5 years or longer. The contracts would be with producing entities such as PEMEX in Mexico, ARAMCO in Saudi Arabia, and BP in the United Kingdom's North Sea province.

William Robinson of the Defense Fuels Supply Center is by no means confident that such producers will be willing to enter into long-term arrangements. The present tendency of producers, he says, is to sell on the spot market or to keep the oil for their own refinery needs. But Robinson, like Hystad, thinks an effort should be made to obtain such contracts, for they would offer substantial advantages.

One advantage is that the reserve would have an assured supply of crude, with the price being based primarily on the going OPEC rate at the time of delivery rather than at the much higher prices that would exist on the spot market under tight market conditions. Buying oil under long-term arrangements might offer the further advantage of putting less pressure on the world price than would repeated entries into the market to make spot purchases or to buy oil on short-term contracts.

Oil could be diverted to refineries even in times of noncritical shortages and thus used to increase supplies of gasoline and heating oil, but only at the risk of allowing the filling of the reserve to stretch out interminably.

In the event half of U.S. oil imports were cut off, severe shortages would be felt within 2 months, and—even with rationing, fuel switching, and other emergency measures—the present 90-million barrel reserve would be exhausted less than 1 month after the drawdown began. According to Edward N. Krapels, a petroleum economist and consultant to DOE, other industrial nations such as Japan, France, and Germany now have emergency reserves that would last about 45 days.

As of this writing, President Carter has not mentioned the strategic reserve in any of the energy policy statements he has made since his 10 days of brainstorming at Camp David in July. This does not mean the President now regards the reserve as unimportant; that would be a remarkable switch, for only last year it was at his initiative that the ultimate goal for total oil in storage was raised from 750 million barrels to a billion barrels (although no planning to that end has ever been done). But it does clearly mean that more politically pressing things are on his mind.

In sum, the future of the reserve program looks bad. The best chance that the reserve will be filled may lie in the gradual increase in the price of gasoline and other petroleum products resulting from the rising cost of imported oil and the phased decontrol of domestic crude oil prices.

If the price of gasoline went to \$1.30 a gallon, say, it might help the reserve. But this is not likely soon to happen in the absence of the decontrol of gasoline prices, an option which President Carter has firmly rejected.—LUTHER J. CARTER

Thermidor at OTA

While the Administration was making high-level chops and changes, the congressional Office of Technology Assessment (OTA) had its own internal shake out. Jack Gibbons, who has been OTA director since 1 June, on 3 July fired 23 staff people, including several of the senior technology assessors. Gibbons has presented this as an economy move forced by the Congress. Skeptics abound among both fired and retained, which is why the firings have created a stir in the Washington science community.

Gibbons has explained that, unexpectedly, a shortfall of \$1.8 million turned up in OTA's current budget of \$11 million. To economize, Gibbons deferred \$1.3 million in contracts to the next fiscal year, which begins 1 October; and another \$500,000 was cut out of existing programs.

Included among those released is Joseph Coates, who headed OTA's exploratory office and was one of the initial proponents of the technology assessment concept. Coates was also the moving force behind the OTA-generated list of 50 research priorities, which caused much ill will in Congress last year. The office and its staff of five, including Coates, was eliminated.

Three lower-level staff have been dropped from OTA's office of administration, which is responsible for keeping tabs on the budget; one from the health and life sciences division; and 11 from the division of science, information, and transportation (mostly transportation). Three of the five persons in the press office were also terminated. The total amounts to 18 percent of OTA's staff of 130.

Gibbons says he released those that were least important to tasks specifically assigned by Congress. "I have no commitment to any individual here," he says, "but I do have a commitment to Congress to run OTA fairly and effectively. Coates' office did not have that much to do with what the Congress wants."

Skeptics on the OTA staff—past and present—say that most of those fired had the misfortune to cross swords at one time or another with Skip Johns, who directs OTA's energy division. No one in Johns' division was fired. Gibbons, before becoming director of OTA, worked with Johns on energy advisory panels. "Johns has gotten Gibbons to purge his enemies," is the way several of the wounded put it. Gibbons denies it. The candidates for firing came from all three division directors, he says, and the choices were made by him.

The skeptics also point out that a few weeks before the discovery of the OTA budget shortfall, Tom McGurn, the top OTA budget officer, was asking everyone to hurry up and spend more money. OTA had a surplus, he said, and would have to start some new studies swiftly or it would be left in the bureaucratically embarrassing circumstance of actually receiving more money than it used. Gibbons remembers the surplus projected then as \$500,000; others remember a figure of \$2 million. Whichever, it evaporated quickly as the initial weeks of Gibbons' tenure sped by.

Gibbons has told his congressional overseers that the discrepancy was caused by inattention to OTA's overall budget projections during the period just before he arrived—inattention particularly to spending projections. As it now stands, he says, "we have totally mortgaged next year's program with the contract deferrals from this year, unless we get a budget increase from Congress." In a typical maneuver, the House has already cut OTA's budget by \$1.6 million; Gibbons is now pressing the Senate to assume its traditional role and boost it back up to the current level, or an even higher one, so that a compromise can be reached right in the middle. He is understood to have said he expects to do some hiring if the budget cuts are restored.—R. JEFFREY SMITH

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