



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555  
October 29, 1979

4884

Mr. Ellsworth J. Andrews  
1201 Purdy Court  
Lutherville, MD 21093

Dear Mr. Andrews:

This is in reply to your letter of March 31, 1979, to President Carter. I am sorry for the delay but we have been very busy with the aftermath of the Three Mile Island accident.

A number of the subjects mentioned in the pamphlet attached to your letter are discussed in Environmental Statements published by the Nuclear Regulatory Commission in relation to the construction of nuclear power plants. Enclosed is an example of such a statement, which is for the Yellow Creek Nuclear Plant. You may be particularly interested in Section 4.4 on impacts on the community during construction, Section 5.8 on impacts on the community during operation, Section 5.4 on radiological impacts from routine operation (including transportation of radioactive material), Section 7 on environmental impact of postulated accidents, and Section 9.1 on alternative energy sources (including comparisons of economic costs and health effects of nuclear and coal-burning power plants).

We have learned a number of lessons from the Three Mile Island accident and are applying the information to prevent such accidents in the future. We assure you that every effort is being made to ensure the continued protection of the public health and safety at all nuclear power plants.

Sincerely,

A handwritten signature in cursive script, reading "Harold R. Denton", is written over the typed name.

Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Enclosure:  
As stated

7911120 299

Philadelphia, Pa. 1911

Dear President Carter,

NRC

I am writing to you because I am curious.

I am 52 years old, married and have 3 sons, one of whom is a physician working in a Washington, D.C. hospital. We are a family that has always privileged home ownership and country. Both my wife and I work in fields that deal with human needs and human problems.

I have just finished reading that Saturday edition of the Tribune from New York which included "Biology of the Terrestrial" at the Three Mile Island Power Plant near Harrisburg, Pa. Coincidentally, my wife and I were also viewing of the new motion picture Chiswick Syndrome at our neighborhood theatre last evening. I challenge its accuracy, to say the least. I have observed first hand to me is shared out in our back yard and outside the theatre last night. The fact is that it is not a picture of a group of people in the Tribune Tribune. I am returning a copy and I think its content is false. I think that the fear of us in this society can be brought, like ghost many subjects, I feel we have a responsibility to ask questions, become enlightened to as many

important issues of the day as possible. I think by  
I have known very little about Plonin's story  
other than there has been a certain amount of  
controversy over current potential dangers and  
future possible hazards. The Hamburg incident  
and the movie (with hand out) have had their  
impact!

If knowledge is indeed strength, then I  
need to become stronger in this area. I am  
giving my government, and you in particular  
as our ~~representative~~ <sup>representative</sup> to represent all of our people,  
to provide me with comments and information  
which I will use in the statements made in the  
attached paper.

This information will be ~~strongly~~ <sup>strongly</sup> important  
to me and my family as well as our ~~people~~ <sup>people</sup>, to  
our friends and associates.

I am looking forward to a prompt response  
to this request as it is the first one I have  
ever made of my government.

Sincerely,

Edward J. Lindgren

1501 Brady Court

Eastville, Maryland

21033

# NUCLEAR POWER FACTS

There are currently 1,500 nuclear facilities in existence in the United States.

## HOW A NUCLEAR PLANT WORKS

Very simply, a nuclear power plant is much like many other electricity-generating facilities. Water is heated into steam and steam is used to turn a turbine which produces electricity. The difference is that a radioactive core is used to heat the water in a nuclear facility.

## NUCLEAR PLANT SAFETY

Because the burning element of a nuclear plant is a volatile poison, there are many problems with nuclear power that do not exist with other types of power plants. Radioactivity can be contained, but once radioactive cores cannot be totally shut down. A coal plant can be shut off by putting out the fire. The nuclear plant, on the other hand, always demands an operating cooling system—even when "turned off." Therefore, reactors constantly have the potential to "meltdown", burning through containment structures. A meltdown could release into the atmosphere poisons that could result in the death of up to 100 persons and \$17 billion in property damage (Atomic Energy Commission study). Emergency Core Cooling System (ECCS), a device meant to prevent such a catastrophe, has thus far failed to work in even one case. A 1975 fire in the Browns Ferry reactor in Alabama shut down the facility for months, causing over \$4 million in damages and narrowly averting a core meltdown. The ECCS did not function and was called upon.



## NUCLEAR WASTE

In addition to electricity, another by-product of nuclear power is radioactive waste. About 600,000 gallons of high-level nuclear wastes have been produced so far in the U.S. Some 235 million gallons are expected by 2000. This waste includes cesium-90, cesium-137, and plutonium-239, among many others, all highly toxic poisons. It is estimated that at our current limited rate of production, there will be 30,000 gallons of plutonium-239 alone by the year 2000. This poison will remain radioactive and dangerous for over 250,000 years. There is no safe way to dispose of radioactive waste. There are no permanent waste disposal facilities.

For Good Alliance phone: 393-6702

Not to be doubted

There are none currently under construction. There are none planned for the immediate future. The U.S. government has set a target date ten years in the future for the first permanent site. Even this site has not been confirmed. The plans are plagued with controversy, many critics pointing out that the proposed storage will not be able to contain radioactive material safely—and more safely than the present overflowing temporary storage facilities throughout the country. In the Washington, D.C. area, the North Anna nuclear power plant had to ask for permission to expand its waste storage facilities only two weeks after beginning operation. Other temporary storage sites such as those in Maryland, Washington and in Kentucky, are leaking their poisonous contents into the surrounding land and water. Radioactive particles do not disperse evenly in the environment. They concentrate in the food chain. Radioactivity in fish can be 1,000 times higher than in the surrounding water.

## TRANSPORTATION

With an increasing dependence on nuclear power, there is more radioactive material being transported on the nation's highways and railroads. This presents the high possibility of accidents and hazardous spillage. In 1977, a semi-trailer truckload of refined uranium was spilled on a Colorado highway. In 1973, another truck dumped radioactive material on the Pennsylvania Turnpike. Thirty U.S. governments have now passed forbidding transport of nuclear materials through their boundaries, and many states are passing similar legislation.

## INSECURITY

Going hand-in-hand with transportation is the escalation of terrorism. With wider access to radioactive material, there is an increasing chance of theft. It takes only 5 pounds of plutonium plus material available at a hardware store to construct a fission bomb. The only precautions for nuclear terrorism thus far have led to severe civil liberties restrictions.



One of the more disconcerting aspects of nuclear power is that it is not economical. It is overly expensive. Already the residents of Virginia have experienced a 12% utility rate increase because of nuclear power. To understand this phenomenon, certain aspects of the nuclear and utility industry must be studied. First, there are the uranium companies. Five companies control 80% of the market. Second, there are the manufacturing companies. There are only four, with General Electric and Westinghouse being the top two. Finally, there are the utilities. They are unregulated monopolies. The state has little power to tell a utility company what it can do in the area of plant construction; the state's power rests almost solely in determining if the utilities are receiving a fair profit on their investment. This is usually done by applying a rate of return to the money invested. If the money invested, the more money is made in profit. Which means the more expensive the power plant, the more profit the utility company can expect to get in return. And nuclear power plants are more expensive to build than any other type of power plant currently being constructed.

In brief, a small group of multinational corporations control the supply of fuel for nuclear power plants, an even smaller group of corporations control the construction of these plants, and finally, the utilities not only buy the fuel and power plants have no choice but to pay the highest prices. As a result, the utilities will insure higher profits to themselves.

#### DISADVANTAGES

Nuclear power plants take up needed capital which could otherwise be used to create jobs. There are several estimates which show by the 1980's the capital needs for nuclear power will be so high that they will absorb almost the entire share of the economy, taking away money from other industries and services. Although nuclear plant proponents often point out how many jobs they will create, in reality each plant will only employ 125 to 150 specially skilled persons.

Nuclear power is a government-subsidized industry. The U.S. federal government provides a needed tax-free fuel enrichment cost; the development of waste facilities is being conducted at government expense; many other incidental costs are being subsidized by the government including plant security, transportation security, reprocessing and additional development. These costs are not paid in our monthly utility bills, but through federal and state taxes.

Another important hidden cost is plant decommissioning. A nuclear power plant will last only forty years. After that it will become highly radioactive, and must be disposed of. The costs of this have not yet been calculated, but one facility in Minnesota was decommissioned at the cost of \$100 million. The cost to build the plant was 1 million dollars.

There is also an additional cost in the form of an accident. Insurance companies will not insure nuclear plants for accidents. There is a law, the Price-Anderson Act, which limits these liabilities to \$560 million, almost all paid by the government.

#### NUCLEAR POWER MUST BE STOPPED

It is an unacceptable option. It will not solve our economic or energy problems, but will only exacerbate them. We are going ahead, not because nuclear power is the best option, but because it is the only option available to our nuclear industry.

There are citizens forming all over the world to stop nuclear power.

In the Washington area, Potomac Alliance is concerned with the local proliferation of nuclear power plants. A major concern of Potomac Alliance is the North Anna Plant, about 30 miles south of Washington, D.C. in Louisa County, Virginia. This plant is built on a major geological fault, and the hulling of the facility is sinking into the ground, causing dangers of a pipe rupture and core meltdown.

(please cut and mail to Potomac Alliance, P.O. Box 9106, D.C. 20005)

I would like more information about Potomac Alliance and/or nuclear power

I would like to be on your mailing list

I would like to contribute \$3, \$5, \$10, \$15, \$20, \$25, \$50, \$100, to help in the fight against nuclear power

PLEASE ADDRESS:

PLEASE PRINT