

# ABB

DSI-10  
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December 2, 1996  
LD-96-057



Mr. John C. Hoyle  
Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
ATTN: Chief of Docketing and Services Branch  
Washington, DC 20555-0001

**Subject: Comments on the NRC Strategic Assessment and Rebaselining Initiative**

Dear Mr. Hoyle:

In response to the invitation to the public and stakeholders to submit comments by December 2, 1996, please find attached Combustion Engineering, Inc.'s (ABB-CE's) comments on each of the direction setting issues identified by the NRC staff.

ABB-CE commends the Commission for undertaking this comprehensive systematic assessment of its future role. Since the NRC came into being in 1975, the industry that it regulates has substantially matured in a technical sense, and it follows that the role of the regulator must adapt to that maturation. In addition, the commercial environment for the industry is just beginning to move toward deregulation, which brings new factors into play.

The move toward risk-informed, performance-based regulation is to be encouraged. The future competitive environment for electrical generators makes it imperative to free safely operating nuclear plants of unnecessary regulatory burdens. This requires the NRC to acknowledge in deed, as well as in word, that the safety performance of the industry as a whole has been steadily improving over more than a decade. It means relooking at the philosophy of regulating the new Advanced Light Water Reactor designs such that their vastly improved safety features result in added margin from regulatory requirements rather than tightening the regulations to enforce the new safety levels. If the Commission is unable to acknowledge these safety improvements through revamped regulation and enforcement, the nuclear industry will be unable to compete in the future marketplace.

We would encourage that a very careful evaluation be made of the input which will be received and that the necessary time and attention be provided to make the

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Acknowledged by card 12/31/96 bmt

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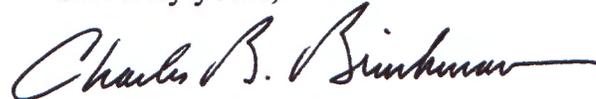
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difficult, but extremely important, decisions. We would also recommend that the Commission consider the use of stakeholder committees in helping to further develop the options available to the Commission and to develop plans for successfully carrying out the new directions chosen by the Commission.

Thank you for the opportunity to submit our input to this critical process. Please contact me at 301-881-7040 if you have any questions related to our input.

Sincerely yours,



Charles B. Brinkman  
Director, Nuclear Licensing

Attachments:

1. ABB-CE Comments on DSI-2
2. ABB-CE Comments on DSI-4
3. ABB-CE Comments on DSI-5
4. ABB-CE Comments on DSI-6
5. ABB-CE Comments on DSI-7
6. ABB-CE Comments on DSI-9
7. ABB-CE Comments on DSI-10
8. ABB-CE Comments on DSI-11
9. ABB-CE Comments on DSI-12
10. ABB-CE Comments on DSI-13
11. ABB-CE Comments on DSI-14
12. ABB-CE Comments on DSI-20
13. ABB-CE Comments on DSI-21
14. ABB-CE Comments on DSI-22
15. ABB-CE Comments on DSI-23
16. ABB-CE Comments on DSI-24

cc: S. Floyd (NEI)  
S. Magruder (NRC)

**DSI # 10 Reactor Licensing for Future Applicants**

**DSI - Given the current environment, what should the Commission's policy be on future reactors?**

**Generic Question #1 - What, if any, important considerations may have been omitted from this issue paper?**

Given the current environment, that many of today's operating reactors seem to be operating close enough to the regulatory limits that the NRC is expending substantial amounts of effort in special inspections and enforcement related activities, the Commission should reassess whether it feels it is practical to continue the same mode of regulation when the next generation of reactors are built.

The next generation of reactors will be substantially safer than today's plants. That is the NRC's policy and that is what has been demonstrated by the evolutionary ALWR designs that have been submitted for design certification. In the case of ABB-CE's System 80+™ Standard Plant Design, the NRC-approved PRA has resulted in core damage frequencies which are less than 1% of those attributable to a typical present-day reactor. Now is the time for the Commission to recognize that it can break the extremely destabilizing and cost-intensive regulatory process by allowing these new designs to operate well above regulatory requirements instead of the path that is emerging from the design certification proceedings; namely, to raise the regulatory standards so as to enforce by law the new safety levels.

It seems to us that now is the time for the NRC to thoroughly engage itself in this decision which has major implications for the resource requirements of the NRC in the next century and for the viability of the commercial nuclear option. We do not believe that this issue has been addressed as a fundamental regulatory concept in the present design certification proceedings.

ABB-CE also endorses the remarks of the Nuclear Energy Institute on this item, and in particular, we wish to emphasize the remarks relating to the necessity to define in the very near term -- not at the time a COL application is actually tendered -- the elements of the Part 52 licensing process that remain an unknown to prospective applicants. This would include the issues contained in the NEI Regulatory Issue Resolution Plan for the Part 52 process such as the form and content of the COL application; development of regulatory guidance on ITAAC verification; implementation of the "50.59-like" process to preserve severe accident insights; COL policy issues; emergency planning rulemaking and the maintenance of design PRAs. We also believe that Part 52 should be amended to reflect the lessons learned from the initial design certification proceedings.

**Generic Question #2 - How accurate are the NRC's assumptions and projections for internal and external factors discussed in the issue papers?**

The staff's assertion that completion of the design certifications of the ABWR and System 80+ designs should be viewed as a demonstration that the basic design certification process is both stable and predictable misses the mark of what the phrase "stable and predictable" was meant to apply to. The industry is looking for stable and predictable licensing of COL applications as a result of having obtained design certifications, site permits and a well defined and adhered to COL application process. There was little that was predictable about the design certification processes because we were in a pioneering effort which resulted in the expenditure of considerably more resources and time than anyone had predicted. That is where the benefit of standardization comes in. The designs are now fixed, and that expenditure is defined and complete. Unfortunately, there is a tremendous amount of additional work that remains to obtain the stability and predictability which will be required before a potential applicant will be willing to seriously consider licensing a nuclear plant under Part 52. The NRC and the nuclear industry must continue to pursue these issues while there is time to do so and personnel who are familiar with the Part 52 process and goals.

ABB-CE also endorses the remarks of the Nuclear Energy Institute on this item.

**Generic Question #3 - Do the Commission's preliminary views associated with this issue paper respond to the current environment?**

The Commission's preliminary views are responsive insofar as the factors defined in the DSI. However, the current operating plant regulatory environment does not seem to be motivating the Commission to try to improve operational regulation for the next generation of plants (see our comments in response to Generic Question #1).

**Related Issue #1 - Can emergency planning requirements be simplified for advanced light-water reactor designs?**

Yes. ABB-CE has maintained that the System 80+ Standard Plant Design is an excellent candidate to demonstrate that simplified emergency planning is a viable concept which should be addressed. We are working with NEI, EPRI and others to prepare a petition for rulemaking on this topic to be submitted in 1997.

**Option preferred by ABB-CE:**

ABB-CE supports Option 2 plus a concerted effort to respond to industry initiatives to fully define the processes with which a COL applicant must comply.

We concur with the staff's assessment that benefits from the investment of resources in the SBWR, CANDU 3, MHTGR and PRISM are largely unrealized. However, we do not support the Commission's preliminary view to "Document to the greatest extent practicable the work performed" on all of these truncated reviews, except to the extent that the original applicants (or other volunteers) are willing to fund such close-out work.

The willingness to fund this effort is a direct indication of its potential future worth. To spend unsolicited effort on these close-out activities is to throw good money after bad. These resources should be spent on making the path clear for the design options that applicants have funded to completion.