
High Voltage Hazards

Barefoot children playing in dewy farm fields complain about hundreds of bee sting-like pricks on their heels. An elderly widow in a rural area ten miles from the nearest town discovers, on a snowy evening, that she is unable to receive anything other than moving streaks across her television screen. While fastening a tarp over his hay-filled truck during a blizzard, a farmer feels a shock that he compares with touching the live ends of a car's spark plugs. Farm workers complain of shortness of breath, irritation of the throat and nasal passages, and the presence of a strange chemical smell, especially pungent in the morning and early evening.

Such incidents could become important bits of evidence in a struggle over electric power hazards taking shape in New York. The New York State Public Service Commission is expected to hold hearings shortly on whether two private power companies should be permitted to operate power lines carrying extremely high voltages. Although more than 1,250 miles of the high voltage lines are already in operation in the South and Midwest, many experts fear the lines may cause side effects that endanger the health of those living nearby.

These lines carry 765 kilovolts (kv)—about twice the standard voltage—through bare, uninsulated wires that often pass forty or fifty feet above rural roads and farms. The wires are mounted on twelve-story high steel towers. The proliferation of the towers and lines across the nation's farmlands and woods has received little attention. Although the lines stretch for hundreds of miles through counties, even states, there is currently almost no meaningful Federal regulation. The Federal Power Commission only has authority over hydroelectric projects. The Environmental Protection Agency's jurisdiction extends only to Federally licensed or financed projects. The safety requirements specified in the National Electric Safety Code, drafted years ago by the National Bureau of Standards, are primarily concerned with physical contact between people and the lines.

Regulation is somewhat better on the state level, but is often inadequate. Power industry representatives dominate many state commissions. Furthermore, state commission power is often restricted. Thirteen state commissions, for example, lack authority to require certification before a power transmission line can be constructed.

The weakness of Federal and state regulation has localized fights between people and power companies, and such squabbles have received limited attention in the national media. Louise Young, a physicist who lost a fight against the high voltage lines in her home state of Ohio, has written, lectured, and worked tirelessly to encourage people in other states to fight the new lines. Her book, *Power Over People*, and her personal efforts

helped alert New York state officials to the potential dangers of the 765 kv lines.

Late last fall, the New York State Department of Environmental Conservation, with three other state agencies, asked the Public Service Commission to hold full-scale hearings on two applications for 765 kv lines. The Department expressed concern about several health, safety, and environmental issues raised by the lines: noise pollution, ozone production, electrostatic and shock effects, and electromagnetic fields. Since then, a state inter-departmental task force has been collecting scientific research and testimony from experts and those who live near the power lines in preparation for the hearings. The group has found that "expert" opinion and individual experiences with the lines vary widely.

A member of the task force reports that farmers living near active lines in Ohio have complained vigorously about noise generated by the lines and interference with television reception. In Ohio, the local power company received so many protests about noise—described by one farmer as "bacon frying in grease"—that the voltage was finally lowered. In Virginia, on the other hand, there were many complaints about noise and television interference when the lines were first activated, but American Electric Power Co. (AEP) officials report there have been no complaints recently.

Experience with electric shock varies widely: Louise Young reports severe problems and incidents of electric shock in her area; Virginia state officials claim there are few problems. There is little scientific guidance on another problem—ozone produced by the lines. While it is known that ozone has a strong, unpleasant odor and probably causes more injury to vegetation than any other air pollution, a New York state technical report finds that "present experimental data are insufficient to establish reliable analytical predictions" of ozone emitted by the lines and its probable effects.

The New York task force, which visited farm areas near or under the high voltage lines in the Midwest, found that crops appeared to be growing normally; dairy farmers reported no change in their animals' reproduction rate. Opponents of the lines, however, note that the lines have been in operation for less than five years. Everyone seems to agree that the most pressing concern involves questions over the long-term biological effects of the electrostatic and electromagnetic fields. There is little reliable research in this area, and what does exist is contradictory.

The AEP, in conjunction with Johns Hopkins University, conducted a ten-year study of ten transmission line workers, and found no significant ill effects from frequent exposure to the lines. However, studies made in the Soviet Union have generated considerable concern in this country. One such study of 250 Soviet workers employed at substations on lines operating at 500 kv reported that headaches, general discomfort, and reduced sexual potency resulted from the work. The studies concluded that long-term exposure to intense electric fields without protective measures

results in "shattering the dynamic state of the central nervous system, heart and blood vessel system, and in changing blood structure."

Only two states other than New York have formally considered the 765 kv line issue. The Virginia State Corporation, a kind of public service commission, recently approved the lines, finding them consistent with Virginia's health and safety standards. After long hearings, Lancaster County in Michigan refused to grant power companies permission to operate the lines, citing lack of their need and its concern over the health and safety implications of high voltage line transmission.

In the short run, the New York State hearings may present the most thorough and scientific statement to date of the potential problems and dangers of high voltage lines to human health and the environment. Meanwhile, there have been recent indications that Federal interest in the power line controversy is growing. The White House Office of Telecommunications Policy, charged with assessing the long-term biological effects of electromagnetic radiation, has taken an interest in the power line debate. The OTP anticipates that either the new Nuclear Power Commission or, more probably, the new Energy Research and Development Administration will examine the issues involved once these agencies begin to function.

JUDITH MILLER

(Judith Miller is The Progressive's Washington correspondent.)

Britain Shows the Way

Great Britain has been a toothless tiger in world politics since the sun set on her empire. In domestic affairs, too, she has traveled a rocky road. Today a beleaguered Britain is reeling under an avalanche of social, political, and economic crises, not the least of which is the bitter, bloody conflict in Northern Ireland.

The recent terror bombings by the IRA in London and other English cities have generated understandable outrage and fear. An insistent clamor for the death penalty for captured terrorists led Parliament into a historic debate over the restoration of capital punishment, which was abolished nine years ago. In view of the multiplicity of crises it confronted, the House of Commons might have taken the easy road of responding to the hysteria which prompted the demand for the return to the death penalty. But the Commons refused to be stampeded. By the margin of 369 to 217, a vote which criss-crossed party lines, the Commons rejected a return to capital punishment.

The closing argument against restoration of the death penalty was made by Home Secretary Roy Jenkins who, after making the moral case against state-

inflicted death, quoted the Commissioner of Police for London and six of his senior officers as saying that they were opposed to capital punishment because it was ineffective in combatting crime.

The United States, which has borrowed so copiously from Britain in building our system of law, should once again turn to the British experience to combat the current drive to restore capital punishment. Since 1972, when the U.S. Supreme Court invalidated capital punishment in cases before it, many state legislatures have been moving to draft new legislation that might meet the objections of the Court. But the conclusion of the British Parliament that capital punishment is no deterrent to crime is decisively reinforced by American experience. The restoration of the death penalty would be a major step back toward barbarism. Our lawmakers can distinguish themselves by heeding the counsel of "the Mother of Parliaments."

Trouble in Paradise

St. Croix, Virgin Islands

License plates in the United States Virgin Islands proudly boast that these islands are "America's Paradise"—long a dubious claim. Yet the claim has persisted, partly because some islanders, especially more recent arrivals, felt there was something special about the three specks of Caribbean real estate—St. Thomas, St. Croix, St. John—that have been U.S. territory since 1917.

In fact, as tourism boomed and new business and industry moved in, there seemed some validity to the paradise claim. These were trouble-free havens for those wanting to escape the problems of mainland America. This was especially true on St. Croix, the largest of the three islands, which has a certain Old World charm to it. Never mind that black Crucians did not regard their island as a paradise; there were more important considerations. Tourism was growing yearly and tourism means business—business mainly for whites. Many visitors from the mainland bought homes or condominiums on St. Croix. Who could doubt the paradise claim with all that warm tropical sun and the blue-green waters of the Caribbean?

But all that has changed. In a short two years, the anxieties of the modern world have caught up with the Virgin Islands and especially with St. Croix. A series of murders, at first thought to be interrelated and racially oriented, has alarmed St. Croix. The first two incidents would have been enough to do that. The first was the slaying of eight persons in September 1972, at the posh Fountain Valley Golf Course; the second involved the deaths of two more and the wounding of a third two months later at a popular bar in Christiansted, the capital of St. Croix. Nine of the victims were white, and the accused killers were black.

Since then there have been other ugly incidents—