

Deregulating for Dollars

The U.S. Nuclear Regulatory Commission (NRC) and the nuclear industry are in the process of deregulating nuclear safety standards.

This deregulatory effort has come about because the nuclear industry has come to the realization that if forced to comply with the regulations that are currently on the books their nuclear reactors will be unable to compete in a newly deregulated electricity market place. "Risk-informed" regulation means that the public is exposed to more risk while the nuclear industry is exposed to less regulation.

The Nuclear Regulatory Commission has made "Risk Informing Part 50" voluntary. However, it is important to note why this deregulatory effort is voluntary. If the NRC required nuclear reactors to meet these new regulations they would have to first meet a rigorous cost / benefit analysis required under the NRC's back fit rule. The back fit rule requires that any imposition of regulation result in a net safety benefit commensurate with the costs imposed on the licensee. "Risk Informing Part 50" fails the cost / benefit analysis because there will be **NO SAFETY BENEFIT TO THE PUBLIC!**

The list of regulations that the nuclear industry wishes to subject to "risk-informed" regulation is instructive. According to the Nuclear Energy Institute (NEI), the NRC and NEI have already begun to "risk inform" the regulations that govern Fire Protection, Technical Specifications and Nuclear Reactor Security.



Technical Specifications

Technical Specifications are the rules and requirements that govern the operation of the nuclear reactor. They contain limiting conditions of operation (LCO's) which are the regulatory "stop signs" for nuclear reactors. The NRC's last rewrite of the technical specifications has resulted in a 40% reduction in LCO's imposed upon licensees.

Recently, the nuclear industry was before the Congress touting the improved efficiency of the nuclear reactors. **The Nuclear industry is not operating better; the NRC is just regulating less.** NEI and NRC have already wiped out 40% of the reasons to shut down a reactor and now they want to "risk-inform" the other 60%. The NRC staff has acknowledged that the industry can expect little regulatory relief due to the previous re-write of the technical specifications, yet efforts to deregulate these requirements persist.



Fire Protection

After the 1975 fire at TVA's Browns Ferry reactor in Alabama, the NRC promulgated more rigorous fire safety regulations. However, the NRC failed to enforce those regulations. Instead, the agency granted more than a thousand exemptions and waivers. In 1992, the NRC testified before Congress that reactor owners would use temporary measures for about six months until their fire safety problems could be fixed.

Eight years later, those "temporary" measures are still being used at US nuclear plants instead of meeting the minimum standards. Now the industry and agency wish to "risk-inform" regulations that the NRC has never really enforced.

Reactor Security



Reactor Security has been another source of embarrassment for the nuclear industry and the NRC. The OSRE (Operational Safeguards Response Evaluation) Program has continually identified significant physical protection vulnerabilities at U.S. nuclear power plants. As of the summer 1998, mock adversaries were able to defeat security 40 times, demonstrating the potential for terrorists to cause "significant core damage" at nearly half the plants tested. Similar results have been recorded since that date and "significant vulnerabilities" continue to be identified. Many licensees failed their OSRE evaluations despite the fact that they had many months of advance warning and had increased the sizes of their security forces by an average of 80%. Yet reactor security regulations are slated for risk-informed treatment by the agency and the industry.

Before the NEI and the NRC deregulate fire protection and reactor security, Public Citizen would like to see NRC first enforce the regulations. No regulation can have a safety benefit if the nuclear industry does not to implement it and the NRC fails enforce it.

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The Nuclear Energy Institute has delineated the amount of money that the nuclear industry hopes to save by “risk informing” the safety regulations in 10 CFR Part 50:

10 CFR 50.46
LOCA & ECCS Analysis
\$25,000 - \$3,000,000/reactor/yr

10 CFR 50.47
Environmental Qualification
\$100,000 - \$300,000/reactor/yr

10 CFR 50.55a
Codes & Standards
\$200,000 - \$500,000/reactor/yr

10 CFR 50.44
Combustible Gas Control
\$200,000/reactor/yr

General Design Criteria 19
Control Room Ventilation
\$100,000 - \$250,000/reactor/yr

General Design Criteria 17
Electric Power Systems
\$300,000/reactor/yr

NEI has also identified a trove of regulations that, if “risk-informed”, would save the nuclear industry less than \$50,000/reactor/yr:

10 CFR 50.62
Anticipated Transient Without Scram

10 CFR 50.34
Contents of applications

10 CFR 50.71
Maintenance of records, making of reports

10 CFR 50.54
Conditions of licenses

10 CFR 50.59,
Changes, tests and experiments

10 CFR 50.72 & 50.73,
Reporting Requirements

However, it’s not just the deregulation by dollar amount that concerns us. What the NEI and the NRC fail to acknowledge is that several of these regulatory requirements have a substantial impact on safety.

In 1993, NRC conducted a review of its regulations. For each regulation NRC asked, “What is the contribution of the rule to safety?” According to the NRC’s review, the top four regulatory requirements that NEI identified as “prime candidates” for deregulation all had a substantial impact on safety: Loss of Coolant Accident and Emergency Core Cooling System Analysis (10 CFR 50.46), Environmental Qualification of Electrical Equipment (10 CFR 50.47), Codes and Standards (10 CFR 50.55a), and Combustible Gas Control (10 CFR 50.44).

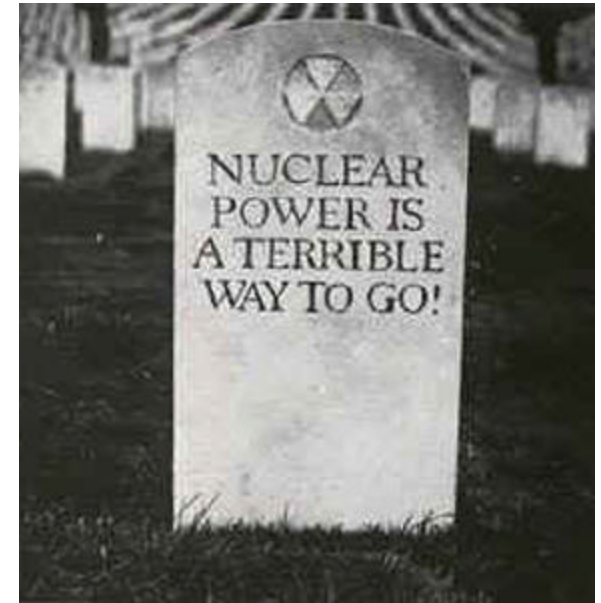
The Nuclear Energy Institute testified before the Senate oversight committee that deregulation of 10 CFR Part 50 safety standards was possible because of the improved safety record of the nuclear industry. However, the fact that the U.S. nuclear industry has not melted down a nuclear reactor in the last 20 years is not a sufficient reason for deregulating those requirements that helped achieve that record.

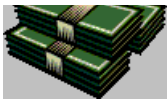
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