going to DENR, its laboratories and 5,800 personnel going to ERDA, and its regulatory function retained by a five-member commission renamed the Nuclear Energy Commission.

Most of the Interior Department's fossil fuels R&D would go to ERDA while DENR would inherit Interior's National Park Service, Bureau of Land Management, Bureau of Sport Fisheries and Wildlife and the Agriculture Department's Forest Service. Because of their "historical association with natural resources," the Bureau of Indian Affairs and the Office of Territories would also go to DENR, as would the Geological Survey and the National Oceanic and Atmospheric Administration (NOAA).

The President asked all Americans to cut back on their energy demands by voluntarily joining car pools, reducing their speed on the highway and turning down their air-conditioners. The goal, he said, would be a 5 percent reduction in energy demand, and he ordered Federal agencies to lead the way by reducing their own energy consumption by 7 percent. The Department of Defense has already embarked on a 10 percent reduction.

Reaction to the President's new energy message was more favorable than to the one in April. In a backhanded compliment, the Washington Post said John Love would bring "a strength and background to the White House staff that, in the past, it has generally lacked." The Wall Street Journal said the new budget proposals "dramatically reverse" the President's earlier assertions that no more research funding was required.

How effective the President's fiscal New Year's resolutions become largely depends on Love, who will immediately have to decide what must be done about the continuing oil-shortage crisis and somehow coordinate his view with that of the Oil Policy Committee.

Should the "voluntary" system of energy conservation and gasoline allocations fail, it may be Love who will have to make the unpleasant decision of instituting a new gas tax or rationing, now reportedly under discussion. The President gave new emphasis to geothermal power but he left solar energy and other "exotic"—though potentially promising—sources unmentioned, either in his message or the new research allotments. John Love's office must also finally decide how these sources can be explored. □

The deformed children of alcoholic mothers

Merry old England was especially merry in the 18th century after Queen Anne gave gin distilling and drinking a royal impetus. But the high soon wore off as social critics such as William Hogarth began to point out the disastrous effects of drunkenness on the population. Finally, in the 1800's, when it became evident to some that gin-drinking mothers sometimes gave birth to dwarfed children, strict licensing and prohibitive taxation had to be used to slow down gin consumption.

Even though human experiences and animal experiments have long suggested a possible link between maternal alcoholism and deformed children, a clear-cut association has never been made. Now, researchers at the University of Washington School of Medicine in Seattle feel they have sufficient data to establish that maternal alcoholism can cause serious prenatal and postnatal developmental deficiencies. Kenneth L. Jones, David W. Smith, Christy N. Ulleland and Ann Pytkowicz Streissguth describe in THE LANCET eight deformed children born to mothers who were chronic alcoholics during pregnancy. Facial, limb and heart defects were common to the children. One child, for instance, had an undeveloped and asymmetric jaw, was unable to extend her elbows and had dislocated hips. Her fourth and fifth fingers overlapped, she had a heart murmur, her ears and labia majora were not fully developed and she had a benign tumor on her right thigh. All the children were less than average in size at birth and none showed any catch-up growth even after admission to a hospital.

All the mothers were chronic alcoholics who drank excessively throughout pregnancy. Two had been hospitalized for delerium tremens and one gave birth while in an alcoholic stupor.

The researchers conclude that the deformities were due to alcoholism (or to toxic agents in the alcohol). None of the mothers was known to be addicted to any other drug. The deformities were not similar to those seen in the children of undernourished mothers. None of the children were related and they represented three different ethnic groups and a variety of social backgrounds. Finally, chromosome tests on three of the children were normal.

This is a clear-cut cause-and-effect relationship, says Smith. He further suggests that perhaps as many as 20 percent of chronic alcoholic mothers may give birth to deformed children. Smith has no data for this figure but, he says, the information is being collected.

A new test for a rare disorder

It is not uncommon for people who suffer from the rare genetic disorder, acute intermittent porphyria (AIP), to be wrongly diagnosed. Its symptoms—nausea, severe abdominal pains, psychosis, paralysis or convulsions—are common to many other disorders. To make matters worse, symptoms of AIP can be brought on by many commonly used drugs. Thus, latent or misdiagnosed carriers of AIP risk having severe and sometimes fatal attacks set off by such drugs as sleeping pills, tranquilizers, oral contraceptives and possibly alcohol.

Now, thanks to researchers in Texas and California, a laboratory test has been developed to confirm the diagnosis of AIP as well as detect latent carriers, thus permitting doctors to warn carriers against taking potentially dangerous drugs.

The test was developed by Urs Meyer, assistant professor of medicine, and his colleagues at the University of California, San Francisco, School of Medicine, and by a team of researchers at the University of Texas Southwestern Medical School in Dallas.

AIP is a hereditary defect that affects the way the body makes heme, the red pigment in blood cells. The new test can detect in a small blood sample abnormal enzyme activity that is characteristic of defective heme production.

AIP is a dominant disorder, that is, a child has a 50 percent chance of getting it if only one parent has the gene. Not only can these latent carriers develop the disorder but they can pass it to their offspring. It is estimated by the National Genetics Foundation that about one American in 100,000 suffers from AIP, though this figure may be higher due to difficulty of diagnosis.

The gene is present in carriers from conception, yet it rarely manifests itself before puberty, and is most common during the reproductive years. The rate of incidence is the same in women as in men but the symptoms appear more frequently in women, probably because of hormonal influences.

Shortly after its development, the AIP carrier test was given to 52 Midwesterners, all relatives of Mrs. Kay Wagner Hughes of Columbia, Ohio.

Mrs. Hughes did not know she carried the genes until she went on a low carbohydrate diet that precipitated the symptoms. Mrs. Hughes saw 13 doctors, was hospitized and given barbiturates and tranquilizers that worsened her condition before correct diagnosis was made. When she was taken off her drugs, she completely recovered.