United States Senate

Washington, D. C., September 8, 1976

Respectfully referred to

Congressional Liaison
Nuclear Regulatory Com.

I would appreciate a review of the matter described in the attached letter. Please send me an appropriate report and return the correspondence.

Thank you,

Rec'd Off. EDO
Date 9/20/76
Time 4:04

Robert P. Griffin

ROBERT P. GRIFFIN
U.S.S.

Form No. 3

16—45102-3 GPO

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Sept 6, 1976

Dear Mr. Griffin,

The Consumers Power Co. continues to build a dangerous Atomic plant, which I fear is ten times the size of this plant at South Haven. I also hear that the Dow is very unhappy with Consumers and the arrangement, in which they have found how little they know about constructing an Atomic plant, and how unreliable these plants can be. This plant is not only to service Dow but to service half of Michigan. All of this constructed within the city limits of Midland. It's bad enough having a big Chemical plant, which is like a dynamite factory, in the city. This whole affair is well covered by the lobbyists who have our State and Federal Representatives eating out of their hands. The biggest objection I know of is the lack of

water for cooling such a plant.
They have only a puddle, and they need a whole lake. And the next objection is what to do with the Atomic waste, which would destroy the vicinity for thousands of years, and which they want to bury under our State, which would also ruin our lakes in time.

I would think President Lord, if he has any interest in our State at all, would put an end to this problem as well as the other dirty schemes for our State, such as submarine signalling stations in the U.P., which would be detrimental to the people up there. When are we going to give consideration to people other than the fat cats. I have followed these programs for years and it's funny how the true facts are white-washed when it comes to a showdown. We are fortunate to have an intelligent

person such as Mr. Sinclair, who has had the nerve to stand up to these shysters and their untruths.

Ford and the Republican crowd are going to have to get down to business soon if they expect to beat Carter, who is going to give them the fight of their lives. You are not up against a Mr. McGovern this time. And labor seems to be all for Carter.

When is Congress going to do something about the big stick of the Doctors are giving? Medicaid, and about the ex-Government employees who sometimes draw more after retirement than before? You people have really feathered your nests. What is your opinion?

Very Truly Yours
Neil D. Brown
1331 Bookner St.
Midland, Mich. 48640

Blast likely to heat up N-safety debate

WASHINGTON (AP) — The chemical explosion at a nuclear fuel reprocessing facility in Richland, Wash., is likely to heat up the debate over the safety of the U.S. nuclear power industry.

Eight workers at the Hanford Nuclear Reservation were exposed to radiation after the explosion Monday inside a "glovebox," a small, sealed compartment through which workers use rubber gloves to handle radioactive materials.

Six workers were decontaminated and sent home, while two others were still in isolation undergoing washings to remove radioactivity, an official said. Two nurses who work at a medical facility at the plant also were washed and returned to work immediately. Only a small amount of radioactive material leaked out of the remote building where the explosion occurred, he added.

Although the blast did not involve a nuclear reactor, the mishap may touch off a new round of demands for safeguards at all nuclear installations, including both chemical facilities and the nearly five dozen commercial plants now producing power from nuclear fission.

Although nuclear energy is still in its infancy, the industry has a good safety record, with few cases of exposure and no fatalities in commerical operations. Last year, nuclear energy provided under 7 per cent of the nation's electricity. It is expected to grow to 28 per cent of the produced electricity by 1985.

The U.S. Nuclear Regulatory Commission and environmental groups differ over the potential hazards from the growing industry.

Critics and supporters generally agree a reactor, composed of spaced clusters of fuel rods, could not create a nuclear explosion, which requires the slamming together of very pure atomic materials.

But critics fear an unlikely combination of malfunctions, accidents or sabotage could cause a reactor core to melt and break through its containment structures.

In that case, they say, radioactive fuel and waste products vaporized by their own heat could spread through the air and reach thousands of people, depending on local geography and weather conditions. While everyone is exposed to small amounts of natural radiation, some experts fear larger doses could cause birth defects and cancer.

Critics worry about accidental releases of radiation at any step during the long fuel-handling process.

After uranium is mined from the earth, it is packed in fuel rods, usually as a mixture with ceramic materials covered with steel. They are transported, usually in trucks, to nuclear plants. They travel the highways again after they are used for disposal or reprocessing.

The Hanford facility, operated by Atlantic Richfield for the Energy Research and Development Administration, has both reprocessing and waste disposal activities.

Critics fear exposure could result from highway or processing accidents, natural disasters or terrorist sabotage.

To date, nuclear accidents have not resulted in calamaties or mass public exposure to radiation. Industry leaders point to the record as proof the safeguards are working.

Skeptics claim a disaster will strike eventually, and the safeguards are not foolproof.

Meanwhile, a panel of experts on atomic safety has told the NRC it should consider the possibility of a disastrous accident in designing the experimental "breeder reactor" of the future.

After nearly two years of review, the Advisory Committee of Reactor Safeguards agreed with supporters of the breeder program that the chances of such a disaster are remote, but the committee said nobody could say with certainty that it could not occur.

The committee concluded, in a report circulated Monday by the NRC, designs for the proposed Liquid Metal Fast Breeder Reactor should consider the possibility of malfunctions that could cause the reactor core to melt.

The report said attention should be given to two possible results of a meltdown: the chance an explosion could result, blasting open the reactor and its building and releasing radioactive materials, and the alternative that without exploding the melted nuclear fuel could heat up enough to burn its way through barriers and release radiation that way.

It said breeder designs should emphasize "provisions for the contaimment of molten fuel," more popularly known as "core-catchers," whose function would be to catch molten fuel and scatter it, reducing its nuclear reactions and preventing its escape.

Environmental groups long have been warning the breeder reactor would pose a melt-down hazard that could expose the public to dangerous radiation, although conceding the chances of such an accident appear slim.

The conventional nuclear reactors in today's atomic power plants use uranium fuel rods to heat water and produce steam to drive electric generator turbines.

The proposed breeder reactor would use plutonium as its fuel, resulting in nuclear reactions powerful enough to turn an unusable type of uranium into more plutonium; it could actually produce more new atomic fuel than it burns up, earning its breeder nickname.

But the breeder reactor would operate at temperatures so high its heat could not be transferred directly to water. Instead, the temperature of its core would be controlled by the circulation of molten metal, sodium, which would then pass the heat on through metal walls to water in a separate circulation system.

What the environmentalists fear is a "loss of coolant" accident that would let a reactor core overheat to the point that its fuel would warp or melt, bringing larger amounts of fuel together and generating even more heat.

Out of control, such a process could conceivably lead to a melt-down and explosion or burn-through.

The advisory committee said it has not been able to figure out any way a breeder core could run out of control so badly that it would break out of its protective enclosures.

Still, the committee concluded, there is enough scientific uncertainty about the way a runaway nuclear core really would behave to make it a good idea to include that hazard "as a part of the safety evaluation of a liquid metal fast breeder."

Consumers, NRC los

By TODD MASON
Daily News staff writer

Consumers Power Company and the Nuclear Regulatory Commission (NRC) lost round three of the legal manueverings to keep the Midland plant under construction and the industry unfettered by potentially devastating federal court rulings.

The District of Columbia Court of Appeals has refused both parties a second extension of the effectiveness of its July 21 decisions that question NRC licensing proceedings in Midland and in Vernon, Vt.

The NRC is now officially obliged to reopen those proceedings and examine the environmental impact of radioactive waste disposal. At Midland, it is also obliged to consider energy conservation alternatives to the plant and reactor safety questions.

The remaining legal option of Consumers and the NRC is the appeal to the Supreme Court which both are actively considering.

The change the NRC is forced to accept in the appellate extension refusal has more legal than practical bearing. The NRC issued an August 10 policy statement setting in motion all of the appellate decisions' requirements.

At Midland, the quasi-judicial, three member Atomic Safety and Licensing Board (ASLB) has been appointed by the NRC to hear the new licensing arguments.

As a first step, the ASLB gave Consumers and plant opponents until next Tuesday to file written arguments on whether construction should continue until the licensing requirements are determined.

Consumers has at stake a potential delay in construction at least until December, if it loses its case before the ASLB. The NRD figures it can solve the environmental impact of waste disposal enough by then to allow interim construction and operation approvals.

an

N-plant appeal

Under the same requirements, nuclefuel reprocessing plants have been subject of environmental impact assments for more than two years, l have been denied interim licensing a New York state federal appeals rt. The NRC is appealing.

Facing these uncertainities, both the C and Consumers have been preving options. The NRC is going ead with the policy statement prolures and talking to the Justice Dertment about an appeal to the Sume Court.

Consumers is writing its arguments the ALB decision on construction d preparing a petition to appeal to the Supreme Court.

The appellate extension refusal Thursday removes one argument both Verment Yankee, the other utility involved in the appellate decisions, and Consumers have been using against the ASLB hearings.

Without an effective mandate from the appellate bench, Yankee Vermont argued, the NRC had no jurisdiction to form the ASLBs and proceed with the license questions.

"All we did was say we agree with Vermont Yankee," said Judd Bacon, Consumers attorney, in its request to the NRC to delay the ASLB and the construction question.

Consumers proceeded to argue "As a matter of policy, it was not a good idea to go ahead with the (ASLB) show cause hearing (on construction) while both NRC and Consumers are contemplating going to the Supreme Court to get the matter overturned."

Myron Cherry, the Chicago environmental attorney who successfully argued the case against Midland licensing, again asked the NRC Friday to shut down construction here in compliance with the appellate decision.

About 7,000 students attend school out ... however, are now refusing to transfer to make that dollar ...

Safety Issue Paramount To Atomic Waste Debate...

IT SHOULD BE made clear at the outset of the debate over whether Michigan is selected as a dump site for atomic wastes that the issue is not whether the wastes go here or to Ohio, New York or anywhere else. It's no more right that another state accommodate Michigan's nuclear refuse than it is for Michigan to provide an atomic burial site for other states. As long as the nation is committed to nuclear power production and other peaceful and military uses of the atom, there are going to be wastes that will have to be put somewhere until they lose their radioactivity—which could take up to a quarter of a million years.

The real issue is whether the technology exists to store nuclear wastes safely, and if it does, whether the industry is capable of employing that technology to ensure that human life and the environment are not imperiled. The score in neither case is particularly encouraging.

Scientists still are debating whether the storage of radioactive materials in salt beds, as is proposed for Michigan, or under great shields of granite, as has been proposed for Rocky Mountain regions, is really safe or not. There also is the problem of shipping the wastes from their places of origin to the storage site. It is one thing to handle nuclear matter in relatively isolated areas, such as government testing stations in the eastern Washington and Idaho deserts, and quite another to transport it through highly populated regions such as Michigan, and bury it near cities that, besides their own residents, attract thousands of vacationists yearly.

The sites identified in Michigan so far are sprinkled along the Lake Huron shore from Alpena north to Rogers City. The "best mine site available in the northeastern U.S." for the storage of nuclear wastes supposedly is on a tract owned by U.S. Steel east of Rogers City, on Lake Huron's Adams Point. At least three other sites are on or near the Huron shoreline, and another would require a chunk of the Black Lake State Forest. The possible threat that a nuclear dump would pose to the natural features of these areas is reason enough for a full-scale public debate on the proposal. Attorney General Frank J. Kelley's vow to sue the Energy Research and Development Administration unless it prepares an environmental impact statement on any proposed Michigan site could be the catalyst for such a discussion.

Rep. H. Lynn Jondahl also says he will introduce legislation this fall "to stimulate and expand the debate, more than 30 years overdue, regarding the creation of public policy" in the area of nuclear waste storage. Such a law would require a storage facility to be certified by the Public Service Commission and approved by the Legislature. Despite the insistence of some ERDA officials that "state and local governments have no legal authority to regulate the federal government," it would be both logistically and tactically difficult for ERDA to override both the PSC and the state's legislators.

The search for nuclear storage sites in Michigan could turn to the public's benefit yet if it spurs the kind of re-examination of the atomic waste question that people everywhere have a right to expect.

Kelley

Jondahl

Close look needed on nuclear waste storage

...And Nuclear Plant Facilities

VOTERS of at least four, and possibly six, states will decide this fall whether to clamp firm state controls on the nuclear energy industry. But the Nuclear Regulatory Commission recently achieved in one fell swoop what many nuclear critics had long sought in legislative relief. It reluctantly declared a moratorium on licensing future nuclear plant construction until it completes a thorough study of the environmental impact of reprocessing spent reactor fuel and disposing of nuclear wastes. The respite will be temporary, with full licensing possibly to resume as early as next December.

But the point has been made, thanks to a U.S. Court of Appeals ruling last month, that there still are outstanding questions about nuclear power safety that will have to be answered before the country commits more of its energy eggs to this particular basket.

Significantly, the ruling came in response to legal challenges to Consumer Power Co.'s Midland nuclear plant in Michigan and to the Vermont Yankee plant at Vernon, Vt. A licensing board now will decide whether licenses for the two plants should be modified or suspended. The appeals court had ordered the NRC to reconsider its original approval of the licenses.

Both the Midland and the Vermont Yankee plants have been riddled with construction problems that would almost be comic if the potential consequences weren't so grim. Vermont Yankee's problems have included the upside-down installation of the key element in controlling nuclear reactions. Federal investigators at Midland concluded only "pure luck or happenstance" had prevented structural damage as a result of continuing building errors.

In the case of the Midland plant, the appeals court also instructed the NRC to consider whether the simple alternative of energy conservation might negate the need for a nuclear power facility.

It's against this background that the states of Washington, Oregon, Montana and Colorado will vote in November whether to tightly restrict nuclear plant construction and siting, atomic waste disposal, and installation of safety systems before they have been tested under actual working conditions. Ohio citizens' groups have until Labor Day to get the 21,000 petition signatures they still need. Arizona critics succeeded in getting a nuclear initiative on the fall ballot, but nuclear proponents immediately filed legal motions to remove it. A Michigan initiative failed to get enough signatures this time around, but could qualify before the 1978 election.

As we have editorialized before, whether these initiatives ultimately succeed or fail, the nuclear industry is unmistakably on notice that it will have to convincingly resolve public safety and environmental concerns if nuclear power is to be accepted as a major energy source. The industry-backed Atomic Industrial Forum itself acknowledged, after the defeat of the California nuclear initiative in June, that the pro-nuclear vote had "lanced the boil, but did not cure the infection" of growing public misgivings about nuclear power.

The NRC temporary moratorium on nuclear plant licensing is important evidence that "lancing the boil" indeed won't be enough, but that the industry must also cure the infection, and quickly.