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Spent Fuel Pool Accident Risk at Decommissioning Plants

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Summary

- Risk stated in report is non-conservative because threat from sabotage was not analyzed. ✓
- Risk stated in report is non-conservative because it relies on invalid assumptions. ✓
- Report should not be revised. Instead, Part 72 should be applied. ✓

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Staff Finding

"The staff found that the event sequences important to risk at decommissioning plants are limited to large earthquakes and cask drop events." pg. ix

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Staff Not Looking

"The risk analysis in this study did not evaluate the potential consequences of a sabotage event that could directly cause offsite fission product dispersal." pg. 4-15

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Au Contrare

"This level of security requires a site with a permanently shutdown site to provide security protection at the same level as for an operating reactor site." pg. 4-14

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Au Contrare, cont.

BUT,

- ◇ OSREs don't test protection of spent fuel pools/casks at operating reactor sites
- ◇ OSREs and security inspections are not conducted at permanently closed reactors

THEREFORE: Spent fuel storage security is already less than operating reactor security.

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G/10

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Au Contrare, cont.

"There is a firewater hose station in the SFP [spent fuel pool] area." pg. 3-3

What are the chances of a single person, insider or uninvited guest, dropping one end of that hose into the water and siphoning the SFP water out?

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No Need?

"The staff report released today concludes that there is no immediate safety concern at decommissioned sites and thus no need for immediate regulatory action."

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Need!

"[T]he nuclear industry, through NEI, made important commitments, which are reflected in the staff's updated risk assessment." pg. 3-5

"Without this credit, the risk is estimated to be more than an order of magnitude higher." pg 3-11

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Questions

Shouldn't the individual licensees, not NEI, make these commitments?

Could sincere workers at plant XYZ "undo" one or more of the ten commitments in a future cost-saving effort because they were not aware of NEI's pledge?

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Questions

If plant XYZ fails to meet NEI's commitments, will NRC take enforcement action against the plant or NEI?

The NRC's ultimate enforcement action for an operating plant is a shutdown order. What is the ultimate for a decommissioning plant?


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Conclusions

- ① **Report demonstrates that spent fuel represents a risk that must be properly managed.**
- ② **Interactions to date suggest that report, if revised, may never apply to *any* plant yet alone every plant.**


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Recommendations

- ① **Spent fuel pool risk at decommissioning plants should be properly managed under 10 CFR Part 72, not 10 CFR Part 50**
- ② **Safety analyses required by Part 72 must be plant-specific and include security evaluations**

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Recommendations

- ① **Spent fuel pool risk at decommissioning plants should be properly managed under 10 CFR Part 72, not 10 CFR Part 50**
- ② **Safety analyses required by Part 72 must be plant-specific and include security evaluations**

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