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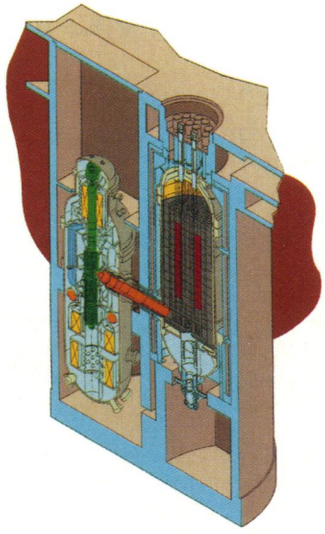

GENERAL ATOMICS

Coup de grâce? Gas-cooled reactor had few supporters.

Congress Pulls Plug on Nuclear Reactor

Citizens groups have blasted it, scientific reviewers have panned it, and earlier this month, Congress may have dealt a death blow to a Department of Energy (DOE) nuclear reactor project that had lasted 30 years.

The Gas Turbine Modular Helium Reactor (GTMHR), a reactor type given $900 million in federal funds since the 1960s, was to use ceramic-coated fuel pellets cooled with helium gas. The fuel and other features made the reactor meltdown-proof, according to its developer, San Diego–based General Atomics. But while "it's an interesting concept," says physicist John Ahearne, director of Sigma Xi scientific society, the GTMHR "did not offer any real advantages" over more fully developed reactors. Ahearne, who served on recent National Academy of Sciences panels that gave the GTMHR low marks, also questions claims that the reactor would top others for disposing of weapons plutonium.

DOE has soured on the reactor as well. Terry Lash, director of DOE nuclear energy research, asked Congress to kill the project this year, noting that it didn't appeal to utilities and would require at least $1 billion in federal funds over the next decade.

The reactor was still kicking in June in the House, however, where Representative John Myers (R–IN) pushed through $20 million in an appropriations committee. But that earmark was cut on the House floor, and on 1 August the Senate approved just $7.5 million to shut down the project. "It's a pity," says Princeton nuclear policy expert Frank Von Hippel, "but [the nuclear industry] has been on life support for so many years. It probably would have gone on indefinitely."

NASA Ducks Search for Celestial Threats

The National Aeronautics and Space Administration (NASA) has declined, for the second time, to follow a blueprint for what an earlier report called "insurance for our planet against the ultimate catastrophe"—an impact by a mountain-size object from outer space. In a report NASA quietly sent to Congress last week, an expert panel noted that improvements in telescopes in the past 3 years have lowered the cost of finding 90% of the most threatening objects from $300 million to $60 million. But "given NASA's severely limited resources," says Associate Administrator for Legislative Affairs Jeff Lawrence, the agency is still not interested.

NASA's reluctance "isn't particularly surprising," observes planetary scientist Clark Chapman of the Planetary Science Institute in Tucson, Arizona, as pursuing civilization-menacing asteroids and comets could be "a weird direction" for an agency squeezed by congressional budget-cutting. Yet it was Congress that in 1991 and 1994 requested a plan and cost estimates for a 10-year telescopic search for the estimated 1800 undiscovered objects larger than 1 kilometer that could hit Earth. The chance of a catastrophic hit during an average American's life-span is about 1 in 1000.

In the report, a panel chaired by Eugene Shoemaker of Lowell Observatory concludes that advances in sensors since 1991 would reduce needs for new telescopes, making the cost $59 million over 15 years. NASA now spends about $1 million per year on the search, at which rate the 90% goal won't be reached until the middle of the next century.

Major EMF Report Warns of Health Risks

After spending nearly a decade reviewing the literature on electromagnetic fields (EMFs), a panel of the National Council on Radiation Protection and Measurements (NCRP) has produced a draft report concluding that some health effects linked to EMFs—such as cancer and immune deficiencies—appear real and warrant steps to reduce EMF exposure.

Epidemiologists have long struggled over conflicting data on the health effects of EMFs, generated by powerlines and other sources. Biologists have failed to pinpoint a convincing mechanism of action. Nevertheless, the 800-page report, from a panel chaired by Ross Adey of the Veterans Administration Hospital in Loma Linda, California, concluded that "there is an implication that a significant proportion of the world's population may be subjected to a low level of risk."

Although it could not identify a safe threshold of EMF exposure, the panel advised "due diligence" in reducing risk. For instance, the report recommends that new housing not be built under high-voltage transmission lines and that new day-care centers, schools, and playgrounds "should not be built where ambient 60 [hertz] magnetic fields exceed 0.2 [microtesla]."

If the report's conclusions are endorsed by NCRP's scientific council, "they would have tremendous weight with regulatory bodies," says a federal official. That's because the NCRP—a congressionally mandated advisory panel—is seen as "extremely conservative" and therefore unlikely to endorse phantom risks, says Louis Slesin, editor of *Microwave News*, a New York City–based newsletter that reported on the draft this week. NCRP President Charles Meinhold says the report "has no standing" until the NCRP vetting is complete early next year.

New UC Chief?

A search committee has tapped psychologist Richard Atkinson, chancellor of the University of California, San Diego (UCSD), and former president of the American Association for the Advancement of Science, to head the $10 billion, nine-campus UC system. Atkinson, who headed the National Science Foundation for 5 years before coming to UCSD in 1980, would replace President Jack Peltason, who steps down on 1 October. The UC Board of Regents planned to vote on Atkinson's nomination on 18 August.

Dutch Debate Tests on Evolution

The free-thinking Netherlands is abuzz over an old-fashioned question: whether evolution theory should be included on national biology exams for secondary schools. The education ministry has kept evolution off the exams since they were expanded in 1991; officials prefer to allow leeway in how much schools teach about the topic. But now scientific societies are protesting the gap in biology education, the media is spotlighting the debate, and parliament may take up the issue.

Because of pressure from some Protestants in schools and government, the education ministry has ignored advice from an outside committee to include evolution theory on state exams. Although evolution is part of the school curriculum, many believe "the subject will only get a meager treatment" if it remains off the exams, says Kees Koopman, director of the Netherlands Institute for Biology (NIBI). In recent months NIBI and the Royal Netherlands Academy of Arts and Sciences have sent letters to the ministry asking it to reconsider adding questions on evolution.

The evolution question may be discussed in parliament in September. Lawmakers could appoint a commission to look into the matter, says Joos Joosse, a zoologist at the Free University at Amsterdam and a member of the academy, but he worries that they may "not think the subject is important enough to create a political conflict."