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# **Super Bowl Rematch: St. Louis Rams vs. Tennessee Titans**

**David Lochbaum**  
**Nuclear Safety Engineer**  
**December 4, 2000**



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# GALL Issues

- **Fairness of Bait and Switch**
- **Value of One-Time Inspections**
- **What is 'Generic'?**



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# Bait and Switch

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**At the same time that it was soliciting public comment on the draft GALL report, the staff was contracting with Argonne to revise the document.**

**‘Bait and switch’ is incompatible with the goal of increasing public confidence.**



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# 1-time Inspections

**GALL allows one-time inspections to provide reasonable assurance of timely detection of aging effects.**

**Given that the results of one-time inspections won't be known for many years, the staff should not place much faith on unverified assumptions.**



# What is 'Generic'?

**Generic \Ge\*ner"ic\, 1. Pertaining to a genus or kind; as, a generic description; a generic difference; a generic name.**

**2. Very comprehensive; pertaining or appropriate to large classes or their characteristics; -- opposed to specific.**

Source - <http://www.dictionary.com/>



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# What is 'Generic'?

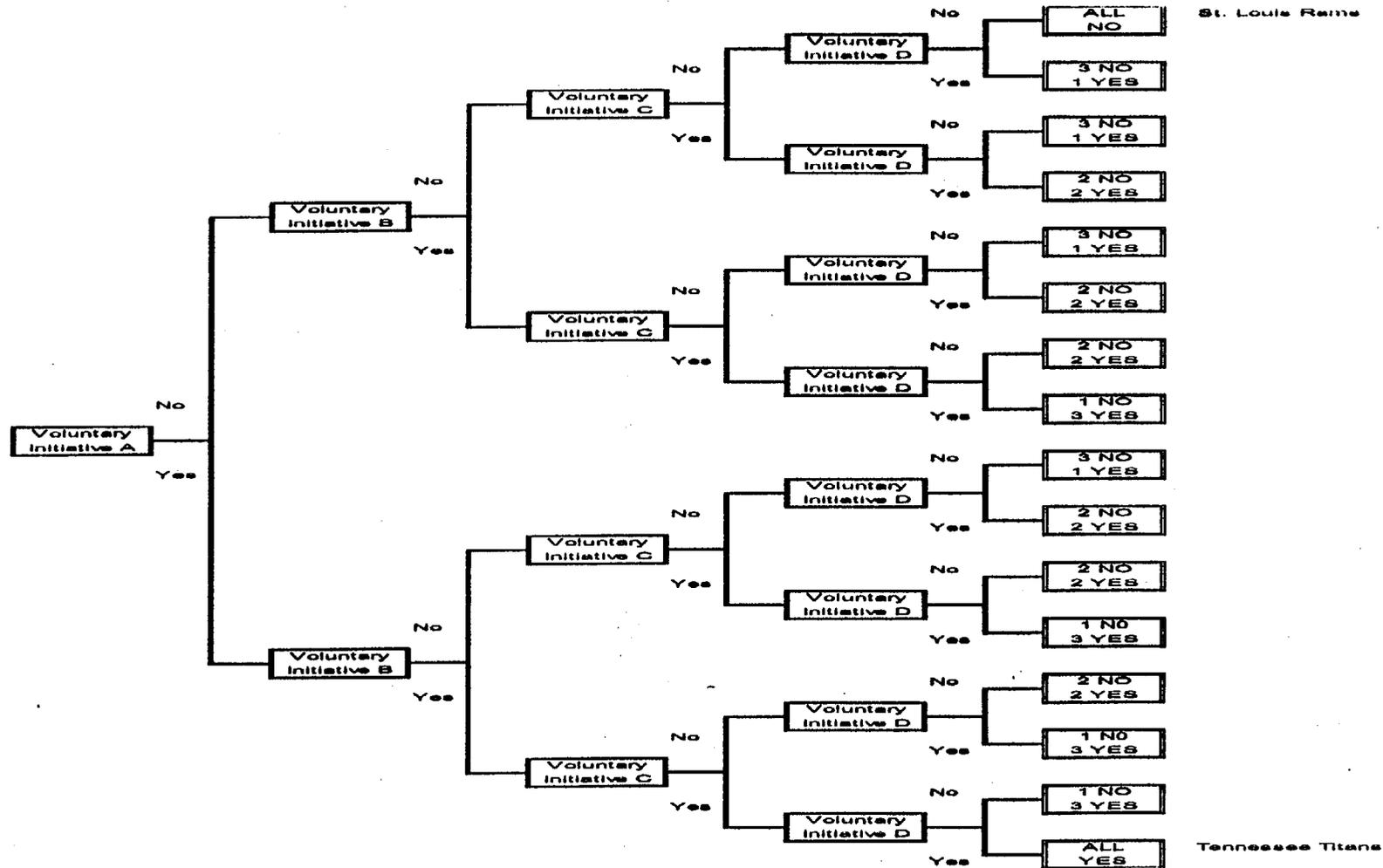
**Fact: NRC is developing GALL in parallel with several voluntary regulatory initiatives, such as risk-informed special treatment requirements.**

**Question: How does it all fit together?**



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# This is 'Generic'?





# What is 'Generic'?

## Questions:

**Is license renewal granted based on GALL invalidated by later adoption of voluntary regulatory initiatives?**

**Is GALL rendered obsolete if plants adopt voluntary regulatory initiatives before submittal?**



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# Recommendations

- ① **Fairness dictates that NRC seek public comment on the draft GALL report they actually intend to issue. Since that was not done, an additional public comment period is required.**



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# Recommendations

- ② **NRC staff should accept only 'minimal' use of one-time inspections.**



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# Recommendations

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- ③ **Before issuing final GALL report or approving any voluntary regulatory initiative, the NRC must determine if all of the pieces fit together and will continue to fit together.**



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December 4, 2000

Chairman Richard A. Meserve  
Commissioner Nils J. Diaz  
Commissioner Greta J. Dicus  
Commissioner Edward McGaffigan, Jr.  
Commissioner Jeffrey S. Merrifield  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT: COMMENTS ON GENERIC AGING LESSONS LEARNED (GALL) REPORT**

Dear Chairman and Commissioners:

The St. Louis Rams defeated the Tennessee Titans 23-16 on January 16, 2000, to win Super Bowl XXXIV.<sup>1</sup> The Rams are a National Football League (NFL) team from Missouri, which has the official nickname of the Show Me State. The Titans are the NFL team from Tennessee, which has the official nickname of the Volunteer State.<sup>2</sup>

That Super Bowl match-up seems to symbolize the nuclear industry's approach to voluntary regulatory initiatives. Some plant owners are eager to adopt initiatives such as risk-informed special treatment requirements and the Generic Aging Lessons Learned (GALL) report format for license renewal applications. They are the Volunteer owners. Other plant owners are content with the existing regulatory scheme and have stated their intention to pass on the new options. They are the Show Me owners.

Because the voluntary regulatory initiatives are not mandatory, it is reasonable to assume that some plant owners will adopt all of the initiatives, some plant owners will adopt none, and some plant owners will adopt some of them. Figure 1 illustrates the potential dilemma for just four (4) voluntary regulatory initiatives. If the plant owners will be equally divided on every decision, sixteen (16) distinct regulatory schemes are produced. The real problem is even more mind-boggling because the agency is considering more than four (4) voluntary initiatives and plant owners also have the option of adopting them in any order (e.g., A-B-C-D, D-A-C, A-C-D, D-A-C-B, etc.).

It is readily apparent from the illustration how the NRC will meet its goal of reducing unnecessary regulatory burden via the voluntary initiatives. After all, what plant owner could gripe when selecting from such a diverse regulatory potpourri. But it is not readily apparent how this regulatory diffusion will enable the NRC to meet its other goals of maintaining safety, improving the agency's effectiveness and efficiency, and increasing public confidence. Imagine for a moment the poor NRC staffer trying to apply the backfit rule to 16 or more different regulatory configurations.

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<sup>1</sup> Source: <http://www.superbowl.com/u/xxxv/history/>

<sup>2</sup> Source: <http://www.50states.com/>

Figure 1 also illustrates a specific concern about the intended use of the GALL report. That concern relates to the fidelity of all the voluntary regulatory initiatives. In other words, are all of the initiatives compatible and interchangeable? I attended the public workshop on GALL conducted by the NRC staff on September 25, 2000. Pointing out that the draft GALL report differentiated between aging management program requirements for safety and non-safety related components, I asked Mr. Christopher Grimes about the impact of a plant owner who has adopted the voluntary special treatment requirements initiative. Mr. Grimes conceded that the GALL report might have to be revised to accommodate that case. The questions that the NRC should answer before issuing the final GALL report, or approving the adoption of any voluntary initiative, include:

1. Is the GALL report rendered obsolete or invalid when a plant owner adopts a voluntary regulatory initiative (such as risk-informed special treatment requirements) before submitting the license renewal application?
2. Is a license renewal granted based upon the GALL report invalidated when that plant owner subsequently adopts a voluntary regulatory initiative?
3. Is the regulatory endpoint for a plant adopting voluntary initiative X before submitting a GALL-based license renewal application equivalent to that for a plant submitting a GALL-based license renewal application before adopting voluntary initiative X?
4. When the voluntary regulatory initiatives spawn a spectrum of regulatory schemes, as suggested by Figure 1, what does Generic mean?

The fidelity issue is real. As a consultant before joining UCS, I worked for owners trying to get their nuclear plants off the NRC's Watch List. Those efforts involved many tasks intended to correct programmatic failures and their consequences. Good fidelity minimizes "gaps" and "overlaps" in these efforts. A recent example of bad fidelity came from the initial attempt by the owners of DC Cook to perform system evaluations. Because they had not first corrected their configuration management problems, all of the first set of system evaluations were flawed and had to be redone. It appears to UCS that the NRC has not formally assessed the fidelity of its voluntary regulatory initiatives.

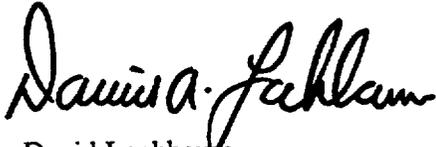
On October 6, 2000, UCS submitted formal comments on the draft GALL report in response to a *Federal Register* notice dated August 31, 2000. Our first comment described what we view as "bait and switch" by the NRC staff. The first presentation at the September 25, 2000, public workshop was by a staffer of the Argonne National Laboratory (ANL) describing his extensive changes to the draft GALL report. It turned out that the NRC staff had contracted ANL to extensively revise the draft GALL report in parallel with the public comment period. FOUL! It is blatantly unfair to solicit comments from the public on a draft document that the agency has no intention of issuing. UCS considers this to be further evidence that the NRC staff collects public comments to fulfill some procedural requirement, not to obtain useful input. The NRC staff must provide another public comment period on the GALL report it fully intends to finally issue.

In the pre-ANL GALL report, the NRC staff permits plant owners to rely on one-time inspections of components to satisfy the monitoring and trending element of an aging management program. The stated purpose of one-time inspections is to verify that the components are degrading so slowly that periodic monitoring is not warranted. UCS is not fundamentally opposed to the use of one-time inspections, but points out the time delay involved. The NRC staff during the September 25<sup>th</sup> public workshop stated several times that it preferred the plant owners to conduct the one-time inspections close to the end of the original license period rather than right now. That desire makes sense, but it means that

the results from the one-time inspections will not be known for a decade or longer. The one-time inspections may, in fact, reveal more degradation than expected. While that discovery may be in time to allow remediation before entering the license renewal period, it comes too late to benefit applications submitted in the interim. In other words, that time delay defeats the purpose of the Generic Aging Lessons Learned concept because the lesson is learned too late. The best way to avoid such unpleasant surprises is to limit the number of one-time inspections. The NRC staff must be very judicious in accepting one-time inspections.

In summary, UCS recommends that the issuance of the GALL report be deferred until after the NRC staff concludes a formal evaluation of how it is affected by the various voluntary initiatives being pursued. After all applicable changes to the GALL report resulting from that evaluation have been incorporated, another public comment period of at least 60 days should be opened for the updated draft GALL report.

Sincerely,

A handwritten signature in cursive script that reads "David Lochbaum".

David Lochbaum  
Nuclear Safety Engineer

Enclosure: PowerPoint™ slides for Commission briefing

Figure 1

