

Citizens Against Perkins

Citizens Against Perkins (CAP) is a local group formed to inform the citizens of Piedmont, N. C. of the hazards of nuclear power. The purpose of CAP is to prevent the construction of the Perkins nuclear reactors and to halt the transportation and storage of radioactive materials within our region.

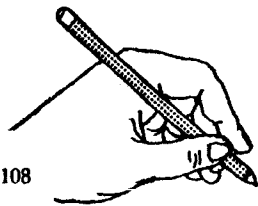
CAP believes that conservation and the development of safe clean energy sources will make nuclear power unnecessary.

CAP endorses and promotes legislation that will phase out the use of nuclear power.

If you would like to ask questions or join, phone or write CAP:

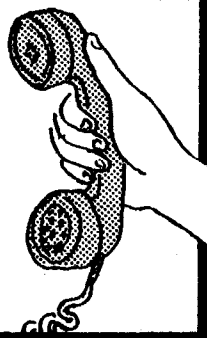
Write:

CITIZENS AGAINST PERKINS
Box 10581
Salem Station
Winston-Salem, North Carolina 27108



Phone:

(Area Code 919)
Frances King - 725-4243
Bill Crow - 765-8269
Lorraine Ashburn - 725-9905
Laura Mantius - 724-7304



CAP meetings are held on the 2nd and 4th Tuesdays of each month at 7:30 P.M. on the 2nd floor (floor above the mezzanine) of the old Government Center, at 3rd and Main Street in Winston-Salem.

For detailed information —
contact C.A.P.

COSTS

COSTS OF NUCLEAR POWER

Duke Power Company claims that nuclear power is a cheaper source of electricity than more conventional sources. In this way they justify the building of goliath plants like Perkins. There are strong reasons to believe that nuclear power will be far more expensive to the public than Duke Power tells us.

CONSTRUCTION COSTS FOR PERKINS

Building costs of nuclear plants typically run 2 to 3 times original company estimates. In 1975 the estimate for Perkins was \$2.5 billion. In 1979 Duke Power estimated the cost at \$5 billion.

(1979 Duke Power Prospectus)

PLANT EFFICIENCY ESTIMATES

Duke Power Company has based many of its cost calculations on operating Perkins at 76% of capacity. However, for the last 5 years average nuclear plant capacity utilization has been 58%.

PLANT RETIREMENT COSTS (DECOMMISSIONING)

"Cleaning up the remains of nuclear facilities -- A multi-million dollar problem."

-June 1977-House Science & Technology Comm.

Nuclear plants have an estimated useful life of no more than 30 years. Then the highly radioactive plants will either have to be entombed in concrete and guarded -- forever, or dismantled by remote-controlled methods and buried. This is called decommissioning. These costs, which may easily be in the \$100 million range, are not included in Duke Power Company's estimate of the cost of Perkins.

NUCLEAR INSURANCE

In terms of recovery from property damage due to an accident, we would all be losers. If you look at your home-owners policy you will probably find there is a specific exclusion for damages caused by radioactive contamination.

Duke Power would be expected to have insurance covering property losses by its customers. However, in the event of a serious accident, property owners would be able to recover only a fraction of their losses from Duke Power because of the Price-Anderson Act which limits the total liability of a utility.

"... Price-Anderson exists to protect the utilities and nuclear manufacturers. Period."

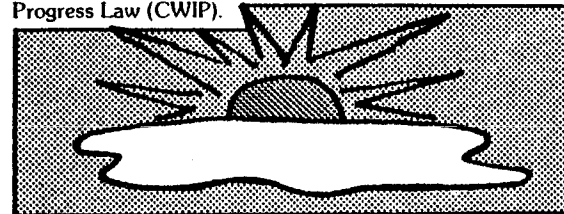
-Senator Mike Gravel

WHY DOES DUKE POWER PREFER NUCLEAR POWER?

Duke Power's rate base, on which it is guaranteed a "fair" rate of return by law is made up of the total cost of plant and equipment of its generating facilities. Nuclear plants are the most capital intensive generating facilities to build, and therefore they are the best for Duke Power Company.

Duke Power receives significant government help in promoting nuclear power. The cost of fuel enrichment is largely borne by the federal government; waste disposal almost certainly will be also.

N. C. Law now requires utility customers to pay interest and dividends on money borrowed to build plants before the plants are generating electricity through the Construction Work In Progress Law (CWIP).



ALTERNATIVES

IS NUCLEAR POWER NECESSARY?

There are better ways to produce energy that are safe, clean, and cost effective.

Passive solar designs are cost-effective by using the structure of the building for heating. Active solar systems, using manufactured collectors, are efficient when used for hot tap water or space heating. Western Electric Company is now operating a solar facility in New Mexico that produces electricity.

Wind generated electricity shows great promise economically. A windmill near Boone will provide electricity for 300-500 homes.

Plants, such as trees, provide a regenerative energy system. The wood stove is making many cost-conscious people smile.

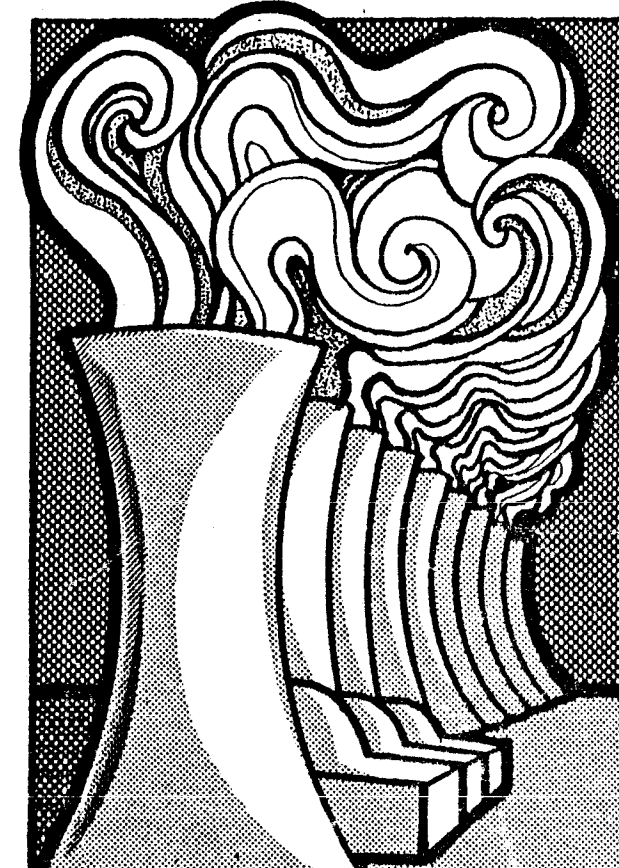
Co-generation of electricity and heat from steam is cost-effective to industry. R. J. Reynolds, Inc. has done this for many years in Winston-Salem.

Conservation - A kilowatt saved, is a kilowatt earned. We can use energy more efficiently and maintain our standard of living. Sweden, Switzerland, and West Germany have a standard of living similar to ours and they use only 60% per capita of the energy that we use.

Some ways that save electricity include insulating houses, sealing air leaks in homes, orienting new buildings to the sun, using waste industrial steam to generate electricity, improving industrial processes, and building more efficient appliances.

"Saving energy is synonymous with saving dollars ..."

Former Federal Energy Administrator
Frank Zarb



HOW WILL
PERKINS
NUCLEAR
POWER PLANT
AFFECT YOU?

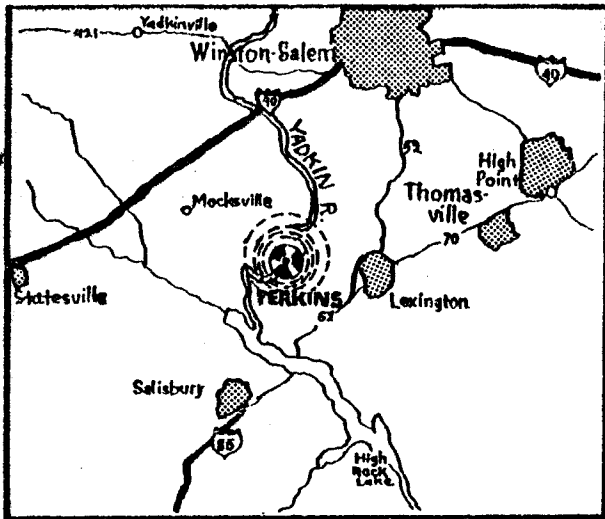
Duke Power Company is applying for a license to build the Perkins Nuclear Power Plant near our community. We as citizens in the affected area can influence this decision. This pamphlet is an introduction concerning the safety, need, cost, and alternatives to this proposed nuclear plant.

WHO: Duke Power Company

WHAT: Perkins Nuclear Power Plant would be among the largest nuclear plants in the world, consisting of 3 reactors and 9 cooling towers.

WHERE: On the Yadkin River, 17 miles from Winston Salem, 10 miles from Lexington, 10 miles from Mocksville.

WHEN: Duke Power has obtained all the necessary licenses except the construction license, which they are actively seeking from the Nuclear Regulatory Commission.



"To the village square we must carry the facts of atomic energy. From there must come America's voice."

-Dr. Albert Einstein

SAFETY/HEALTH

PERKINS AND RADIATION HAZARD

In normal operation Perkins would release small levels of radioactive elements into the air and water.

Our area has frequent temperature inversions, and pollutants accumulate in the stagnant air, making radioactive gasses more concentrated than usual.

Radioactive elements in water become concentrated during the food chain; for example, through grass to cows, and then to humans in milk or beef. There is now documented evidence of strontium-90 in human breast milk.

THERE IS NO SAFE LEVEL OF RADIATION

Most scientists say there is no such thing as a "permissible" or safe dose of radiation. Any increase in local radioactivity can bring an increase in leukemia, cancer, genetic damage, and mutation.

RADIATION AND HEALTH HAZARDS

Radiation is different from other health hazards. It is undetectable by normal senses; we cannot see, hear, touch, or smell it.

Radiation does not dissipate from our bodies; it accumulates throughout our lifetimes. The immediate effects of low-level radiation take 12-40 years to show up in the form of leukemia and cancer, and longer for genetic mutations.

THREE MILE ISLAND

Three Mile Island is the most serious nuclear accident thus far. The nuclear core was exposed for a time, threatening a catastrophic accident.

Governor Richard Thornburgh of Pennsylvania has said that he would have ordered more extensive evacuation if he had known during the critical days of the accident what he learned later.

The costs of the accident will be high and are likely to be borne by the customers.

NUCLEAR PLANT SAFETY

The government has estimated that a single major nuclear power accident could kill 45,000 people, injure 100,000 more, damage from 17 to 231 billion dollars worth of property and contaminate several thousand square miles. (Atomic Energy Comm.)

Three Mile Island has made government and utility assurances that a serious accident is next to impossible, sound extremely hollow.

At an N.R.C. hearing in Mocksville, a Duke engineer admitted that "all equipment is subject to failure" and "leaks are not uncommon."

We must choose to stop nuclear power; our children won't have the option.

ENVIRONMENT/WASTES

WATER:

The cooling towers of the Perkins plant would evaporate up to 70 million gallons of water per day from the Yadkin River. This would reduce the amount of water downstream, and as acknowledged by Duke Power Co. itself, would prohibit any significant municipal or industrial development below Perkins in the future.

TOXICITY:

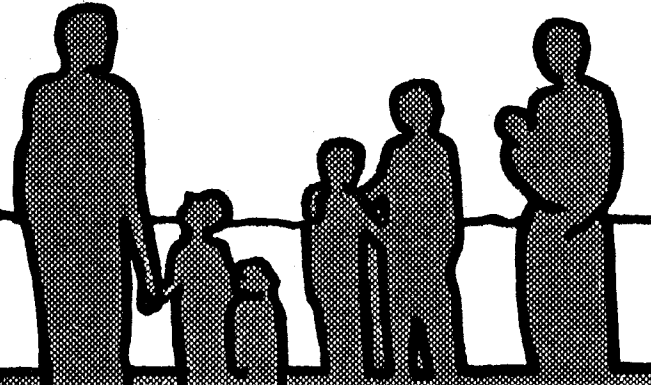
A nuclear plant's radioactive wastes include some of the most toxic substances known, such as plutonium, strontium, and cesium. Only one-millionth of an ounce of plutonium, inhaled, can cause cancer. Perkins would produce 1200 lbs. of plutonium each year. Only 10-20 lbs. is required to make an atomic bomb.

STORAGE:

Radioactive wastes can only be stored, they cannot be "disposed of," because many of these wastes have a dangerous lifespan of thousands of years. Yet the utility companies continue to produce enormous quantities of these deadly materials. After 30 years of government and utility promises, there is no permanent solution to this serious problem of wastes. And, because on-site "temporary" storage is filling up, the utilities are transporting their wastes to other "temporary" storage facilities, further endangering communities through which they travel.

WHAT ARE WE LEAVING OUR CHILDREN AND GRANDCHILDREN?

Nuclear energy is unique in that it burdens future generations with the cost of managing the radioactive wastes created today. Plutonium remains deadly for 250,000 years.



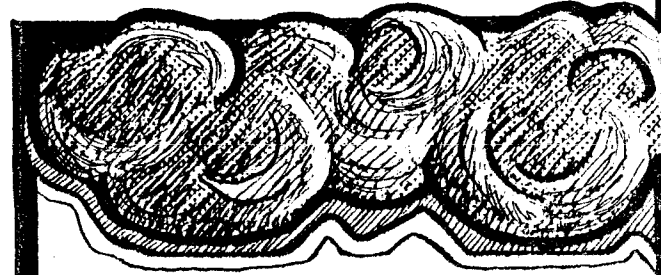
"And what moral right have we to burden our progeny with this poisonous legacy?"

-Dr. Helen Caldicott
Pediatrician - Boston Children's
Medical Center

DO WE REALLY NEED PERKIN'S ELECTRICITY?

New plants are built to handle peak load demand. Growth in peak load demand has declined dramatically since the early 1970's. Still Duke Power is forecasting a rate of peak load growth twice that of the two most recent years: 4.2% vs. 2%.

Inaccurate peak load forecasts result in unused plants. Duke Power now has a capacity reserve of 30%. Most analysts agree that a 15% reserve is sufficient. Customers pay for the excess capacity.



"Once a bright hope shared by all mankind, myself included, the rash proliferation of atomic power plants has become one of the ugliest clouds overhanging America."

-David Lilienthal
First Chairman of the
Atomic Energy Comm.

"... the country must recognize that it now appears imprudent to move forward with a rapidly expanding nuclear power plant construction program. The risks of doing so are altogether too great."

-Excerpt from statement by 2000
scientists under auspices Union of
Concerned Scientists - 1975

How long shall the land mourn and the herbs of every field wither, for the wickedness of them that dwell therein? The beasts are destroyed and the birds because they said, he shall not see what we do.

They have made it desolate and being desolate it mourneth unto me; the whole land is made desolate, because no man takes it to his heart.

-Jeremiah 12: 4-11