

Report from Rome by Lorenza Maria Saini

University reopens to nuclear debate

In Italy's anti-nuclear referendum, "witch-doctors won over the physicians, astrologers over astronomers."

The Schiller Institute has picked up the "hot potato" of nuclear energy in Italy, by organizing on June 5 a debate on "Nuclear Energy, High-Speed Trains, and Telecommunications: Infrastructure for a Free Europe," at the Engineering Faculty of La Sapienza University here. After a long hiatus, experts in the various fields of nuclear energy and telecommunications were able to talk to students about the many hopes and projects which, despite the greenie fad, are still pursued by Italy's scientific and technical elite.

The speakers included spokesmen for the national electrical utility ENEL, the national alternative energy agency ENEA, Alenia Space Co., the Assotrasporti transport firm, and the Engineering Faculty's Transportation Institute. They addressed an audience of students and representatives of top national companies.

The forum was introduced by Dr. Giuseppe Filippini from the Schiller Institute, who discussed the economic development potentials created with the collapse of the Berlin Wall. After outlining broadly the main infrastructure projects which these changes could allow, which offer interesting chances for intervention by Western European countries, Filippini underlined the need to build throughout the continent, in the medium term, at least 250 nuclear plants—an undertaking which is feasible thanks to new reactor technologies which are more advanced both technically and in terms of safety.

Professor Federighi, a member of the ENEA management, directed his

remarks especially to the youth, and expounded very sensitively some reflections which future scientists and technicians have to take into account, beyond their personal aspirations. At the end of World War II, for example, for him as for many of his university classmates, there were no doubts about their role—they had to rebuild the country. Now, he said, that clarity of purpose is gone, and we have even come, with the exit of nuclear power, to a further impoverishment, so to speak: An entire stratum of technicians and engineers, not just nuclear, but linked to the so-called armature of the plants, no longer exists. In the clash between the village witch-doctor and the physician, between the astrologer and the astronomer, the 1987 referendum against nuclear power took Italy back to the old beliefs, he charged.

Professor Federighi explained how today the energy problem is global and requires an international approach in the general framework of development, of resources, of overcoming imbalances, and of safeguarding the environment. After analyzing the limits of fossil fuels and their impact on the environment, Federighi pointed to the new nuclear technologies as the way to limit gaseous emissions into the atmosphere, in order to satisfy the growing energy needs which will derive both from the development of the East European countries and of the Third World.

Engineer Paolo Fornaciari, the ENEL planner who signed the Unified National Project which was blocked

by the 1987 anti-nuclear referendum, traced an extremely alarmist picture of the national energy situation. Installed electrical capacity is no longer capable of meeting the national demand, and thus Italy is no longer able to contract the prices at which it buys imported electrical power from a position of strength. And ironically, the electricity produced abroad and imported into Italy is the equivalent of six units of the nuclear plant at Caorso, one of those shut down in the aftermath of the referendum. From this standpoint one cannot even say that Italy has refused to use electricity produced from nuclear sources.

Dr. Giovanni Pellegrineschi, senior scientific consultant to Alenia Space Co.—after an interesting aside on the history of satellites launched into space, conceived as a new operational space, like the water of the oceans when Spain and England were maritime powers—spoke about new communications technologies. Direct satellite broadcast technologies are very useful to reach areas where communications are backward or downright lacking, because they allow "leapfrogging" over the need to build traditional infrastructure. These potentials are bogged down by a legislative and bureaucratic complex which cannot keep pace with the potentials the new techniques afford.

Dr. Catella, president of Assotrasporti, decried a discrepancy between statements of principle and the practical effects produced when these are translated into law. He suggested that one way to rebalance the global transportation system is to develop intermediary modes between the various systems, even the already existing one of internal navigation. Among initiatives to cut current costs, he announced a conference of experts to stop the veritable epidemic of cargo theft from auto-trains.