

**Exploring the Effectiveness of Transparency as a Crisis
 Communication tool in the Nuclear Industry**
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Get Fukushima
 Risk

Overview:

On March 28, 1979, Three Mile Island Unit 2 suffered a partial core meltdown, setting off what would become the worst domestic nuclear crisis in U.S. history. Since then, other nuclear accidents have occurred in the world, Chernobyl in 1986 and Fukushima Daiichi in 2011, both of which heightened public fear and concerns about nuclear crises. When a disaster occurs, any errant message could lead to unnecessary panic, damage and potential death. In the nuclear industry, when things go wrong, mass hysteria and government panic, follow more so than other conceivable accident scenarios. This necessitates careful and thorough crisis communications planning and can provide an excellent glimpse at what one should do in a worst-case scenario.

Method:

To explore the media's frame of the two significant nuclear crises and NRC's handling of each situation, the researcher conducted a content analysis of newspaper articles from the *NY Times* and the *LA Times* three month before, during, and six months after each of the Fukushima Daiichi and Three Mile Island crises. Specifically, the researcher examined three articles from each newspaper's online archives in those three-time frames using the following keywords: nuclear industry, nuclear power, Nuclear Regulatory Commission (NRC), nuclear accidents, and nuclear reactors (N= 36). The content analysis analyzed the articles for reference to the NRC communication response, tone, and factuality. Whether each article mentioned and/or commented on the NRC's transparency in handling the given crises was qualitatively coded and analyzed through sufficiency and accountability of information contained in each unit of analysis. The data from each sample content were then analyzed in both quantitative (e.g., Chi-square statistical analyses) and qualitative manners (e.g., an open coding method).

Significant Results:

1. Media doesn't capture the NRC's transparency until 6 months after the crisis even with significant NRC information freely available during that time.
2. The author measured transparency through the presence of sufficient information (open coding); and whether each article used the term, "transparent" or "accountable" in describing the NRC's responses. With this stipulation, the author can conclude 72.2% of the articles sampled did not portray the NRC as offering sufficient or accurate information to public.
3. There is no statistically significant difference in reporting the NRC's adoption of crisis response strategies between the Three Mile Island and Fukushima Daiichi, suggesting a red flag for nuclear crisis communication.
4. The only two emerging crisis communication responses where the NRC improved were cooperation and transparency.

Future Plans:

The author plans to run a focus group with Baby Boomers and Millennials. The researcher will use the focus group to investigate the effectiveness of fact sheets as an analog for transparency as well as nuclear public opinion and general knowledge of nuclear power. The fact sheets will come from the NRC website and are publicly available.

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