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tries may find an advantage in cutting production, he adds. "We're a major oil company; we know something about exploration and production." The United States imports 8 million barrels of oil a day, and Denning says, "We're not going to produce enough to make up for that, even with decontrol" of prices. SRC II should be supported in the name of national defense, he concludes, "so that you can bring one of these things to Wall Street and get private financing."

The SRC I project, whose major sponsor is the Air Products and Chemicals Inc., is in a similar but less precarious fix. Edward Donley, the board chairman of Air Products, says he has been in "almost daily" communication with Stockman over the last 2 weeks, and that he sees no evidence of long-term energy planning at the OMB. The approach, Donley found, is to cut everything that is cuttable, and then to let Congress and members of the Administration argue for exceptions in the national interest. An exception should be granted for SRC I, Donley argues. Shifting the solvent coal projects from the DOE budget to the synfuels corporation would be no help, he points out, because SRC I and II do not meet the corporation's requirement of at least 40 percent private financing. The SFC law would have to be amended to allow the SFC to support noncommercial, largely public-financed ventures like his own SRC I.

Representative Wright's letter to the President also included a special plea to rescue three synfuels projects from the ax. These include two oil shale projects in Colorado, one proposed by an Exxonbacked corporation called Tosco, and the other by Union Oil. The third is a coal-to-liquids project called Tennessee Synfuels, backed by Koppers Co. Inc., Cities Service, and the Continental Group, Inc. The three were declared "winners" in early January by pre-Reagan DOE officials in the first round of competition for federal aid under the interim synfuels program. That is the program Stockman wants to abolish. "These projects should not be held back by a false sense of economy;" the Wright letter says, for "our country desperately needs to move ahead in deploying this technology." As Wright's aide said, "We are concerned that several months of earnest effort on the part of private industry applicants and the DOE not be wasted." But Reagan's staff may want to pick its own winners.

The outcome of all this pulling and hauling can hardly be predicted. Nor is the situation helped by the fact that the still undefined purposes of the synfuels corporation must be laid out by a still unnominated chairman. It is clear, however, that the Black Book proposals should be regarded as tentative in the extreme. —ELIOT MARSHALL

Compensation for Victims of Vaccines

Government report, prompted by swine flu lawsuits, suggests solutions to compensate injured

During mass immunization campaigns, a few individuals are inevitably injured as a result of severe reactions to a standard vaccine. These children and adults, who may suffer lifelong disability, are left to recoup damages through expensive, protracted lawsuits because no federal program to compensate them now exists. The outlines of such a program have now been sketched out in a recent report by the Office of Technology Assessment (OTA), which discusses options for Congress to consider if and when legislators decide to act on the problem.

"Society has the obligation to minimize the consequences of injury" when a person is harmed rather than protected during a national immunization program, according to the technical memorandum, "Compensation for Vaccine-Related Injuries."

The court system is neither swift nor equitable to the victims, says Lawrence Miike, a physician and lawyer who was staff director for the report. "The legal system is a terrible way to go. It takes years to get a settlement and only a few who push their cases get anything." For the few who do reach a court settlment, "it's a jackpot situation. The court system doesn't award anything to most of the injured."

The risk of serious injury from vaccines is quite small, especially from the vaccines against childhood diseases. (D–W.Va.) when he was chairman of the House Committee on Interstate and Foreign Commerce. Staggers, who retired after the past session of Congress, took an interest in the issue of compensation because of an earlier OTA report that reviewed federal immunization policies,

"The legal system is a terrible way to go. It takes years to get a settlement and only a few who push their cases get anything," says the report's staff director.

Nevertheless, when reactions do occur they can be severe. In immunizations against diphtheria, the chance of convulsions is one in 5000. For taking the live poliovirus vaccine, the risk of paralysis is one in 4 million. The reasons that some persons suffer reactions are not clear although foreign proteins found in a standard preparation may be responsible in some cases.

The agency report was requested by former Representative Harley Staggers

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including the swine flu vaccine program and the lawsuits that followed. The need for a systematic way of awarding damages to vaccine victims has also been highlighted by three lawsuits that were settled before the swine flu immunization program in 1976.

In all three court decisions, the manufacturers were held responsible for damages, but not because of any wrongdoing in producing the vaccine. They were charged with failing to warn the person

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receiving the vaccine of its inherent risks. The decision blurred the prior distinction that the drug company fulfilled "its duty to warn" by notifying only the person administering the vaccine, not the person taking it. The manufacturers were also upset over another point that arose from one of the three cases, *Reyes* vs *Wyeth*, settled in 1974. The court said that the manufacturer should assume the risk of loss, not the victim, because the financial burden "is a foreseeable cost of doing business and should be passed on to the public in the form of price increases to his customer."

The drug companies complain that it is too difficult to foresee the number of lawsuits and then calculate a surcharge. "There is no predictability in the expense of suits to follow," says William Freilich, counsel for Merck Sharp & Dohme.

With no guarantees against heavy financial losses, drug companies were later reluctant to produce swine flu vaccine. Their insurers refused to provide coverage for liability. But the vaccines were finally manufactured in quantity after the federal government agreed to handle any liability suits that did not involve negligence by the drug companies. Even so, the problems of lengthy lawsuits and "jackpot" settlements still persist. The largest settlement on record, \$1.2 million, was recently awarded to a Minnesota woman who suffered permanent damage to her hands, legs, and stomach muscles from the swine flu vaccine.

California and several foreign countries have already established compensation programs which cover at the minimum the medical expenses of children who have been vaccinated under mandatory programs, the OTA report says. Manufacturers would like all vaccines to be covered by a government compensation program, but that "raises the question why there should be a distinction between vaccines and all other drugs," the report says. The final answer may fall somewhere in between.

OTA officials Miike and David Banta, the health program manager, contend that a compensation program should cover only those children harmed by mandatory vaccines. It should not cover persons who volunteer for inoculations such as the swine flu vaccine. Without a compensation program, "what we're saying is 'tough luck' to the child who becomes ill after taking a vaccine [that is required]," Banta says. "With the flu vaccine, a person is making a choice."

Others say that a case can be made for the eligibility of people who choose to be

Top Health Posts Filled

The Reagan Administration has filled two top health posts within the Department of Health and Human Services with physicians, who both strongly oppose federal funding of abortions.

The job of assistant secretary of health went to Edward N. Brandt, Jr., the vice chancellor of health science at the University of Texas. E. Everett Koop, chief surgeon at Children's Hospital in Philadelphia, was chosen deputy assistant secretary of health.

HHS Secretary Richard S. Schweiker plans to reorganize the two positions, raising Brandt to a new post of undersecretary of health and Koop to the job of surgeon general and assistant secretary of health. The plan, which needs approval by Congress, would consolidate health affairs under Brandt.

Brandt, 47, holds a doctorate in biostatistics and was formerly dean of the medical school and the graduate school at Texas. He has been mainly interested in health manpower issues, especially the distribution of physicians.

Until recently, the leading candidate for Brandt's new job was Steven Beering, dean of the University of Indiana School of Medicine. Beering was apparently the choice of the Reagan transition team, but not that of Schweiker, according to health lobbyists. Beering says he and Schweiker "simply were not on the same wavelength," differing not on policy or goals but the way in which to carry them out. Beering also favors a more liberal approach to abortion policy than Schweiker.

Koop, 64, however, has been a leader in several anti-abortion groups, including the National Right to Life—a perfect match for Schweiker, a former senator from Pennsylvania.—MARJORIE SUN

vaccinated when national efforts are made to prevent diseases. "Even though it's voluntary, it still is in the interest of public health and the government," says Robert Levine, chairman of Yale University's institutional review board and a professor of medicine. He has a broad interest in compensation, especially in the area of compensation of research subjects.

Minor temporary injuries should not be covered by the federal government, the OTA report says. The measure of injury could be defined by the medical expenses or the degree of disability or both.

A compensation program would at least take care of medical costs, but it could go much farther in its coverage. California places a ceiling of \$25,000 for medical expenses. Japan, however, awards an injured child money for medical expenses, an annuity for persons caring for the youngster, a disability pension, and a funeral grant, the report says. The compensation program in Denmark resembles in some ways the compensation policies in California and Japan. When disability is calculated to be 5 to 50 percent, a lump sum is given; for greater injury, an annuity is paid.

The funds for compensation payments would most likely come from general tax

revenues, the report says. Money from a surcharge on vaccines, as was suggested by the court in the Reyes decision, would be ineffective and not relevant to the victim or the government, the report said. A surcharge will not lower the incidence of injury. And since the government is the major buyer of vaccines, it makes little sense to tack on any extra cost, according to the report.

If the government pushed for another mass immunization program today, compensation would still be modeled on the basis of swine flu experience. If the injured can prove that the government failed to warn them of the risks, then they might win compensation. It is an adversarial stance because the vaccinated individual "has assumed the risk of injury and is therefore not entitled to compensation," the report says. But the government has gone ahead and compensated victims who developed Guillain-Barré symptoms after receiving the swine flu vaccine. This action may make the government appear as though it is "acting in an arbitrary manner if it chooses to compensate some individuals ... and not others," the report said. The Department of Health and Human Services, which coordinates vaccine programs, "has not issued a clear statement that explains its criteria.'

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The OTA report was not completed until late in the past session of Congress and therefore legislation, which Miike and others had hoped for, was not proposed. Now that Staggers has retired, the future of the issue is uncertain.

Some pharmaceutical companies are still reluctant to put more money into research and development of vaccines because liability may still rest on their shoulders without a clear-cut federal policy. Freilich says that, although the liability issue has not been the sole factor for the drop in vaccine manufacturing, it has had a "numbing effect."

Levine of Yale says that leaving the drug companies open to liability damages related to mass immunization is risky for public health. "It's in the country's best interest to encourage drug companies to make good vaccines. If it comes to getting them to stay in business, the government should pick up the tab."

The strongest argument for the program is rooted in the concern for the injured. Frederick C. Robbins, president of the Institute of Medicine, who has had a continuing interest in immunization, says that developing a compensation program is "a reasonable thing to do, if only for the reasons of social justice." —MARJORIE SUN

Disagreeing to Agree

The deliberations and contentions of the Panel on Science and Technology mirror the paradox of our troubled society.

-From the preface of the report of the science and technology panel of the President's Commission for a National Agenda for the Eighties.

Presidential commissions no longer follow the comfortable patterns of the past. Dissent and discord are increasingly common in commission deliberations, and the tensions are reflected in the reports.

An example is the report of one of nine panels of the President's Commission for a National Agenda for the Eighties, that on science and technology. In the preface,



J. Fred Bucy, Jr. Taking exception

the chairman of the panel, Glenn E. Watts, president of the Communications Workers of America, made clear that the panel members could not agree on the major issues. The report also carried a free-swinging dissenting statement by one of the five panel members, J. Fred Bucy, Jr., president of Texas Instruments.

Because of the November election, the commission had the bad luck to be reporting to a President no longer able to implement its recommendations, but the science panel's discussion is worth noting because it focuses on a watershed issue in science policy for the 1980's.

As panel chairman Watts put it in the preface, "The most significant split among panel members seems to center on the relationship between science and technology and social life. Some placed heavy emphasis on the need...to involve the public in the management of science and technology in order to meet the public's perceived needs. Others are most concerned about what they perceive to be the negative impact of public regulation on the future progress of science and technology."

In his dissent, Bucy takes issue even with the title of the panel report, *Science and Technology: Promises and Dangers.* "This phrase and the text that follows overemphasize the perceived dangers facing our nation. As a result, it underemphasizes the effort that is necessary to address the major technological needs of the country."

Bucy's preferred alternative? "The proper approach to meeting the technological challenges facing the country is to stress a decentralized, self-correcting structure of decisionmaking. The government has a major role to play in maintaining this type of decentralized environment."

A major theme of the panel report is that technological advance and public understanding of science "are no longer in balance." However, the report does not advocate scientific populism. In fact, the recommendation that is most likely to stir controversy can be interpreted as elitist.

Existing policies that support basic research on a project-byproject basis also may be inadequate to maintain research capabilities at the nation's leading research institutions. Rather than trying to spread resources across as many scientists as possible, the federal government may have to concentrate scarce research funds, supporting the best scientists at a smaller number of institutions, and perhaps moving toward a system of centers of excellence in research.

Bucy rejects the proposal to create centers of excellence because he thinks that it is impossible to choose between first rate and second rate science "by some bureaucratic criteria."

Bucy not only differs on matters of substance but objects sharply to the process followed by the panel in producing the report. He notes that because of various constraints, "The views of commissioners were assessed individually, with an attempt to reach our common statement by incorporating our comments into a draft text circulated by the staff." In this failure to reach agreement by debate, Bucy sees a possibility that "the problem of the panel may well be a microcosm of the problem facing the nation at large."

What has made it difficult to reach consensus? Certainly, the politics of presidential commissions has changed. Now regarded as obligatory is "balance" in membership; that is, major constituencies must be represented. With frankness fashionable and many commission members unwilling to risk offending their constituencies, such balance virtually guarantees disharmony.—JOHN WALSH