Friends of the Earth, 9 Poland Street, London W1V 3DG : Briefing Document Autumn/Winter 1975

ENERGY

Britain does not have an energy policy. It has, instead, a long history of energy decisions, taken apparently in isolation, unconnected, incoherent, often inconsistent and not infrequently contradictory. Even the evidence by the Department of Energy to the Royal Commission on Environmental Pollution, the most complete public summary of the basis of British energy decisions in 1975, is explicitly denied the status of a policy statement. Nonetheless, by piecing together the various indications, it is possible to see where our decision-makers are taking us. After a brief flirtation with North Sea oil, we and our children and their children shall come to depend for our energy increasingly on electricity, mostly supplied by gigantic nuclear power stations, many of them using fast breeder reactors and fueled by plutonium by the ton.

Friends of the Earth view this prospect without enthusiasm. In mid-1975 we published a tabloid newspaper called *Nuclear Times*, describing the implications of the nuclear option, and our reasons for considering it probably the most expensive, difficult and dangerous direction we could take.

Since the publication of *Nuclear Times* the behaviour of the nuclear electricity establishment has grown even more preposterous. The Electricity Council Annual Report announced an operating profit of £128 million: which was turned into a loss of £258 million by interest charges of £386 million - a consequence of disastrous investment policies dating back more than a decade. The Electricity Council blamed the losses on government restraint of electricity prices, and were paid compensation from public funds. At least, if they had charged the true cost of the electricity, we the public would have seen our money going into their coffers, and known why our electricity bills were so high.

The Central Electricity Generating Board Annual Report indicated that the CEGB now has 58.5 million kilowatts of generating stations, with another 10 million kilowatts expected to come into service within five years. (This assumes that the second nuclear programme, the Advanced Gas-cooled Reactors, do eventually start up and operate, years late and after staggering costs. In the case of Dungeness B, the first and worst - recently set back until 1978 - this assumption is by no means a sure thing.)

Peak demand for electricity in England and Wales has remained virtually stationary for more than three years, at just over 40 million kilowatts. Accordingly, the CEGB has nearly 50% more generating capacity than it now needs, and will soon have even more. In a desperate effort to make its statistics look less extravagant it has now announced plans to shut down 28 stations and parts of another 20 in the next two years, costing thousands of jobs. But in the face of every rational bit of evidence the CEGB is determined to proceed with construction of the Sizewell B nuclear station, four reactors totalling 2.64 million kilowatts. This station is now estimated to cost £1000 million. In Scotland, where the supply-and-demand situation is fully as outrageous as it is in England and Wales, the South of Scotland Electricity Board is likewise determined to press on with its £500 million Torness nuclear station. No possible justification for such investments can be found in the

electricity statistics. Anyone who thinks electricity is expensive now would be well advised to ponder where the £1500 million for these two nuclear stations will come from.

Nuclear power stations, of course, also require a number of complex and expensive services. Fuel must be manufactured; then, after it has been used, it must be dealt with - 'reprocessed'. By this time it is fiercely radioactive, and the radioactive waste from reprocessing must then be stored indefinitely, while awaiting some decision as to what to do with it. Reprocessing and waste storage take place at the Windscale Works of British Nuclear Fuels Limited in Cumbria. Fuel for the AGR and SGHWR programmes is made of uranium oxide, and requires special reprocessing; but BNFL's oxide fuel plant leaked radioactivity in September 1973, and has been shut down since then for major rebuilding. There will not be enough oxide fuel from Britain's own nuclear activities to justify building a plant of 'economic' size; and BNFL is drumming up business all over the world, contracting to import radioactive used fuel from Japan, Sweden and several other countries, as a basis for its expansion plans. BNFL insist that they will return the radioactive waste to its country of origin; but to do so they must build a plant to turn the waste into solid glass, to reduce the hazard of transport. No such plant of larger than laboratory size yet exists. The history of nuclear activities worldwide is littered with examples of nuclear facilities which failed to work as designed, including the $65 million Midwest Fuel Recovery Plant of US General Electric. In any event, by the time BNFL get their oxide plant and their glass plant functioning their storage bays will contain an impressive collection of imported fuel elements, some of which have already been there since 1973.

As well as returning the radioactive waste BNFL also proposes to return the plutonium**.** The contract now being negotiated for 4000 tons of fuel from Japan, will entail recovering and returning to Japan perhaps 40 tons of plutonium - enough for at least 4000 atomic bombs. Japan has not ratified the Non-Proliferation Treaty, by which nations commit themselves not to construct nuclear weapons. Neither has Switzerland, another BNFL customer. An additional problem will be that of transporting plutonium in quantity over such long distances, and guaranteeing that it does not fall into the wrong hands at any stage.

Nonetheless, this seems to be what Britain's energy planners consider to be the best of all possible futures. Friends of the Earth beg to differ; see 'What Friends are For', page 4, *Nuclear Times*. The present standstill in British energy demand gives us all an unparalleled opportunity to decide what sort of future we want; to look seriously at the abundance of ways we can conserve energy and improve efficiency; to develop the energy technologies which have been overlooked because of official obsession with fission; and to make our politicians and planners listen to us**.**