RUSSELL D. FEINGOLD
WISCONSIN

502 HART SENATE OFFICE BUILDING
WASHINGTON, DC 20510
(202) 224-5323
(202) 224-1280 (TDD)

United States Senate

WASHINGTON, DC 20510-4904

COMMITTEE ON THE JUDICIARY
COMMITTEE ON FOREIGN RELATIONS
COMMITTEE ON THE BUDGET
SPECIAL COMMITTEE ON AGING
DEMOCRATIC POLICY COMMITTEE

April 2, 1997

Nuclear Regulatory Commission
Dennis Rathbun
Director, Office of Congressional Affairs
Washington, DC 20555-0001

Dear Mr. Rathbun:

My office has been contacted by Mrs. Winifred Spring who has concerns regarding the declining performance trend at Point Beach Nuclear Plant in Two Rivers, Wisconsin.

Mrs. Spring believes that this decline poses an extreme risk not only to the personal health and safety of area residents, but also to the ecological conditions of this lakeshore region. While the NRC has duly acknowledged the trend, Mrs. Spring would like to see more attention given to this matter and more action taken towards its resolve.

Please investigate Mrs. Spring's concerns and respond to Jeri Gabrielson in my Milwaukee office. Thank you for your attention to this matter.

Sincerely,

R

Russell D. Feingold
United States Senator

RDF: krm

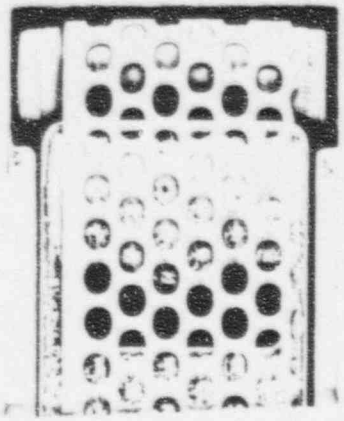
8383 GREENWAY BOULEVARD
MIDDLETON, WI 53562
(608) 828-1200
(608) 828-1215 (TDD)

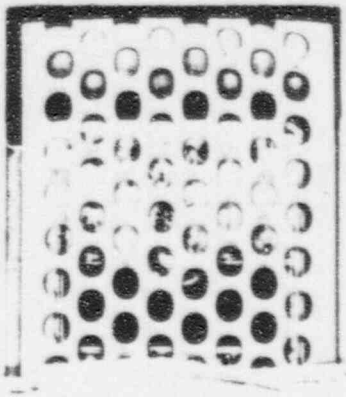
517 E. WISCONSIN AVENUE
ROOM 408
MILWAUKEE, WI 53202
(414) 276-7282

317 FIRST STREET
ROOM 107
WAUSAU, WI 54403
(715) 848-5660

425 STATE STREET
ROOM 225
LA CROSSE, WI 54601
(608) 782-5585

1640 MAIN STREET
GREEN BAY, WI 54302
(414) 465-7508





United States Senate
WASHINGTON, DC 20510-4904

OFFICIAL BUSINESS

Russ Feingold
U.S.S.

Nuclear Regulatory Commission
Dennis Rathbun
Director, Office of Congressional Affairs
Washington, DC 20555-0001

20555-0001

RUSSELL D. FEINGOLD
WISCONSIN

502 HART SENATE OFFICE BUILDING
WASHINGTON, DC 20510
(202) 224-5323
(202) 224-1280 (TDD)

COMMITTEE ON THE JUDICIARY
COMMITTEE ON FOREIGN RELATIONS
SPECIAL COMMITTEE ON AGING
DEMOCRATIC POLICY COMMITTEE

United States Senate

WASHINGTON, DC 20510-4904

RUSSELL D. FEINGOLD
WISCONSIN

DATE: 4-21-97

TO: Linda

OF: NRC

FAX: 301 415-3861

TOTAL PAGES (INCLUDING COVER): 4

FROM: **Jeri Gabrielson**
U.S. Senator Russ Feingold
517 E. Wisconsin Ave., Suite 408
Milwaukee, WI 53202

Any problem with transmission, please call 414/276-7282. Our FAX number is 414/276-7284.

8383 GREENWAY BOULEVARD
MIDDLETON, WI 53562
(608) 828-1200
(608) 828-1215 (TDD)

517 E. WISCONSIN AVENUE
ROOM 408
MILWAUKEE, WI 53202
(414) 276-7282

317 FIRST STREET
ROOM 107
WAUSAU, WI 54403
(715) 848-5660

425 STATE STREET
ROOM 225
LA CROSSE, WI 54601
(608) 782-5585

1640 MAIN STREET
GREEN BAY, WI 54302
(414) 465-7508

522441

Q5208 cw 983687 Jein 6

February 5, 1997

Senator Russ Feingold
U.S. Senate
Washington, D.C.

State/case - 10 GMs

Dear Senator Feingold:

I was unable to attend your meeting, recently, at Manitowoc; but, I am taking this unusual liberty to bring to your attention a very bothersome, threatening problem in this lakeshore area.

The enclosed material will sufficiently explain to you the fears of the people in Eastern Wisconsin

Is there anything you and Senator Kohl can say or do?

Thank you for your past great concern for your people in Wisconsin and, for any consideration you can extend in the nuclear matter.

Very sincerely yours,
Winifred Spring
(414) 794-8103

1304 N. Woodland Dr.
Two Rivers, Wis.
54241

SENATOR FEINGOLD
MILWAUKEE
FAR 11 AM 9:29

522441

522441

Wisconsin Electric
POWER COMPANY

Point Beach Nuclear Plant
6610 Nuclear Rd., Two Rivers, WI 54241

January 31, 1997

(414) 755-2321

Dear Neighbor,

This week the Nuclear Regulatory Commission sent a letter to Wisconsin Electric formally notifying management of a declining performance trend at Point Beach Nuclear Plant. While plant operations adequately protect public health and safety, it is clear that our recent performance is not up to our standards or the NRC's.

The purpose of a trending letter is to allow a utility, under the watchfulness of the NRC, to take early corrective actions before concerns become difficult to reverse. We have been working with the NRC since last fall and will continue to work toward this common improvement goal until we meet it.

We have put the president of the company, Richard Grigg, in direct charge of nuclear operations, and we have hired expert consultants to help us make the operational adjustments as quickly as possible.

As a Point Beach neighbor, we want you to be aware of these developments and of our desire to achieve a new level of excellence at Point Beach as quickly as possible.

If you have any questions, please call me at 755-6214 or Lauretta Krcma-Olson at 755-6400.

Sincerely,

Scott A. Patulski

Scott Patulski
Site Vice President

522441

JGI

ID 524644

SATURDAY, FEBRUARY 1, 1997 BUSINESS 3D

MILWAUKEE JOURNAL SENTINEL

More Point Beach problems found

Nuclear regulators say inspection turned up new safety violations

By Lee Bergquist
of the Journal Sentinel staff

Two Creeks — Federal nuclear regulators said Friday they found more potential safety violations at Point Beach Nuclear Power Plant during a special three-week inspection last month.

Revelations of possible new violations came as Nuclear Regulatory Commission staff members criticized Wisconsin Electric Power Co., owner of the plant, for a number of technical and management troubles that have plagued the facility.

"If you don't believe that you have problems here, if there is not a complete buy-in to the troubles here, then you have a real big problem," said A. Bill Beach, the NRC's regional administrator.

Much of Friday's attention by the NRC was in addition to several safety violations that resulted Dec. 4 in the agency levying $325,000 in fines, the second-biggest fine ever by the agency's Midwest Regional office.

The findings were the result of special on-site visits at the plant and at Wisconsin Electric headquarters in Milwaukee Dec. 2 to Dec. 20.

The inspections produced about a dozen potential new violations that could mean new fines against the utility in the next few months.

NRC officials said the latest findings are sure to result in more new violations, but they said it was too early to say whether Wisconsin Electric

Please see **PLANT** *page 3*

Plant/New Point Beach woes found

From page 1

would be required to pay additional fines.

Stung by continued criticisms, Richard R. Grigg, president of Wisconsin Electric, told the NRC that fixing the plant's problems was the most important issue for the company — even more important than the proposed $6 billion merger of parent Wisconsin Energy Corp. and Northern States Power Co. of Minneapolis.

Point Beach has had an enviable safety record for years, Grigg said, but the plant's performance has slipped and its problems must be corrected.

"My view of this is that we are sort of yesterday's champions," Grigg said.

Wisconsin Electric fired its former top nuclear executive in early December and Grigg took over direct control of nuclear operations a few days after the company was fined.

Beach said that while his agency has seen some improvement, he stressed — and Wisconsin Electric officials agreed — that the utility must overhaul a culture that now fails to look for problems before they happen.

For example, internal plant inspection reports examined by the NRC revealed very few problems that had been uncovered by Point Beach employees. But the NRC found plenty on their own.

A common thread in Wisconsin Electric's violations is a failure to identify problems stemming from what Beach said was a mistaken belief by many Point Beach employees and Wisconsin Electric managers that they are doing a good job running the plant. He said they often disagree with the NRC over interpreting operation rules.

NRC inspectors found during the December visit that employees in the control room failed to notice that a meter was reading below acceptable levels during two shifts. NRC inspectors had to tell them.

d advertising

The Kewaunee Nuclear Plant

by Ray Wilding-White

In spring 1997 the Wisconsin Public Service Commission (PSC) will hold official public hearings regarding the replacement of the generators at the Kewaunee Nuclear Plant (KNP). KNP plans its own "informal" public relations meetings before that and has already conducted well-planned plant tours.

The replacement does not involve the steam driven electric generator but rather two heat-exchangers, or steam generators, on each side of the reactor. In each, hot radioactive water from the reactor flows through 3320 u-shaped pipes (6600 total) turning the water outside the pipes into steam which, in turn, drives the generator proper.

These pipes corrode and, further, rust expands and creates cracks. When a pipe is excessively corroded, it is plugged and goes out of service. Since the plant opened in 1974 plugging has been required at an increasing rate since the rate of corrosion is non-linear (Totals: 1983 to 1994: 9.8%; 1994: 10.3%; 1996: 20.3%).

25% is the maximum allowed for either of the steam generators or for the mean of both. As of March 1996, Unit A was at 24.94 % and Unit B at 17.69% for a mean of 21.32%.

Inserting sleeves and other procedures which allow for the selective unplugging of pipes supposedly can extend the maximum to 30% (or in some other plants to 35%) and a sophisticated technique (Eddy Current Magnetic Probe) for measuring the cracks where the pipes meet their supports, often major problem areas, supposedly allows the safe level of corrosion to be raised to 50%. These methods have been criticized as pushing the safety envelope but, in any case, they are at best palliatives and cannot take the plant to its present license deadline of 2013. This date is also the license deadline for Point Beach.

KNP has three owners: Wisconsin Power and Light (WPL), Madison Gas and Electric (MGE) and Wisconsin Public Service (WPS) and these three are not of one mind. It appears that WPL and MGE are reluctant to be a party to the replacement even if the construction authorization is approved. Reportedly they have offered to swap in their shares in favor of a WPS operated fossil fuel plant, a plan WPS rejected. All that KNP spokesman Doug Day would say was that "the three are reworking their partnership." Point Beach is operated by Wisconsin Electric Power Company (WEPCO) but WEPCO is at this time in the process of merging with out-of-state Northern States Power (NSP) of Minneapolis, the new entity to be called PRIMERGY. There have also been suggestions that WEPCO and/or NSP have approached KNP but these have not been confirmed. A change in ownership and therefore in management, with the potential changes in policy these usually incur, seems to be clearly in the cards.

Replacing the heat-exchangers will run to about $100 million and, according to Resident NRC Inspector Jack Gadzala, the new state-of-the-art installations would be good for over 40 years, or well past 2013. On that date, whoever runs KNP can apply for a 30 year

reactors) which were installed in 1970 and is at this instant replacing the second pair which were installed in 1972. It was clear from the statements of Point Beach's new manager, Scott Patulski, at an October 1 public relations event that Point Beach has every intention of renewing in 2013. What, you may ask, becomes of a discarded, radioactive 40 to 70 foot steam generator? It is, to use the novel but expressive term used by Point Beach, *mausoleumized*. The old PB Unit 1 sits in this state in a building above ground.

Most people, when they think of a nuclear disaster, think in terms of Chernobyl or Three Mile Island. Catastrophic events are not impossible. At Point Beach for a number of years an 8 lb sledge-hammer was used to close a safety valve that was designed to shut within 5 seconds of receiving an electronic signal. (1992, NRC fine: $150,000); an operator failed to respond to an alarm until a colleague prompted him 15 seconds later (1996); a portion of the emergency core cooling system was inoperable for a year (1992, NRC fine $75,000) and other serious violations that had the potential of catastrophic results which, irrespective of Point Beach being in a different county, would involve Kewaunee. These violations were first reported in February, 1992 by the watchdog Civilian Utilities Board (CUB); they did not appear in the major press until the September 13, 1996 issue of the Milwaukee Journal, page one.

KNP, it must be pointed out, has a safety and NRC fine record that is as good as Point Beach's is questionable. There are no major violations or fines of the type above on record.

However, popular thinking to the contrary, "China Syndrome" events are not the major case for concern. The major concern is well summarized by a cartoon that appeared during World War II which showed a submarine up to the knees in water with a sailor holding a bucket looking at the captain and saying "Bail where?"

The fuel rods, which are grouped in "assemblies", when they are "spent" (still radioactive but not efficiently so) are moved to a pool filled with water which is kept safe by a cooling pump. This pump has a second as a back-up; when asked what would happen if both failed, KNP tour guides had only an unclear "we have procedures" as an answer. These pools were originally intended as temporary storage for a few months only. Temporary solutions have a tendency to become permanent — World War I temporary buildings on the Washington Mall were still there two decades after World War II — thus these pools are still in operation. The KNP pool is now about 75% full and will be full by the year 2000. Doug Day told me that there was enough space to go to 2013 but he failed to tell me of one hitch.

The pool is a rectangle with an aperture half way down the long wall. This leads into a narrow canal that is parallel to the pool. When rods are removed from the reactor they are brought under water along one half of this canal, through the slot and into the pool. The other half of the canal was put there for the planned second reactor which was never built. There will be enough space to go to 2013 only if this half of the canal is used for storage and permission to do this has not yet been requested from the NRC let alone granted. Further, there will be no pool space if the plant operates beyond 2013.

The alternative is storage in 19-foot, silo-like concrete casks which are filled with assemblies inside the plant and are then rolled out and stored above ground outside the plant buildings. These casks are not without problems.

At Point Beach, on May 26,1996 at 2.45 a.m. the lid of the third cask (of what would eventually be 100) was being automatically welded when an explosion took place that moved the 6400 lb lid by more than an inch. It turned out that, as an economy measure, the model VSC-24 casks used were lined with zinc not stainless steel and that there was residual boric acid from the pool on the assemblies. This combination released hydrogen gas which the welding exploded (NRC confirmed this). More than this, blue flames had been seen when closing the two earlier casks and these had been dismissed as cleaning fluid burning off. Further, videos of the inside at both Point Beach and Palisades, Michigan showed gas bubbles rising from the racks. Neither the designers nor the on site managers or crew realized that hydrogen could be generated even though anyone who knows batteries would have realized this potential. Further, neither the earlier fires nor the bubbles were investigated. Point Beach management has consistently dismissed the explosion as "a burn" or a "flame." Dr. Gilbert Emmert, chairman of the nuclear engineering department at U[illegible], said: "I think a gas burn is just a euphemism for an explosion."

To be complete, one should mention that at the Palisades, Michigan plant, a loaded cask developed a crack. It has been moved back into the plant where it now sits since no way of unloading it has been found.

Like the pools, the casks are considered to be temporary storage; they have an estimated lifetime of 30 to 50 years and the material in them has a lifetime of 10,000 years. They are supposed to be in place until the Federal Government takes the spent material away. Industry spokesmen always make the point that they have been paying into a Government fund for this disposal for years and this is true (the cost has been passed on to the consumer); they also make the point that the Government has been court ordered to dispose of the material by 1998 and this is not quite so

ssified advertis

true. More accurately, The First Court of Appeals ruled that the Department of the Environment must dispose of nuclear waste by 1998 but the meaning of the term *dispose* was left wide open and it does not mean that all waste has to be carried away by 1998. It is highly unlikely that any material is going to be moved by that date.

At present the only permanent site being studied and developed is the one at Yucca Mountain, Nevada. Geological and related problems exist that are not yet clarified; also the State of Nevada is developing the well known "OK but not in my back yard" attitude we have seen with half-way houses, scattered housing, etc. Yucca Mountain will not be available for a long time if ever. The whole matter is very clearly laid out in Scientific American, June 1996 (pp. 72-79). (Consult the Kewaunee Public Library). The industry has no stated contingency plans should the Government not take the material away other than continued on-site storage.

Congress recently introduced a bill to temporarily store casks above ground at Yucca Mountain but the President quite rightly will veto this and the Senate is four votes short of an over-ride.

It should be noted that only 10% of the energy in the rods is expended. Recycling techniques could extract 90% or the energy in the residue and this is what is being done in Europe. It is not done here according to Scott Patulski, because of "politics" and a law forbidding it. The present "business friendly" Congress could easily repeal the law if the Utilities so lobbied, but the truth is that it is cheaper to use new enriched U-235/U-238.

If the canal storage is not approved and/or KNP operates beyond 2013, casks will be the only option. (Patulski said that he "expects a reasonable accord" with NRC; we can assume that cask construction will resume at Point Beach). Since existing damage control policies are totally inadequate, should a cask leak in any way, the damage to the lake and to the ground water would be devastating and more than likely irreversible.

Any permanent storage has to be safe for 10,000 years and that is a long time; long before then our descendants may be faced with, literally, a hot potato.

The Cast of Characters:

Utility Companies. Though they talk in terms of benefit to the consumer, their prime concern is the bottom line. Management varies considerably as the comparison of Point Beach and Kewaunee above shows. At best they are less than candid; they always paint rosy pictures and blame the Government for their problems. At the worst, as in the case of the Point Beach explosion, they can be deceitful.

Citizen's Utility Board (CUB). The organization has no bottom line to contend with and is the only organization representing the citizen's problems. If occasionally over-enthusiastic, they should be taken seriously. Since they are often critical, they are generally denigrated by the utilities. "CUB asking end of Kewaunee Nuclear Power Plant based on faulty study says WPS" was the heading in a Kewaunee newspaper story. Loretta Krema-Olson, supervisor of the Point Beach Energy Information Center called CUB's use of the word *explosion* "a distortion of the truth" and a "scare tactic."

Public Service Commission (PSC). When speaking to them I mentioned the explosion. Examiner Sally Jenkins immediately took the company line and said that it was not an explosion but a "burn" and added that the pressure was no more than what it takes to pump up a tire on your two ton car. Note: (1) The lid was three tons, not two. (2) A car has four wheels so you are lifting ¼ ton, not 2 tons. (3) The explosion took 1 or 2 seconds, pumping your tire takes about 20.

"All the members of PSC are appointed directly by Governor Thompson."

Nuclear Regulatory Commission (NRC, formerly AEC). This is the top regulating body. New chairperson Shirley Ann Jackson promises tighter control. In the past, however, the agency has often given in to the intense industry pressure and has made many unwise compromises. This is well covered in TIME, March 4, 1996 (pp. 47-54; Consult Kewaunee Public Library).

The Local Citizen. There are some who, because of personal or local economic gain, close their eyes to the problems; there are also those who fear, without foundation, that the subject is too technical for them; and there is, as always, a certain amount of apathy. Still, when all is said and done, it is the citizen who have to make decisions with very long term implications. Caveat Emptor.

READING. An excellent general view of nuclear waste is The Nuclear Primer: A Handbook for Citizens, put out by The League of Women Voters, Lyons and Burford, 1993. I have asked the Kewaunee Public Library to stock the periodicals mentioned in this article and a number of technical reports by the utilities, CUB, NRC and others.