THE Natural Resources Defense Council (NRDC), which has long been a prominent thorn in the flesh of the nuclear industry, has now launched a drive for stricter radiation standards in the United States. In petitions filed during the past two weeks with the Nuclear Regulatory Commission (NRC) and the Environmental Protection Agency, NRDC staff scientists Arthur Tamplin and Thomas Cochran argue that workers exposed to radiation at the present maximum permissible levels run an unacceptable risk of dying from cancer and of having children with serious genetic defects. Consequently, they argue that the permitted exposure levels, at least for younger workers, should be reduced by about a factor of 10.

On the basis of several reports and studies published in the past few years (particularly a 1969 report by the International Commission on Radiological Protection and a report on the biological effects of ionising radiation (BEIR) published in 1972 by the National Academy of Sciences), Tamplin and Cochran have calculated that between 2 and 6% of all radiation workers exposed to whole-body radiation at maximum permissible levels for their working lives could die from radiation-induced cancer.

Though they point out that few radiation workers are in fact exposed to the maximum permissible levels of radiation, Cochran and Tamplin suggest that such a risk is "excessive" and that the standard is an "inappropriate guideline" for the nuclear industry.

Similarly, the petition contains calculations suggesting that workers in the nuclear industry who are exposed to maximum permitted levels of whole-body radiation would stand between a 1 in 10 and 1 in 300 chance of having children with serious radiation-induced genetic defects.

The present maximum allowable whole-body dose of radiation is 5 rem a year, and no more than 3 rem in one calendar quarter. Cochran and Tamplin argue that the standard should be replaced by a requirement that workers under the age of 45 should receive no more than 0.5 rem a year to the whole body, and not more than 0.3 a quarter.

Older workers would be allowed higher radiation doses—up to a maximum of 3 rem a quarter, however.

A two-tier exposure level, Cochran and Tamplin argue, would offer the greatest protection to those most susceptible to radiation injury, such as pregnant or fertile women, while not at the same time applying the strictest standards to other parts of the workforce. "Hence, the proposed changes

Washington seen

by Colin Norman

should not place a large burden on the industry", they argue.

If the NRDC's proposals were adopted, the greatest impact would be felt in fuel-reprocessing and plutonium-fabricating plants, but no such facilities are yet in commercial operation. The immediate effect of the petition, however, is likely to be to reopen the long standing debate about the consequences of long term exposure to low levels of ionising radiation.

● Following recent revelations that the Central Intelligence Agency (CIA) and the Department of Defense have been carrying out ethically bankrupt research on people—such as feeding psychotropic drugs to soldiers without their knowledge or consent—Senator Edward Kennedy has proposed a bill to establish a Presidential commission to oversee all federally supported clinical studies.

The bill would essentially transform a panel which was established by Congress last year to draft regulations governing human experimentation supported by the Department of Health, Education and Welfare, into a permanent body with broad responsibilities. Called the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, the panel has already issued recommendations for research on foetuses, and it is now trying to draft guidelines for research on prisoners, children and the mentally ill. It is expected to complete its work early next year.

Kennedy said last week that the abuses perpetrated by the CIA and the Department of Defense "underscore

the need to expand the national commission's jurisdiction, and to expand it now". His bill would add the Secretary of Defense, the Secretary of Health, Education and Welfare, the Director of the CIA, four Senators and four Representatives to the panel's 11 existing members. It would also establish the commission as a permanent advisory body with responsibility to make public recommendations on clinical studies sponsored by all government departments.

Since Kennedy is the chairman of the Senate Health subcommittee, to which the bill was referred, and since it is also backed by two senior republicans on the subcommittee—Jacob Javits and Richard Schweiker—it stands a very good chance of being passed by the Senate.

● The latest in a long line of statements by prominent scientists warning about the dangers of nuclear power was made public with considerable fanfare last week. It is particularly noteworthy for two reasons. First, it resulted from a study sponsored by the National Council of Churches—a body with considerable influence. And, second, it was supported by a galaxy of scientific stars, including 14 Nobel Prizewinners.

Called "The Plutonium Economy: A Statement of Concern", it warned about the dangers of allowing plutonium to be extracted from spent reactor fuel rods and recycled as a nuclear fuel, and it spoke out against the development of the fast breeder reactor. "We believe that the proposed 'plutonium economy' is morally indefensible and technically objectionable", the statement said.

Drafted by a committee chaired by Rene Dubos and Margaret Mead, and supported by a lengthy background report on the dangers of plutonium, the statement was requested by the National Council of Churches last year. After remarking on the dangers of using plutonium, the report concludes that "all who believe that technology should serve human values should join in opposing the plutonium economy and in seeking to divert into more constructive channels the vast resources being devoted to nuclear power."

council's role in the setting up of the recently formed European Space Agency (ESA). As long ago as 1960 the council was calling for one European agency to handle the building of both launchers and satellites, and the amalgamation of ELDO and ESRO last May was regarded by most delegates as the results of persistent lobbying by the council. The feeling of achievement was celebrated last week by the assembly when it unanimously

agreed a draft recommendation that member states of ESA meet at least once a year at ministerial level. The feeling is that ministerial meetings will provide the agency with an impetus which might otherwise be lacking.

American confidence in the agency has been demonstrated by a request for the ESA to cooperate in NASA's post-Apollo programme: a space laboratory is to be built by European industry under the guidance of the agency.

Apart from scientific and technological benefits, a fully independent ESA could also provide industry and employment—there is even a whisper that the agency ought to become outwardly commercial and seek to establish new markets within the Third World. One delegate, perhaps mindful of the approach of 1984, even expressed relief that with a fully independent space industry Europe will be in the running for worldwide communications control.