



KANSAS GAS AND ELECTRIC COMPANY
WOLF CREEK GENERATING STATION

June 9, 1980

Division of Project Management
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

KWOLNRC-002
Subj: Power Plant Staffing
NUREG/CR-1280

Dear Sir:

I have reviewed the above document in detail and I submit the following comments for your consideration. First to establish my credentials, I graduated from the United States Naval Academy in 1960 and spent two years in engineering on a US destroyer, after which I spent five years in the Navy Nuclear Power program as a student at AlW, an engineering officer during the pre-commissioning and operation of the USS James Madison, and finally as an Engineering Duty Officer and Training Officer at the Navy Prototype SlW. After I left the Navy, I spent over twelve years with the Point Beach Nuclear Plant project; the last seven years as the Operations Superintendent. I was SRO licensed on the Point Beach Plant for ten years. I am now the Plant Superintendent for Kansas Gas and Electric at the Wolf Creek Generating Plant at Burlington, Kansas, an 1100 megawatt nuclear plant under construction.

The first, last and major point I would like to make and emphasize is the obvious lack of knowledge of the civilian power industry evidenced by this document. Mr. Wegner is quite correct in his preface where he states that he has made "limited coverage" of the industry. This point is so obvious in reading the NUREG that I feel it invalidates the entire document. Specific comments are below. The item numbers are per the NUREG, IV D., Major Differences and Recommendations for Maintenance Personnel.

1. The NUREG does not identify a very significant difference between the Navy and civilian maintenance which is the detailed checkout of equipment after maintenance is complete. The continued use in the civilian industry of the testing results from the pre-operational testing program and the continued detailed testing in accordance with Section XI of the ASME code is far above the Navy requirements. The concept he misses when he proposed "reactor technicians" is the fact that qualified personnel test the results of maintenance

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to detailed test procedures and to detailed standards before equipment is brought back on service.

Training of maintenance personnel in the areas of reactor control and theory is a practical, valid approach if done correctly which may aid in a more coordinated maintenance effort. However, licensing is simply not necessary and, in fact, if it were done, would be the creation of yet another bureaucratic nightmare overloading the inspectors without creating a justifiable result.

2. This "verbatim compliance" item is beyond belief. I would suggest that the NUREG author re-read the safety related procedural requirements of the civilian industry.
3. This item is not of any value since the action recommended is already being done.
4. The present extent of exam knowledge in the NRC controlled program is significantly more difficult in theory over the Navy program. I do not feel adding maintenance items to an exam would add anything except more difficulty in qualifying.
5. Again, this item demonstrates a lack of knowledge of the safety related procedural requirements of the civilian nuclear industry.
6. This item, similar to several others, demonstrates a significant lack of knowledge of the present vendor-utility talent relationships. The knowledge is presently available on short notice to the utility (certainly shorter notice than the Navy has when the ship is at sea). His "not likely" statement on drawing control might well be valid for the older civilian plants. It is not true for any plant being built under today's rules.
7. Again, the item shows a complete lack of knowledge of the quality control checks and operating checks made of tests in the civilian industry. I suggest the writer visit a plant under construction today in the civilian industry and re-examine his position.
8. I have no significant comments in this area. The civilian industry is doing this better each year. However, the problem is a lot more complex in the civilian industry due to the varied designs by the different AE's.

9. Again - lack of knowledge of quality assurance requirements in the area of spare parts control for today's plants is very obvious.
10. I have no disagreement with this item. The Point Beach Nuclear Plant is cleaner than any ship I witnessed, and I expect Wolf Creek will also be.

V. Operators

I do not feel the NUREG adds anything to the present ongoing evaluation of the operator training programs in the civilian industry.

Additional Considerations

One basic point that seems to be missed in this document is a major difference in operation of a Navy plant as compared to a civilian nuclear plant. The Navy plant must operate in times of stress, while the lives of the operators are at risk. The civilian power plant simply shuts down. It does this by a set of safety systems that very simply dwarf the Navy systems. This need in turn creates a maintenance requirement in a civilian power plant that is significantly more detailed and complex than any done aboard ship. The normal Navy ship needs the tender and the talent on board the tender, talent, by the way, that is not necessarily qualified on the plant in question, in order to ensure the ship will make it to the next patrol. The "tender" is always on board in a civilian reactor complex, at least during the normal 40 hour day shift and on call at all other times. This allows maintenance at a civilian reactor to be considered normal that is far above and beyond the capacity of a normal shipboard team, and comparing maintenance between the two is really comparing apples and oranges.

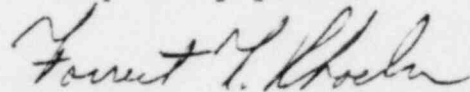
Concerning the fifty items analyzed in the document from the technical staff analysis, item VIII D., I have not itemized specific comments because the general trend of the NUREG is so "pro-Navy" as to invalidate the words. Item 7 is one example. The Navy staffs a ship to go to war. This requires a large staff and the need, therefore, to make work during normal operations. This need works into the design and the plant, therefore, has very few automatic systems. In other words, why automate on a Navy ship with the result in increased maintenance when you can put a man on it. This concept might be valid for the Navy but it is not valid in the civilian industry when the number of operators can be safely minimized by proper design. Cost is indeed a valid yardstick if used properly and under proper control.

I could comment similarly on items 1, 2, 9, 10, 17, 18, 20, 22, 28 (NOTE: The Navy did almost no emergency small break training in the 1965 - 1970 period. The use of prototypes and the prototype operation does not lend itself easily to emergency training), 45, 46, 47, and 48; except the comments would give no particular value to this discussion if the reader has knowledge in both areas.

Summary

I feel this NUREG is a poor representation of the problems we presently have in the nuclear industry. The present efforts by the various NRC committees and INPO, these efforts being established after the Three Mile Island occurrence, will solve the problems and needs of the industry. This NUREG will add nothing to the solution except a false comparison between two different programs, both of which function to perform their required tasks.

Very truly yours,



Forrest T. Rhodes
Plant Superintendent
Wolf Creek Generating Station
Kansas Gas and Electric Co.

FTR/sb

cc: G. Koester