the proposal to delay automobile emission standards. Ford has proposed that strict emission controls which were to come into effect in 1976 should be put off until 1981, in exchange for which the automobile manufacturers have promised to improve by 40% the average gasoline consumption of new American cars by 1980. But Senator Edmund S. Muskie, who heads a key subcommittee which will consider the proposals, has already denounced it because it "trades public health for fuel economy".

Muskie and a number of other observers have pointed out that fuel consumption of 1975 car models was nearly 14% better than that of 1974 models, in spite of the fact that Detroit had to meet strict pollution control standards for the later models. They therefore point out that automobile manufacturers can meet the fuel economy goal without sacrificing environmental controls. Furthermore, a committee of the National Academy of Sciences reported last year that it could see no technical reason for relaxing the standards, and that the cost of meeting them is outweighed by the benefits.

The plans for expediting the nuclear licensing programme may also draw fire from Congress because there is a small but growing number of nuclear sceptics on Capitol Hill, and the Joint Committee on Atomic Energy, which would normally shepherd such a bill through the Congress, has been considerably weakened by the retirement and defeat of nearly a third of its members. To help head off opposition to the nuclear programme, however, Ford has proposed increasing the budget for research on nuclear safety, waste management and safeguards by $41 million next year.

A more fundamental question raised by Ford's proposals is whether the United States has the capacity to achieve even the redefined goal of energy independence. In the past few years, according to the Administration's own figures, electricity utility companies have scrapped or postponed 60% of their plans to build nuclear power plants and 30% of those for non-nuclear plants, and this at a time when Nixon was urging all-out expansion to meet the 1980 independence deadline.

The reason was lack of capital for investment, and so Ford last week proposed a number of measures to attract investment capital to the utilities, and to allow electricity rates to increase steeply. That is a prospect which many legislators will not relish explaining to their constituents when they come up for re-election in 1976.

Furthermore, a committee of the National Academy of Engineering produced a study last year which simply tallied all the measures that would have to be taken to meet the goal of zero oil imports by 1985, the total of which was so staggering that the committee concluded that it is highly unlikely that the goal could be achieved. Although the redefined goal will be easier to meet, there is nevertheless considerable doubt that the capacity can be established in time.

For the long term, Ford has reiterated the Administration's commitment to energy research and development, and has indicated that nuclear power is expected to play a central role in the energy mix towards the end of the century, by which time he hopes that the United States will be so flush with energy that it can export some to the rest of the world. Although he was not very specific about which technologies will get preferential treatment, a background statement distributed with Ford's message at least indicates that the breeder reactor may have slipped a little in the list of priorities. It used to be the number one energy programme in the Nixon Administration, and although the statement indicates that some means must be found to eke out uranium resources, it says that "the breeder reactor is only one such supply source" under consideration. □

THE Administration's plans for promoting the development of nuclear power in the United States were sharply rapped from both sides last week. Two groups of scientists, each replete with Nobel Prizewinners, traded statements in Washington urging, on the one hand, a greater commitment to nuclear power for meeting energy demands and, on the other, criticising the Administration for putting too many of its eggs in one basket.

Although such sentiments are far from new, seldom have they been placed in starker contrast.

The pro-nuclear statement, which was largely the work of the physicist Hans Bethe, was released at a press conference the day after Ford unveiled his energy plans. Signed by 34 eminent scientists, including eleven Nobel Prizewinners, the statement began: "We, as scientists and citizens of the United States, believe that the Republic is in the most serious situation since World War II", and it goes on to deplore the fact that long range energy plans are emerging too slowly.

The statement urged much greater commitment to the use of coal and nuclear power. "We can see no reasonable alternative to an increased use of nuclear power to satisfy our energy needs", it states, while "coal is irreplaceable as the basis of new synthetic fuels to replace oil and natural gas". The statement also insists that although conservation is desirable, large cuts in consumption can be made only at the expense of jobs.

Asked why he drafted the statement, Bethe said that he had "felt for some years that nuclear energy was not getting enough emphasis", although he said that Ford's energy proposals—which were announced after the statement was written—are a great improvement. Among those who endorsed the statement were William O. Baker, President of Bell Laboratories, Harold Brown, President of CalTech, Joshua Lederberg of Stanford University, Franklin Long of Cornell University, Edward Purcell of Harvard University, Glenn Seaborg, former chairman of the US Atomic Energy Commission (AEC), Frederick Seitz, President of Rockefeller University, Edward Teller of Lawrence Livermore Laboratory, and Richard Wilson of Harvard University.

But critics of nuclear power have also taken exception to the Administration's nuclear plans, though from a different standpoint. On the day that Bethe released his statement, Ralph Nader sent a letter to President Ford urging him to "personally review the implications of dependence on nuclear power", citing "the unique and substantial hazards associated with the massive amounts of radioactive materials that would inevitably be created by a full scale nuclear power program". The letter was endorsed by eight eminent scientists.

Nader's letter notes that nuclear accidents could endanger "our children and their children, for generations" and states that early enthusiasm for nuclear power has "been steadily eroded as the problems of catastrophic accidents, long-term waste disposal, and the specific hazards of plutonium have been more fully appreciated". In contrast to which, Bethe's statement says that nuclear critics "lack perspective as to the feasibility of non-nuclear power sources and the gravity of the fuel crisis", and expresses "confidence that technical ingenuity and care in operation can continue to improve the safety in all phases of the nuclear power program".

Although neither statement will have much impact on the Administration's plans, they do at least testify to the wide divergence of opinion within the scientific community on nuclear safety. And a heated exchange at the press conference between the chairman, Ralph Lapp, and Daniel Ford, a spokesman for a group which has played a leading role in opposition to nuclear power, confirmed that those opinions are very firmly held.