

Business Briefs

Energy

California utility plan found to violate law

The Federal Energy Regulatory Commission (FERC) ruled on Feb. 22 that the California Public Utilities Commission (PUC) violated federal law in ruling to compel electric utilities to purchase power at rates above their "avoided cost," that is, if the power were purchased at a cheaper rate from outside or generated by the utility itself, *Mining Week* reported in late February. The decision sets back a plan which would destroy the electric grid system, by forcing utilities to buy power from uneconomical, non-utility "renewable" resource producers.

FERC stated that the PUC had not considered all potential sources of electric capacity. In their petition to intervene, Western Fuels and the National Coal Association pointed out the availability of coal-fired capacity at 3¢ per kilowatt-hour. The PUC order had artificially inflated this to as high as 6.6¢ per kilowatt-hour, by adding in superfluous "environmental costs," increasing the rate consumers would have to pay, so that more expensive "renewables" would be "competitive." The PUC had limited the bidding on new capacity to what are called "qualifying facilities," meaning non-utility companies.

Space

NASA plans unmanned Moon mission in 1997

The U.S. National Aeronautics and Space Administration is planning to send a Lunar Prospector to the Moon in 1997, according to NASA Associate Administrator for Space Science Wesley Huntress. The mission is designed to map the chemical composition of the surface and examine gravitational and magnetic fields.

The \$59 million mission is part of the Discovery Program series, which requires that the spacecraft cost less than \$150 million in 1992 dollars. NASA Administrator Dan Goldin

hopes to reduce average spacecraft cost from \$590 million to \$200 million and average development time from eight to four years, and to increase the number of missions per year from two to eight. How much science research can be conducted in these "faster, better, cheaper" spacecraft remains to be seen, but it is hoped that more frequent missions will balance the fact that each is less capable than the Viking, Voyager, Mars Observer, and Galileo spacecraft.

Other Discovery missions under way include the Mars Pathfinder, which will launch in November 1996 and land on Mars in July 1997, and the Near Earth Asteroid Rendezvous, which will orbit the asteroid Eros in January 1999. NASA has requested \$103.8 million for the Discovery Program in the FY 96 budget, compared to \$129 million for FY 95, but it hopes to add a second series of small planetary spacecraft in its New Millennium Spacecraft project.

Russia

Space agency faces severe problems

Russian Space Agency head Yuri Koptev outlined the severe problems faced by the Russian space program, and reported on a meeting with government officials to try to keep the civilian space effort alive, in a press conference in Moscow on March 2. Koptev said that the agency was given only a token amount of funds in January, and "in February we did not get a kopek."

The question of debts to fragile, newly privatized firms "has not been resolved either," Koptev said. "The Russian Space Agency still owes about 230 billion rubles for the work done last year because we received only 78% of the budget appropriations" earmarked for the agency, he said. This has created a situation where of the 42 enterprises that have been handed over to the agency, "according to the effective regulations, each of them can be classified as bankrupt. But if we take a look at the accounts payable and receivable and take account of the debts of the state to those enterprises, naturally, the economic position of each of those enterprises would look substan-

tially different."

"It is impossible [for the space program] to live on the basis of month-to-month financing," Koptev stressed, "the more so when this has to be pleaded for." He stated that "the government meeting today has shown that there is some understanding. Nobody denied the need to pursue these activities. But so far there is no sense that space activities should be a national priority, and there have been no practical steps to back it up financially and by creating favorable [economic] conditions" for industry.

On Feb. 23, Koptev testified before the Duma (parliament), and warned that the Russian space program could collapse within a matter of months unless there is a substantial increase in funding. Yuri Semenov, chief of the manned space program run by RKK Energia, stated that the current crew will be evacuated from the Mir space station because there is not enough money for supplies. Koptev and Semenov both said that the scheduled March 14 Soyuz rendezvous with Mir, in which U.S. astronaut Norm Thagard is to participate, is now in jeopardy.

Health

Hope rises for vaccine against tuberculosis

Researchers at the University of California at Los Angeles School of Medicine, led by Marcus A. Horowitz, say they have successfully tested a vaccine for tuberculosis on animals, and that human trials may be only two years away.

TB researchers have believed that a vaccine would not work that did not use live, weakened bacteria. But even weakened bacteria (in the BCG vaccine) are a threat to individuals, such as AIDS patients, whose immune systems are depressed. Vaccination with live bacteria also makes it impossible to survey populations for recent infections with the patch test, since these vaccinations produce false positives.

Instead of using live organisms, Horowitz isolated individual proteins from the BCG bacteria and used them as a vaccine, an approach that has been used successfully in the fight against other diseases, such as hepatitis B.

Briefly

● **GAMBLING** at the casino is safer than speculating in derivatives, the German daily *Die Welt* wrote in an editorial on Feb. 28 on the collapse of Barings bank. The daily *Frankfurter Rundschau* editorialized, "The financial revolution is eating its own children."

● **J.P. MORGAN** and Co.'s credit rating has been downgraded by Standard and Poors from AAA to AA, because of Morgan's increasing reliance on derivatives and proprietary trading, the Feb. 28 *Wall Street Journal* reported. The triple-A rating is particularly important for derivatives dealers.

● **ZAMBIA** Consolidated Copper Mines, whose nationalization in 1974 symbolized Zambia's independence, will be sold, possibly to the South African giant Anglo-American, from whom it was originally taken, as part of an economic reform package. Some 90% of Zambia's export earnings come from the mines; unions had already agreed to a 10,000-man cut in the 55,000-man workforce.

● **THE RUSSIAN** parliament has excluded tourists from an obligation to have an AIDS test before entering the country. Only foreigners who stay longer than three months must prove that they are HIV-negative. Diplomatic personnel are not affected by the law, which is expected to take effect in August 1995.

● **BRITISH** municipalities are fleeing out of all merchant banks after the Barings collapse, according to informed reports. "This, if it escalates, could erode the capital base of the entire British merchant banking system," one source said.

● **THE AFGHAN** Red Crescent Society is fighting a tuberculosis epidemic that affects up to 80% of families in rural areas. One official said that poverty, poor diet, and a shortage of medicine are contributing to the high rate. In 1994 alone, 720,000 patients were treated, twice the total for 1993.

Real Estate

Crisis in France is intensifying

French banks have accumulated about FF 200 billion in real estate loans, related to real estate, and 90% of them are bad loans, the French daily *Le Figaro* reported on March 1.

Over 1986-91, the amount of credit to real estate promoters increased from FF 18 billion to FF 175 billion. Since 1991, French banks and insurance companies have suffered from real estate losses worth \$19 billion, and they are now facing another \$12-13 billion in losses. According to the French weekly *L'Événement du Jeudi*, the bad real estate loans on the books of Crédit Lyonnais are far beyond the roughly \$6.25 billion acknowledged so far. The bad loans of other banks include BNP (FF 32 billion), Paribas (FF 26 billion), Suez (FF 25 billion), Crédit Agricole (FF 24 billion), Société Générale (FF 23 billion), and Comptoir des Entrepreneurs (FF 11 billion).

On Feb. 28, the "flagship French financial services and investment group," Suez, reported losses for 1994 of FF 4.7 billion. Suez shares were suspended from trading on the Paris stock exchange.

Economic Policy

Crash is coming in bits and pieces, says Leuschel

"Get Ready, the Crash Is Coming in Bits and Pieces," was the headline of a front-page article in the Italian Catholic daily *Avvenire* on Feb. 28, an interview with Roland Leuschel, head of Belgian Banque Bruxelles Lambert.

"The Barings bank is the financial heart of the British Empire. A battleship is sunk. Is the crash coming?" the paper asked. Leuschel responded, "It is not like in 1929, it is rather a salami crash. First was the [Germany's] Metallgesellschaft, which crashed because of derivatives speculation. Then Orange County, [California], for the same reason, then Mexico." Leuschel estimated that \$3.5 trillion has been lost in the bond market so far. Those who

lost were "all those who borrowed short-term money and bought long-term."

"It is like a depth charge: First the small fish, then the big ones come up dead to the surface," Leuschel said. "We are starting to see the dead big fish." When asked if Warburg is next, he said, "If I knew, I would be making a lot of money. Remember, all crashes come suddenly." It is a bubble like many in history, and "bubbles grow and collapse." The main cause of the bubble is the U.S. Federal Reserve's "easy money" policy of the last year, which has allowed speculators to borrow money at almost zero cost. When asked if it is like 1929, when people borrowed money to play the stock market, Leuschel said, "It is, but it is you who has said that."

Medicine

First artificial kidney developed

U.S. physician David Hume has developed the first artificial kidney, *SAD* news service reported on March 2. It combines the functioning of living tissue and technology. If it works in humans, it will help millions of people who are suffering with severe dysfunction of the kidneys, many of whom must have dialysis treatment several times a week, and whose only hope has been for a donor kidney.

According to the *SAD* report, Hume was able to breed cells of the so-called "proximal tubule" in his laboratory, which play a crucial role in the kidney. His artificial kidney consists of many tiny tubules, which the blood floats through, and which are covered with cells, which also cover the inner walls of human blood vessels in order to prevent clotting. This first filter is linked to a second system, which contains millions of kidney cells.

In the coming six months, Hume will test further materials for his filter tubules, and then he wants to start tests on humans, first outside the body in combination with a normal dialysis machine. If this experiment goes well, he wants his "kidney" to take over entirely the work of the dialysis machine, and if this functions, the bio-artificial organ will be implanted into a volunteer.