Consider the Stakeholders

We read with interest the March/April 2003 issue of *Radwaste Solutions*, which focused on transportation. Although we commend you for devoting an issue to this subject, we cannot help but observe that the slate of articles lacked one crucial viewpoint—namely, that of the stakeholders.

In your commentary ["Fear of Shipping," p. 4], you noted that despite the industry's "strong record of thousands of incident-free shipments," Nevada's mounting of a "strong public relations campaign against nuclear waste transportation may be able to undo years of good example." The comment implies that a good example is enough to convince a skeptical public. We disagree. One cannot simply *tell* the public about the strong safety record and expect public acceptance to follow. Emphasizing the "good example," moreover, could ultimately backfire: if the exemplary record is the main argument to support a shipping campaign, then what will happen when the first serious accident occurs?

As you observe, a more fruitful approach would be "to listen to the public" and "respond to [their fears] in ways that are meaningful to *them*" (emphasis added). We must remember that the public, in general, fears all things nuclear not because of a lack of information, but rather because laypeople perceive risks differently that do scientists and engineers. Indeed, this phenomenon is not *unique* to laypeople—how many scientists and engineers harbor a visceral fear of flying, despite their knowledge of the relative risks of traveling in airplanes versus automobiles? The fear of flying and the fear of spent fuel shipments are both shaped by the same human tendencies.

As is the case with the fear of flying, the lack of control over an activity is one of the many factors that influence perceptions of risk. We believe the success of any radioactive materials transportation program hinges on the extent to which the U.S. Department of Energy gives stakeholders a measure of control over the program. Involving stakeholders in decision making—either directly or through state, tribal, and local government officials—will go a long way toward changing the way they perceive the risks and benefits of shipping spent fuel and high-level radioactive waste.

Some programs within the DOE understand this concept. For example, the Waste Isolation Pilot Plant (WIPP) is, as Jessica Hogue notes, a "Model Transportation System" ["Demonstrating Safety through Performance: WIPP's Model Transportation Plan," p. 16]. Yet while Hogue does well to cite the package, the trucks and drivers, and the safety record as important components of that system, she does not even acknowledge what most corridor states would regard as the single most important component—the DOE's partnership with the states. For years, at the states' urging, WIPP has worked cooperatively with the states on the shipping routes to address their concerns. The states were involved in route selection and in identifying what Rick Fawcett and George Kramer term the "derived transportation safety requirements" ["Consent versus Consensus: Stakeholder Involvement in the Identification of Necessary and Sufficient Transportation Safety Requirements," p. 22]. In addition, many states conducted extensive outreach to the public living along the shipping routes to let them know about the states' central role in planning and preparing for the shipments.

The states also worked with WIPP to train and equip local first responders along the shipping routes. In your article, you observed, "DOE has established a network of trainer emergency response teams in states around the country." We must point out, however, that this network was actually developed through a partnership between the states and WIPP. Neither party could have accomplished this feat without the other. It will require just such a partnership to establish a network along the spent fuel shipping routes and to maintain it over the decades-long shipping program.

The partnership between WIPP and the affected states is truly what makes WIPP a model program. The WIPP model follows, in essence, the process that Fawcett and Kramer describe in their article. DOE identified stakeholders early on and involved them in decision making *before* the technical decisions were made, not afterward. As the authors note, such timing is the only way to make sure stakeholders are "'invested' in the solution."

We were very pleased—as, apparently, were more than a few members of Congress—when the DOE publicly committed to adopt such a model for the Civilian Radioactive Waste Management System. To properly "invest" stakeholders in its transportation, the DOE's Office of Civilian Radioactive Waste Management (OCWRM) must follow WIPP's example and develop its transportation plan—complete with "derived transportation safety requirements"—with extensive, substantive input from the affected states. Because OCRWM has not yet begun working with the states, we are doubtful that 2003 will be, as you reported, "the year the department plans to iron out most of the details of the Yucca Mountain transportation program, from preferred method of transport to container design, route selection, and security methods."

Instead, we think 2003 will see the release of what Dr. Margaret Chu [director of OCRWM] recently described as a "Transportation Strategic Plan," which will identify OCRWM's "strategy to guide specific operations details and the use of a cooperative planning process with federal, state, and tribal agencies." The Council of State Governments' Midwestern Radioactive Materials Transportation Committee intends to be an active participant in work with OCRWM to refine its Transportation Strategic Plan, to finalize its policy and procedures for providing financial and technical assistance to the states, and, ultimately, to develop a fullfledged transportation plan for moving spent fuel and high-level waste.

We applaud *Radwaste Solutions* for taking on the important issue of transportation. We hope to see future issues cover this same subject, with a greater emphasis on—and contributions from—the states and other stakeholders.

> *Lisa R. Sattler* Senior Policy Analyst The Council of State Governments Midwestern Office

Timothy A. Runyon Chief, Division of Environmental Monitoring Illinois Department of Nuclear Safety Chair, CSG Midwestern Radioactive Materials Transportation Committee

Misleading Statistics

The consistent citation of 4300 (rail) shipments to Yucca Mountain (as repeated in your article in the March/April 2003 issue, "Spent Fuel Transportation: The Issues, the Facts, and the Future") may mislead some readers, and could be cited as a serious inconsistency in DOE's analysis. The radiological risks and impacts are per cask, so that three casks in normal incident-free transportation would have the same radiological impact whether they were on one train or on three. For transportation accidents, since, on the average, four railcars are involved in any train derailment, the environmental and health impact would be almost the same. About 12 000 casks would be shipped under the "mostly rail" scenario. Any discussion of transportation impacts should discuss this number as well as the smaller number, and be very clear

about the difference between percask impacts and per-train impacts. *Ruth Weiner, PhD* (*Ed. Note:* Dr. Weiner is a member of the *Radwaste Solutions* Editorial Advisory Board.)