
Secretary of the Commission
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Attention: Docketing and Service Branch

Subject: Comments of Westinghouse Electric Corporation re: United States Nuclear Regulatory Commission Strategic Assessment and Rebaselining Initiative, Direction Setting Issue 10, "Reactor Licensing for Future Applicants"

Dear Mr. Hoyle:

The Nuclear Regulatory Commission Strategic Assessment and Rebaselining Initiative is intended to position the agency to address the issues it faces as it prepares to move into the 21st century. One of the identified mission-critical strategic arenas identified as a part of the Initiative is Assuring Safe Operation of Nuclear Reactors, with Reactor Licensing of Future Applicants being one of the associated Direction Setting Issues.

Westinghouse Electric Corporation ("Westinghouse") submits the following comments in response to the invitation for comments on the United States Nuclear Regulatory Commission Strategic Assessment and Rebaselining Initiative, Direction Setting Issue 10, "Reactor Licensing for Future Applicants".

The request for input asked the stakeholder to focus on the following questions in formulating their responses:

1. What, if any, important considerations may have been omitted from the issue papers?
2. How accurate are the NRC assumptions and projections for internal and external factors discussed in the issue papers?
3. Do the Commission's preliminary views associated with each paper respond to the current environment and challenges?

The DSI paper indicates that new nuclear plant orders in the United States are the force that drives the agency's review of new nuclear plant designs and establishes the priority these reviews are given within the agency. Congress's Energy Policy Act of 1992 defined several imperatives which must be addressed throughout the remainder of this century. Among these imperatives is the need to *keep the nuclear option open for the United States*. In response, the nuclear industry has developed a comprehensive strategic plan aggressively devoted to making sure that this country has the nuclear option when needed and that the nuclear option will be economically competitive with fossil alternatives. An integral part of this strategic plan is the design certification of the Westinghouse AP600 and several other advanced light water reactors. The NRC's responsibility in responding to this imperative is to review the designs of the plants submitted for review in a timely and efficient manner.

Westinghouse, the nuclear industry and DOE continue to invest heavily in the development of the AP600. Even with necessary and aggressive conservation, increased energy efficiency, and advancements in renewable energy resources, new baseload power plants will be needed to support economic growth in the next century. Our nation's economy, growing even at a moderate rate, will dictate the need for additional generation capacity. As the need for new baseload generating capacity arrives during the next 15 years, we must have all available options at the ready so that effective choices can be made.

Keeping in the forefront of nuclear technology is also vital from an international perspective. The United States has long been the world leader in the commercialization of nuclear technology and the world continues to look to us for technology development. Indeed, without a strong nuclear program, our influence in shaping the international nuclear non-proliferation regime would be greatly diminished.

The United States must continue to set the worldwide standard to provide the safest and best-engineered nuclear designs, components, and fuel services. The nuclear export market is also significant with up to 50 nuclear power plants expected to be built in Southeast Asia over the next 15 years. There is a high probability that a large number of these plants will be based on designs approved by the NRC.

The AP600 design has generated such strong interest worldwide that 20 nations (including France, Italy, Spain and Japan) have joined the engineering and testing efforts. This international coalition is strong evidence that the world still looks to the United States for leadership in nuclear power and that AP600 meets the test of a world-class product. Congress's recognition of potential worldwide environmental problems, if the energy needs of Southeast Asia are met solely with fossil fuel plants, places additional emphasis on the importance of AP600.

AP600 is a simplified, safe, and economical 600-megawatt power plant, poised to provide a new era of nuclear power generation. Designed to satisfy the standards set by the U.S. Department of Energy and embodying the principles of the Advanced Light Water Reactor Utility Requirements Document, AP600 is an elegant combination of innovative safety systems that rely on dependable natural forces and proven technologies while being economically competitive with fossil alternatives.

From 1985 to 1989, Westinghouse completed preliminary design and proof of principle testing for AP600, including cost and schedule estimates, under a program funded by DOE and EPRI. In 1990, Westinghouse was awarded the cost shared design certification contract from DOE and EPRI. In March 1993, the companion cost-shared program on First-of-a-Kind Engineering (FOAKE) was awarded to Westinghouse as a result of a domestic market-driven utility selection process. This program, together with the Design Certification Program, will provide the certainty in safety, licensing, cost, and schedule which is needed for public, investor, and utility confidence to proceed with nuclear power. The award of the contracts for design certification and FOAKE along with the continued support of the domestic utilities is a demonstration of the interest in maintaining the nuclear option in the United States.

Westinghouse has proceeded aggressively with the program and has successfully completed a broad based design certification testing program including a \$13 million test program at Oregon State University. The results of these test programs have been used successfully to verify the computer programs to evaluate the performance of the AP600. The NRC are now using the world-class Oregon State test facility for their own research programs.

The ability to construct AP600's around the world, particularly in the Asian nations that will place orders for nuclear power plants in the next three years, depends on the timely receipt of final design approval from the NRC. Being licensed in the country of origin is essential to competing in the foreign markets. For example, China expects to increase their nuclear generation capacity by 30 fold over the next 24 years. Delays will give foreign competitors a crucial advantage and potentially deprive the United States of these very important orders.

It should also be noted that the AP600 program has the support of Congress. For example, the House Budget Committee has made it clear that the ALWR and AP600 programs meet their criteria for Federally funded programs, and the FY-97 program has been approved by Congress.

Completion of the AP600 design certification review by the NRC ensures that the effort expended to date, along with the considerable funding from the utilities, DOE and Westinghouse is not wasted.

The Commission's preliminary views associated with this paper were to continue to give priority for reviewing standard and advanced reactor designs. This is described as option 2 with elements of option 1. In the discussion of option 2, it was indicated that the resource requirements would be higher than are currently planned in the advanced reactor area. The AP600 design certification program is now 88 percent complete, and is targeted for final design approval from the NRC in 1997. The evolutionary plant design certifications are expected by the end of 1996. Since the review of the only other plant under review, the AP600, is targeted to be completed in 1997, there will be a declining NRC resource requirement. The most efficient use of the NRC resources would therefore be the completion of the AP600 design certification review in a timely and efficient manner.

The paper is correct that the economic decisions concerning the support provided to an application are the responsibility of the applicant. As pointed out in the DSI paper, Westinghouse is responsible for the AP600 design review costs. At the conclusion of the program, Westinghouse will have spent over \$22 million in NRC review fees.

Conclusion

Substantial progress has been made in the AP600 program with the full support and cooperation of the utility members of the Advanced Reactors Corporation, the DOE, and the domestic and international members of the AP600 team.

Completion of the AP600 design certification review is:

- Vital to the maintaining the nuclear option in America,
- Vital to developing technology exports,
- And necessary to maintain and enhance our influence in international nuclear policy.

We strongly request that the AP600 design certification program with NRC be completed in a timely and efficient manner on a priority basis as described in the preliminary Commission view. This approach will support the imperatives of Congress's Energy Policy Act of 1992 of maintaining the nuclear option in the United States. The NRC priorities should not be driven by their expectations on the timing of orders for new nuclear power plants.

Westinghouse thanks the NRC for the opportunity to comment on the United States Nuclear Regulatory Commission Strategic Assessment and Rebaselining Initiative and looks forward to further interaction with the NRC as the Initiative progresses.

Very truly yours,

A handwritten signature in black ink, appearing to read "A. J. Bruschi". The signature is written in a cursive style with a large initial "A" and "J".