

Consumers Power Company's and NRC's assurances to the court, under oath and penalty of perjury, that the casks could be safely unloaded misled the judge into denying an injunction against cask loading sought by petitioners Don't Waste Michigan, Lake Michigan Federation, and State of Michigan Attorney General Frank Kelley. However, the 4th cask to be loaded at Palisades, in June 1994, was found by the company two months later to have welding defects. Consumers first announced it would unload the defective cask, then later back pedaled when it discovered serious technical and safety obstacles to unloading the cask. Despite this, NRC allowed Palisades to load 9 additional casks in rapid succession, just 150 yards from the Lake Michigan shoreline. As of July, 2006 the defective cask has still not been unloaded, despite the passage of more than 12 years; in addition, a grand total of 29 dry storage casks have now been loaded at Palisades.

Midland, MI 48640

Feb. 6, 1997

Dr. Shirley Jackson, Chair
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Dr. Jackson:

I respectfully submit a request that you and your fellow Commissioners personally review the 2.206 petition(10 CFR 2.206) that was filed on Sept. 19, 1995, and amended on Sept. 30, 1996, by Lake Michigan Federation and Don't Waste Michigan. Acting Director Frank Miraglia of the Office of NRR issued a decision on this petition on Jan. 23, 1997. The Federal Register notice of this decision indicates that there are 25 days in which the Commission can institute a review of this decision before it becomes final.

This petition was related to the fact that Consumers Power Co. (CPCo) did not have a workable unloading procedure in place before it loaded the first VSC-24 cask at the Palisades site in May, 1993, as required by the Certificate of Compliance (No. 1007) under 10 CFR 72, Section 1.1.2.

When cask #4 was found to be defective in Aug., '94, CPCo pledged to unload the cask. It claimed that this would be a means of affirming to the public its high standards of safety and of restoring public confidence in the cask loading operations at Palisades. When the task of unloading was actually to be undertaken, the technicians found that there were challenging procedures which had never been considered or anticipated in the initial unloading document. In a public meeting with the NRC in Maryland in late Aug., 1994, the concerns described included: 1) introducing 400 degree F. fuel from the metal basket to 100 degree F. spent fuel pool water which would result in a highly radioactive steam flash and raised concerns about thermal shock to the fuel; 2) cutting through the steel in a window of 50 hours or less, since the cooling process cannot be maintained during cutting; 3) developing a procedure for removing steel shims that were pressure-fit inside the fuel basket below the lid.

Without resolving these grave issues and demonstrating a successful unloading procedure of the defective cask, CPCo proceeded to load 9 more casks 150 yards from the shore of Lake Michigan at Palisades.

Page Two

A year later, when defective cask #4 was still not unloaded, Don't Waste Michigan and Lake Michigan Federation filed the aforesaid petition 2.206 to demand enforcement proceedings by the NRC, since public confidence not only in CPCo but in the NRC,-- because it allowed continued loading of these casks,--was even further eroded by these actions.

I am enclosing a copy of this 2.206 petition so that you and your fellow Commissioners can readily review it and understand why we strenuously object to NRC's decision in the resolution of these matters and our reasons for doing so.

1) The decisions made by Mr. Miraglia are based on what appears to be a woefully inadequate understanding of all the facts involved. The lack of a factual basis for his decision is due either to ignorance on his part (understandable, perhaps, since he has been in his Acting Director position for only a few months), or is a deliberate evasion of some of the extraordinary issues and events that have transpired in the design, development, certification and implementation of this cask system that are now in the public record. It is possible to review these facts only briefly in this communication, but even this should be enough to convince you and your fellow NRC Commissioners that a hearing is in order to fulfill the requirement of your responsibility in implementing the 2.206 regulation in the Federal Code.

Mr. Miraglia appears to have relied solely on the judgment of the staff and the facts they provided him for his decision. For this reason, the role of the NRC staff must be reevaluated in light of the serious errors in judgment on the part of some staff members that have been made in the past, and the notable lack of comprehension and understanding of some important aspects of this cask system by some leading staff members who are in decision-making positions.

(It should be noted that there are some highly competent staff members who have tried to influence the decisions of the NRC in key areas. For example, Dr. Ross Landsman, an NRC soils expert, visited the Palisades area in Feb., '94, after repeated citizen concerns about placing casks on unstable sand dunes. He pointed out that using the site specific studies that were initially done for the nuclear plant's environmental impact statement as a basis for judging the stability of the cask storage area on site, as is now done under "generic"

licensing, was seriously flawed and could lead to "catastrophic consequences." As an example, he showed how a nuclear plant, itself, as at Palisades, usually has a foundation of 8 ft. of concrete that is grounded in bedrock. By contrast, the casks, as at Palisades, are placed on top of a 3 ft. concrete pad with no foundation to bedrock. His concerns and expert advice have been ignored by staff members in decision-making positions, and "generic" licensing continues to be the policy for siting dry cask storage facilities on our fresh water supplies throughout the country).

The few historical events we are limited to describing here will demonstrate how poor judgment and incompetence on the part of some of the staff who have directed policy have had unfortunate consequences for the public.

2) The NRC staff was establishing their "generic" licensing policy with the development of the VSC-24 cask at Palisades. This meant that there was no full environmental impact statement required for an area of the dunes at that site that was, and is, characterized as a "high risk erosion area" by the Michigan Dept. of Natural Resources, and no public adjudicatory hearing was permitted.

For these reasons and other safety concerns brought to him by the public, Attorney General Frank Kelley of Michigan requested such a hearing on the VSC-24 cask. This cask had never been built before and had never been fully tested before it was to be certified for use for dry cask storage of high level nuclear waste at Palisades. Having been refused such a hearing, Attorney General Kelley petitioned for an injunction in May, 1993, against the loading of these casks in the Western Michigan Federal Court at Grand Rapids. (Case No. 4:93 CV 67). Consumers Power Co.'s response to the Court was that the company would unload the casks and place the nuclear waste back in the spent fuel pool if the Court should rule against them and, therefore, an injunction to prevent loading was unnecessary. A supporting position for the utility's action was filed by Charles Haughney of the NRC, in which he assured Judge Robert Holmes Bell that Consumers was able to do this by simply reversing the process of loading, if the Court so ordered. This demonstrates that, not only did Consumers Power Co. mislead the Judge, perhaps out of ignorance, about Consumers' ability to unload these casks, but more importantly, Charles Haughney of the NRC pledged the Agency's credibility in support of this position. His statement is signed,

"Pursuant to 28 U.S.C. sec.1746, I declare under penalty of perjury that the foregoing is true and correct." (Executed and signed on May 5, 1993). Judge Bell, of course, could hardly grant an injunction under those circumstances. This is one of many instances in which the judgment of the staff was flagrantly in error, and helped to compound the problems that have later developed.

3) On May 28, '96, a "hydrogen ignition" event occurred at the Point Beach n-plant in a loaded VSC-24 cask. This "ignition" was of sufficient explosive force to raise a 3 ton lid several inches and tilt it on its side. This event was a complete surprise to the utilities, the vendor, and most significantly, to the NRC. It was discovered that the chemical reaction between the zinc coating inside the metal basket and the boric acid of the spent fuel water released hydrogen causing the explosion when the lid was being welded shut. This is further evidence that the staff was not competent to evaluate all the parts of this cask before it was certified. Yet, Mr. Mirgalia repeatedly relies only on this staff's flawed judgment for his decision-making on our petition without providing any proof through documented data or the testimony of independent qualified experts to support his decisions.

(Such independent evaluations by qualified experts would have surely been a great assistance to the staff if a public hearing and an environmental impact statement had been required in the process of certifying this cask. It would have prevented much of the chaos, confusion and costs that we are now experiencing as remedies are being sought for controlling the generation of explosive hydrogen within these casks.)

4) The NRC staff responded to the explosion at Point Beach by sending inspection teams to Point Beach and to the facilities of the vendor of this cask, Sierra Nuclear, in California, by issuing Confirmatory Action Letters to the utilities using the VSC-24, and by issuing Bulletin 96-04 to all utilities in the country to stop loading procedures and to analyze the casks they were using for chemical, galvanic, or other reactions in the casks. Their findings had to be approved by the NRC before loading could again proceed.

5) The responses prepared for Bulletin 96-04 by the utilities which were using the VSC-24 cask we found to be disturbingly inadequate and unsupported by documentation. For this reason, we retained a

highly competent corrosion engineer consultant, Dr. Rudolf Hausler, who had been retained in the past by the Electric Power Research Institute to solve a corrosion problem afflicting all nuclear reactors. He was able to do so and developed a corrosion inhibitor which is now used in all reactors.

Dr. Hausler was able to define a number of serious deficiencies in this cask that had not been found before, and he recommended that they be resolved before any more VSC-24 casks were loaded.

Carl Paperiello, Director of NMSS, wrote an analysis of Dr. Hausler's study and claimed his comments were not sufficient to halt further loading of the casks. (Dec.10, '96) Dr. Hausler responded (Dec. 29, 1996) by stating that Mr. Paperiello's evaluation was pure speculation, and pointed out in detail the additional data that would have to be a part of this analysis to come to the conclusions that Paperiello did in his analysis. Hausler also pointed out that in certain areas of the chemistry of metals, the staff was "stunningly ignorant."

6) Further evidence of the inadequacy of staff's regulatory performance in whom the public is asked to place its trust came to light when an announced inspection at the Sierra Nuclear Corp. took place a week after the explosion at the Point Beach plant. (Inspection Rept. No. 72-0007/96-204, July 9, 1996). Following are only a few of the serious deficiencies that were found:

a) Retrieval of documents was difficult. Design records for the VSC-24 were mixed with those of the VSC-17. Most of the analyses were performed for the VSC-17, whose testing data the NRC had never accepted, but were used, nevertheless, by Sierra Nuclear for the VSC-24 design. The design calculation package, dated Feb. 14, 1989, did not contain a signature nor proof of verification by either the Project Manager or Project Engineer. Neither the design plan or the design package included reference to the design verification as required. The Project Plan should provide detailed guidance for the design staff but contained neither.

b)The SNC staff indicated that the design was not reviewed by a corrosion engineer, that SNC did not consult an environmental effects specialist, and that SNC did not consider the problem of environmental interactions of components in the SFP.

c) The SNC design team had no well-founded basis to specify Carbo-Zinc 11 for coating the MSB components.

All of these deficiencies should have been identified by staff inspections in 1989 and 1990, long before the cask was certified. The licensees should have been required to provide oversight and corrective actions among their own vendors since NRC regulations state that licensees are responsible for assuring that fabricators and vendors establish and execute appropriate QA programs. But the staff did not do so. Yet we are now asked to accept the judgments of this staff, who did not find these very obvious deficiencies in the critical design phase of this cask, as being able to give us the assurance and the appropriate resolution for the far more complicated safety-related issues we have described in our petition.

7) After the Point Beach explosion, you, the Chairman of the NRC, requested the Office of the Inspector General to evaluate staff actions and the dry cask storage program. A major conclusion was, "NRC staff told us they do not formally approve or validate licensee loading and unloading procedures because the agency does not have sufficient staff or expertise to review each procedure." Yet, that is exactly what the NRC staff has been doing when they halted all loading and unloading procedures at all utilities after the Point Beach explosion. They required responses to Bulletin 96-04 which they had to approve before these procedures could continue at individual plants.

Given this acknowledgement to the Inspector General' Office of the lack of sufficient staff and expertise, it strains the public's credibility to be asked to have the confidence in the judgment of the staff in all the critical areas that we pointed out in our petition, as Mr. Miraglia would have us do.

8) Since the explosion at Point Beach, there is general recognition that unloading these casks may be even more difficult. The problems that were earlier identified when CPCo first pledged to unload the cask are now compounded by the fact that hydrogen may be generated in that process. Here again we are asked to accept the judgment of the staff--now already proved to be incompetent in so many ways--that "the deficiencies in the original unloading procedure would not have challenged the integrity of the cask or the fuel...and that the licensee would have ultimately been able to safely unload a cask." This failure to have an adequate unloading procedure,--with all these glaring mistakes and oversights

that are now apparent--is characterized by Miraglia as having "limited safety significance" and therefore, the NRC has refrained from issuing a Notice of Violation or a civil penalty.

The examples of the incompetence of some staff members cited here have become better known to the public since our petition was filed in Sept.19, 1995. But it is that record of poor judgment on the part of the staff that should have given pause to Mr. Miraglia in relying on them for an adequate response to this petition. Instead, his main reliance for his decision is on judgments by staff that he should be able to realize have been inadequate in the past and, therefore, cannot be relied upon now if the public is to have any confidence in the NRC.

Miraglia should have gone beyond these staff judgments to make a decision on our petition. He should have considered the magnitude of what has been done without adequate deliberation and knowledge--1) that millions of curies of radioactivity have been placed in 13 poorly designed casks on the shores of the Great Lakes, 9 of which the utility continued to load even though grave problems with unloading were known to it and were unresolved; 2) that Consumers failed to monitor the casks vendor's design, fabrication and construction practices, giving the public a cask whose design and function it cannot trust; and 3) that some of this high level nuclear waste on the shores of the Great Lakes will remain highly toxic for thousands of years, and yet the casks are licensed for only twenty years. He should especially have considered the fact that no cask has been successfully unloaded, and that there is no assurance of a federal repository.

In view of these considerations, he should at least have required that a VSC-24 cask be successfully unloaded to begin to restore the confidence of the public in the dry cask storage system in general, and at the Palisades site in particular. This should have been required as a condition for continuing to load these casks, and for not issuing a high level violation and meaningful fine. Instead he is asking us to believe his staff's demonstrated flawed judgment that procedural deficiencies of the initial unloading document were of "limited safety significance" as his decision states.

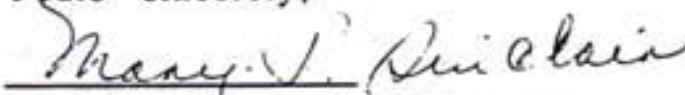
Mr. Miraglia's decision sends the wrong message to the whole nuclear industry on this most dangerous course for the country--i.e. placing high level nuclear wastes on the shores of our fresh water supplies--with no repository in sight. The message is that no matter how careless and sloppy its procedures are, the NRC is a "paper tiger"--it will cost them nothing--and the sham of regulation will go on as usual.

I hope that you and your fellow Commissioners are beginning to understand the sense of outrage on the part of the public over this cavalier dismissal of the grave issues we have placed before you in this 2.206 petition--and its implications for the safety of the fresh water supplies of this country for all future time.

We hope that you and your fellow Commissioners will institute a review of the decision on this 2.206 petition discussed here.

We deeply appreciate your attention to these grave issues.

Yours sincerely,


Mary P. Sinclair, PhD.
Co-chair, Don't Waste Michigan

cc. NRC Commissioners Kenneth C. Rogers, Greta J. Dicus,
Nils J. Diaz, Edward McGaffigan, Jr.

Vice-President Al Gore

Senator Carl Levin

Senator Spencer Abraham

Attorney General Frank Kelley of Michigan

Carole Browner, Administrator, EPA

Congressman Dave Camp

Congressman Fred Upton

Senator Joseph Biden