

October 14, 1983

Mr. Thomas M. Roberts
Nuclear Regulatory Commission
Matomic Building
1717 H Street, N.W.
Washington, D. C. 20555



WENDELL A. JOHNSON
President
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Dear Commissioner Roberts:

The Toledo Edison Company has been an active participant in the nuclear power industry since its decision to construct the Davis-Besse Nuclear Power Station, now in operation near Port Clinton, Ohio. Our interests also extend to include major ownership percentages in the construction of the Perry Nuclear Units of Cleveland Electric Illuminating and Duquesne Light's Beaver Valley Unit 2. Our confidence in the ability of nuclear power to make a major contribution to the supply of safe and economic electricity to our customers is a major factor in our commitment to this aggressive program.

This letter is to urge your support of an expeditious resolution of the nuclear accident radiation source term issue that the industry and the Commission staff have been working on since the Three Mile Island event. Over the years, however, we have had to deal with the stigma that has arisen as a result of "worst case" accident analyses. Specifically, this relates to the evaluations that have lead to a public perception that a nuclear power plant accident would result in a major "public disaster". The assumed consequences, as a result of the source term, are unrealistically high, resulting in an overstatement of public risk.

These evaluations, of course, were the results of the approach the nuclear community often uses in "bounding" the worst case consequences which can be postulated, no matter how low the probability nor how large the unknowns. These evaluations are usually multiply-compounded in their conservatism used to simplify the calculations. Although the earlier evaluations accomplished their desired functions at the time, the tremendously conservative assumptions have left unrealistic dire predictions of risk as a public perception.

These predictions have constantly been used in the public debate of recent years against the development of commercial nuclear power. This overstatement of public risk has been a major factor in the decline of public support and confidence in the nuclear industry, resulting in increased plant complexity and substantially higher costs.

An opportunity now is available to substantially refine our previous calculations to more accurately, but still conservatively, evaluate the potential public risk associated with nuclear power plant accidents. Nuclear industry programs in the United States are examining the radiation source term associated with accident releases.

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The use of oversimplified computer codes grossly overestimates the consequences of a nuclear accident. These overestimates can probably be traced to two separate issues. The first is the incomplete assessment of chemical and/or physical chemical processes and the natural attenuation in release fractions they provide. The second cause seems to be the treatment of releases occurring instantaneously, whereas in real life the releases occur over time. The reduction in the resultant consequences of these releases truly is significant and needs to be finalized.

This opportunity is presented in two areas. The first is, of course, the revised public perception of risk to the public located near commercial nuclear facilities. Public confidence in the safe generation is essential for all of us to progress over the next several decades.

The second opportunity has to do with improved management of our business. Never before has it been so important to efficiently and economically manage the electric utility business as it is now, and for the next few decades. Priority in decision-making, regulation, and operation are essential to providing an economically viable energy supply. Accurate risk and risk comparison techniques are a cornerstone in our future interaction as regulator and operator to insure adequate, but not excessive, controls on our industry. With these refined tools we can cooperate to provide both safe and economically available power for the Nation's future.

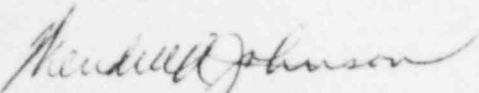
The NRC has been working on the source term issue since 1980. The Accident Source Term Program Office was set up in 1982 to integrate the issue into the regulatory framework suggesting a revised source term. The NRC schedule for the selection of a new interim source term by the end of 1983 and the selection of a final source term in the middle of 1984 appears to be in jeopardy.

As an operating plant licensee, we place a very high priority on the NRC achieving a technically-sound and early resolution of the source term issue.

Since the original source term value has no technical basis for being so high, a revised source term based on scientific knowledge and experience to replace the current one based on overly-conservative assumptions cannot be overemphasized.

* I urge you as a Commissioner to place a high priority on achieving a technically-sound and early resolution on this source term issue.

Sincerely,



Wendell A. Johnson, President
The Toledo Edison Company

WAJ/pm