LETTERS TO THE EDITOR

COMMENTS ON THE REVIEW OF *NUCLEAR POWER AND THE PUBLIC*

Dear Sir:

In the review of the above-referenced book by Charles Kelber in the September 1971 issue of your magazine, I find his statement that I revealed "a common point of view that standards and regulations are imposed to establish the maximum that you can get away with" was wrong and very unfair.

Had Mr. Kelber not taken a single response directed at another point entirely out of context but rather reviewed my paper in detail, he would have read various statements such as:

> "Thus, although the government regulation for radiation doses contributed by a nuclear plant to any neighbor is 500 mrem/year, designers would attempt to keep the plant discharges below 5 mrem/yr to any neighbor averaged over plant life in order to make the contribution of the nuclear power plant insignificant (approximately 1 percent of allowable) with respect to the exposure the public normally receives." (p. 19)
>
> "Under normal operation there are traces of radioactive releases, but they are always well within release rates established by the AEC. In fact, they are kept at insignificant levels." (p. 18)
>
> "The design of nuclear power stations ensures that the total waste release—whether gaseous or liquid—is always well within the specified regulations of the AEC. In fact, as one would certainly expect, every feasible effort is made to minimize wastes which might include radioactive materials, in order to make radioactive waste discharge as small as practically feasible. Thus, the radioactive wastes of the nuclear power station are insignificant with respect to other radioactive considerations had the plant not been there at all." (pp. 9-10)
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> "Every effort has been made to keep this release insignificant relative to natural background." (p. 8)
>
> "The systems provided for waste disposal are based on extremely conservative design criteria, and all existing regulations with respect to release are complied with by large margins." (p. 25)

How Mr. Kelber is able to make the statement he did about my attitude based on a review of the book *Nuclear Power and the Public*, containing the above quotes, is very difficult to understand. I did make the statement, "My primary responsibility as a designer is to check my design against appropriate regulations." I wouldn't retract that statement. How else would I be able to state that "all existing regulations with respect to release are complied with by large margins"?

Mr. Kelber's interpretation of my statement is unfortunate. In fact, with this review given the distribution it enjoyed by placement in your magazine, many members of the nuclear community who have always been committed to doing the job right were very disappointed.

If Mr. Kelber is simply inferring that sometimes our good intentions are misinterpreted due to our imperfect selection of words, I stand advised and will try harder in the future to make sure the proper attitudes of the nuclear industry are clear.

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October 20, 1971

REPLY TO COMMENTS ON THE REVIEW OF *NUCLEAR POWER AND THE PUBLIC*

Dear Sir:

Mr. Bray is understandably upset that I did not give greater emphasis to his speech, an eloquent exposition and defense of current practices in the nuclear power industry, than I did to his answer to a question about people's attitudes. But there are two considerations: Mr. Bray's well-deserved reputation and high standing in the nuclear community hardly need my endorsement in a journal addressed to that community; we know that he and his cohorts throughout the industry do a good job. Second, the central issue with respect to the public's view of our industry is often our attitude as much as it is our practice.

When Mr. Bray's questioner was taking him to task for not knowing some special data (p. 115 of *Nuclear Power and the Public*), his stated reason was: ". . .to see how the participants approach the problems that they work with as men." Mr. Bray's reply: ". . .My

primary responsibility as a designer is to check my design against appropriate regulations." is capable of two interpretations. A member of the nuclear industry would probably subconsciously add the phrase: "to verify that my designs are appropriately conservative." But it is not at all clear that a member of the general public, especially one prepared to be biased against industrial practice, would place this interpretation on the remark. He may feel that the appropriate regulations were not well taken to protect his environment. Evidently, Mr. Bray's earlier formal remarks were not enough to reassure at least one member of the public.

Mr. Bray has hit the mark in his last paragraph. However good our intentions, the public will not appreciate them until we make crystal clear in accurate terms our commitment to improving the world we all live in. We need to keep in mind that the public is rightly cynical about the beneficial effects of adherence to previously established codes and standards. They need to know that we recognize and deal with real problems that exist in the environment, problems that were very likely not even recognized when the codes and standards were established. For example, radiation exposure standards were first established to protect workers and extended from them to the general public. In retrospect, the reverse order would appear the wiser course.

Finally, I would point out that I consider the attitude toward "cost benefit" analysis a more crucial issue than the attitude toward standards. Standards are at least explicit; but if we persist in what I have termed the "every cloud has a leaden lining" approach to cost benefits, we run the very real danger of pricing ourselves out of the market. We must convince the public that not only do benefits far outweigh costs, but the costs themselves are reasonable. If this requires some revision in design, let us face the issue honestly.

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