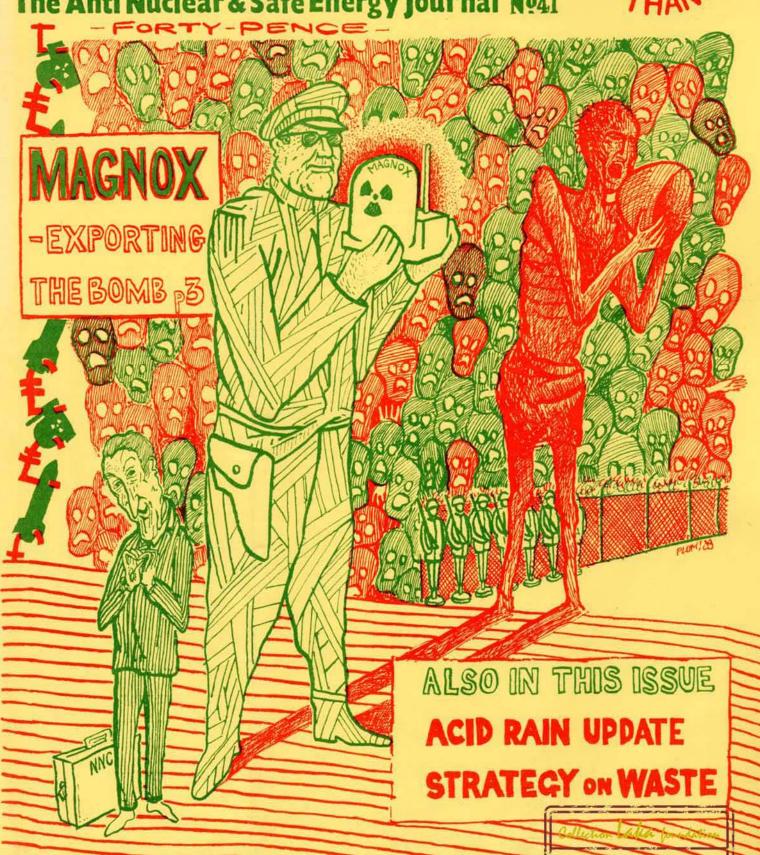
The Anti Nuclear & Safe Energy Journal No41



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We publish this magazine for all Anti-Nuclear, Safe Energy and Disarmament activists throughout Britain. Though based in Scotland we hope to inform people everywhere of the struggles against all nuclear technologies.

SCRAM works closely with other organisations committed to nonviolent direct actions, but we also recognise the need for accurate and comprehensible information.

We hope this magazine helps and we invite contributions - your letters, photos, reports and articles.

SCRAM, Scottish Campaign to Resist the Atomic Menace, Forth St., Edinburgh EH1. (Tel. 031-557-4283).

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Be fruitful and multiply, said the Lord, sell as many nuclear reactors as you can to anyone who will buy them, says the National Nuclear Corporation. On pages 3 and 4 of this issue is yet another story of irresponsible proliferation - the NNC's plugging of Magnox reactors as the ideal export.

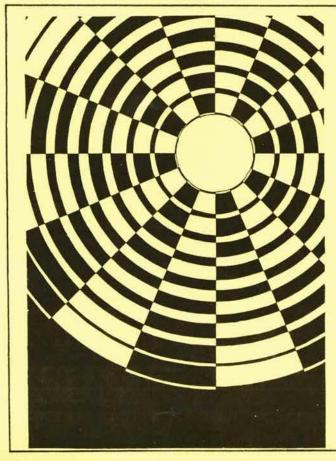
These are especially suited to those wanting to make nuclear weapons without being detected. They may declare they want power, not bombs - but bombs they will eventually go for and get. From the simplest view of national policy, exporting nuclear technology is not just bad, but stupid. Those countries you sell to may soon stop being your allies or neutral and become your enemies - witness Tony Benn's evidence at the Sizewell inquiry (reviews page) where he recounts how Walter Marshall wanted to sell pressurised water reactors to the Shah - Iran was then a Western ally - now calls its old friends the Great Satan.

However even crudely rational foreign policy has died with the rise of nuclear madness. On page 15 is a review of George Kennan's book, The Nuclear Delusion. Kennan, once US ambassador to the Soviet Union, laments the

death of foreign affairs and diplomacy in the age of war by annihilation and the policies of vested interests.

Walter Marshall pops up again enough to make anyone believe in conspiracy theories of politics this time with Sir Ian McGregor of the Coal Board, who together are strenuously ignoring Britain's contribution to the corroding of Europe. On pages 12 & 13 you can read about the Electricity & Coal Board's trying to have us all forget about Acid Rain. An international week of action is taking place from Monday 2nd April to Saturday 7th April.

So, as usual, the issues are diverse, if connected. Lack of union is the curse of the peace and antinuclear movements. On pages 8 and 9, we deal with nuclear waste, which has recently been more prominent in the news. A framework of strategies is outlined. By its nature dumping nuclear waste can arouse local campaigns which are vigorous and well-organised however there is a great need to go further. People can see what is happening around them - they must unite against the whole nuclear thing - industry, proliferation and weapons.





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Decidedly Dodgy

Over the past few years the British nuclear industry has been pushing the "Magnox" reactor as a design ideally suited for export sales. In this article Jos Gallacher, of the Centre for the Study of Arms Control and International Security at Lancaster University, outlines the way that, if successful, such sales would further accelerate the proliferation of nuclear weapons. The prospect of even more countries gaining nuclear weapons is terrifying... these exports must not be allowed.

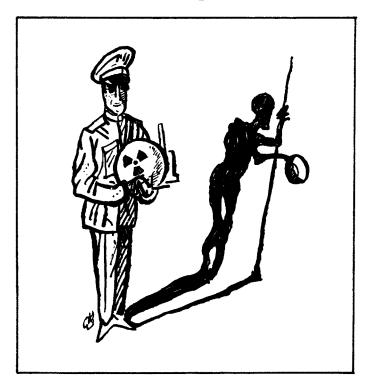
The export of any nuclear technology carries a risk of promoting the proliferation of nuclear weapons. However some technologies carry a greater risk than others. For example technologies for the separation of plutonium from spent fuel - "reprocessing" - are judged so dangerous that the nuclear exporting states have agreed to exclude them from nuclear trade. Similarly exporters generally refuse to sell uranium enrichment technology.

Although no such restrictions are placed on the sale of nuclear power stations, some reactors offer a greater potential for nuclear weapons use than others. The Magnox reactor which Britain is now offering for sale to developing countries is more dangerous in this respect than most of the others on the market.

Britain originally developed the Magnox reactor as part of the post-war military programme. The plutonium production reactors at Chapelcross and Calder Hall were the first Magnox reactors to be built. Even before the first of these had been commissioned the government announced a programme of Magnox power stations which resulted in nine plants being built between 1955 and 1971. Over that time the design evolved as improvements were made and larger reactors were built.

Reactor			
Type:	LWR	Candu	Magnox
Burn up		<u> </u>	
MWD/t	30,000	8,000	4,000
Pu 238 %	2.5	n	n
Pu 239 %	58.5	65	76
Pu 240 %	24	27	20
Pu 241 %	11	6	4
Pu 242 %	4	2	n
Fissile %	69.5	71	80

Even the mature design has features which make it attractive to countries with weapons ambitions. (Including Britain - Hinkley Point "A" was modified slightly to allow it to be used for weapons material production). In particular, the Magnox reactor uses natural uranium, produces good quality plutonium



and has "on-load" refuelling capability.

NATURAL URANIUM

France and India, as well as Britain, chose to build reactors which used natural rather than enriched uranium in order to open up a weapons option.

In its sales literature for the export design of the Magnox reactor the National Nuclear Corporation (NNC) boasts

"... with a natural uranium system there is no need to negotiate an enrichment contract and to accept the political obligations which this sometimes entails."

The "political obligations" referred to are conditions some countries impose to prevent importing states developing nuclear weapons. The United States has long dominated the enriched uranium market and is still the largest single supplier. The U.S. imposes two conditions on the transfer of enriched uranium fuel. Firstly, a country must have all its nuclear activities under international "safeguards" and, secondly, it must agree not to separate plutonium from spent fuel without American consent.

The NNC is encouraging countries to buy Magnox in order to evade these non-proliferation centrols.

PLUTONIUM QUALITY

The plutonium produced in a Magnox reactor is particularly suitable for use in an atom bomb. The "quality" of plutonium depends on the proportion of the "fissile" isotopes - Pu239 and Pu241 - and less of the other isotopes - Pu240 and Pu242. Plutonium extracted from a Magnox reactor in normal operation is of better quality than that from any other reactor (see table).

April/May '84 SCRAM Journal 3

It is possible to make a bomb with any grade of plutonium, however the presence of Pu240 complicates the task of the weapon designer. Without going into technical details the problem is that the higher the proportion of Pu240 the greater the chance of "preignition" which would reduce the yield of the bomb. In effect Pu240 increases the uncertainty about the power of a bomb. Therefore better quality plutonium will be used wherever it is available.

ON-LOAD REFUELING

"Weapons grade" plutonium normally means plutonium which is more than 93% fissile, which is a higher quality than Magnox will usually produce. Quality can be improved by removing some fuel from the reactor early. In most of the world's power stations this means shutting down the reactor, which is expensive and is usually only done when "safeguards" inspectors are present. In a Magnox station, however, fuel is extracted while the reactor is running. Thus it is cheaper to produce weapons grade plutonium in a Magnox reactor and less easy for safeguards to detect.

During the early part of a reactor's life a substantial quantity of fuel containing weapons grade plutonium is discharged. In the case of the design on offer this could amount to enough for 30 bombs in the first two years. It is plutonium of this kind - from the start-up phase of Britain's own civil Magnox stations that Ross Heskith alleges has been used for American nuclear warheads.

ALGERIA, BANGLADESH, CHILE, TURKEY

Another worrying aspect of the NNC's decision to promote the export of Magnox reactors is the shape of the market they are aiming at. At 300 MW the export design is 1/4 of the size of a modern nuclear power station. It is intended for developing countries whose electrical grid is too small to accommodate a full size station.

The potential market is extremely large. According to a recent IAEA study there are only 22 countries with electricity grids large enough to take a 1200 MW power plant while as many as 55 countries could use a 200 - 600 MW station. This report is probably overoptimistic in its assessment. However it illustrates the point that offering to sell small reactors opens up the possibility of the proliferation of nuclear technology to a vast number of states who would otherwise find it difficult to justify commercially.

So far neither the NNC nor any of its competitors have succeeded in selling a small reactor. In recent years Algeria, Bangladesh, Chile and Turkey have all shown some interest in importing a Magnox reactor. Venesuela has considered buying Magnox to raise steam for oil extraction(!) At present only Turkey appears to have maintained its interest.

The new lease of life Britain is attempting to give to the outdated Magnox design carries with it the dangerous threat of providing countries the opportunity of developing a nuclear weapons capability.

Jos Gallacher



A COVERED SPENT FUEL FLASK - STRATFORD STATION - LONDON 7.7.83

Dear SCRAM,

A campaign is now underway at USAF Molesworth, the next site for Cruise Missiles, to seed the base with spring wheat. The wheat is to go to starving refugees in Africa, so it's not just a symbol of what we can do for life instead of for death - it's the real thing! Help is needed from all quarters to make this campaign a success. Easter Sunday is National Planting Day, but there is plenty to do before and after that date!



Sponsor a starving refugee by reserving a plot on the base. Each plot is roughly equivalent to the amount of wheat needed to keep one person from starvation over the winter.

There will be workcamps as well through the summer to follow through on this and other 'Peace Conversion' projects at Molesworth. The first two are from 15th to 22nd April and from 4th to 7th May. For more information about workcamps and wheat plots and how you can help, write or phone the Molesworth 'Wheat to the Starving' Project, 2 North Park Terrace, Bradford BD9 4NG. Tel. (0274) 496646. Donations gratefully accepted.

Thanks for your help.

Tim Wallis, Bradford.

Dear Scram,

I have for a number of years been receiving the "Quarterly Statement of Nuclear Incidents" produced by the Health and Safety Executive, which has been sent free to anyone who requested it. Introduced by a Labour Energy Minister, it has listed incidents at all nuclear installations in the United Kingdom.,

Taking one issue at random (fourth quarter, 1979) there were 11 pages, 12 separate incidents at seven different nuclear installations and finally a report of investigations into earlier incidents.

Now, suddenly, all has changed. The report (first quarter, 1983) has dwindled to only one page and there is one incident reported (at Berkeley nuclear power station). Those wishing to continue to receive the statements are to complete and return a form. Statements will in future only be issued for those quarters in which reportable incidents have occurred.

The new arrangements for reporting incidents are stated to have been announced in Parliament on July 26, 1982, and under these arrangements no incidents were reported to ministers for the third and fourth quarters of 1982.

Although it was tempting to criticise the earlier statements and feel that a lot could be concealed, at least they were something in the way of public accountability, I regard the present developments as sinister and they seem to have come about almost unnoticed.

With ageing equipment, there will surely in reality be more rather than fewer "incidents".

Yours, Jane Buxton, Somerset.

Dear Scram Journal,

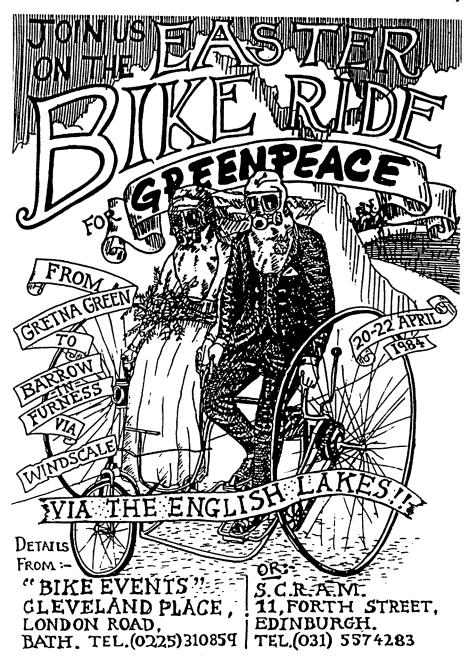
Listening to Radio 1 news this morning on the continuing saga of pit closures and strikes, Mr McGregor was quoted as saying that the present round of closures and unemployment will be sufficient to end overcapacity... What he was not quoted as saying I added myself "until Torness is commissioned". SCRAM will then be able to say as they have for the last 5 years "We told you so".

What good does that do I wonder? If we can see the results for miners of nuclear power why can they not with the paid workers, libraries and researchers we know they have. I urge anti-nuclear inactivists to contact their nearest miner and ask "Why can't miners unite to Stop Nuclear Power Nuclear Waste and Torness".

My second topic is nonviolent direct action. I have attended many meetings

where the question is debated. "Will nonviolent direct action alienate the ordinary working person in the street, I've discovered that not only does it not alienate them, they do it themselves. Recently Lothian Region Transport decided to Ban smoking on the front of the top deck of buses. I was delighted being a non smoker. What do I find on every top deck? Smokers smoking. Perhaps they are illiterate I muse. "Excuse me there is no smoking at the front of the bus now" I say politely, 'It's oright hen" they reply (well that's the politest form of their reply). Anarchy is happening upstairs on the Edinburgh buses. Is it the example anti-nuclear activists have set in the media that is influencing people?

> Yours for peace, Linda Hendry.





ORKNEY ISLE DUMP?

A proposal to sink intermediatelevel nuclear waste in the seabed is being examined by Government ministers. An outline plan has been submitted to the Department of Environment and is due to be considered by the Radioactive Waste Management Advisory Committee this spring.

The plan proposes a purpose built rig working off the coast of Orkney near an area called Stormy Bank, which would drill shafts 10,000 ft. beneath the sea bed and bury canisters containing the waste in a cavity insulated with "chemical-proof" material.

The dumping area of Stormy Bank proposed by the plan as "a suitable disposal site" because the geology there is made up of permo-triassic deposits where waste could be buried with the "complete confidence" that the basement rock would prevent

radio nuclides migrating to the shore.

The rig which would be used is the same as that used in the oil industry. These rigs normally have 4 legs but this special rig will have a fifth leg for extra "stability". The man behind this latest wheeze, Mr. Alex Copson, believes that the plan could allay the anxieties of those who are against dumping underground and under the seabed. His site is distant enough from habitation and he claims his new method should prevent pollution of the water and the coast.

Apparently NIREX, the body set up to develop disposal methods, is studying the plan with great interest.

But who is Mr. Copson trying to kid? Certainly Orcadians will give him the same reception they gave the uranium prospectors a few years ago. Donations and further information from:- The Dunters, Dyke End, South Ronaldsay, Orkney KW15 2TJ.

POLARIS KILLS CAR

The MoD have shown that even whilst being refitted, at Rosyth Dockyard, parts of a Polaris submarine could be used aggressively. The "test" object, a nineton £1 million reactor pressure head, dropped from a lorry, successfully destroyed the "target" car, owned by a surprised

Mr. Stubbs. The car proved not to be contaminated but no doubt this was an oversight and will be rectified in future tests. The operation took place outside the dock-yard safety footwear shop but shoes do not appear to have been targeted.

It is thought that this may lead to the Russians hardening official's cars.

Dunfermline Press, 11.2.84.

SIZEWELL TO LONDON PROTEST VOYAGE

On the 21st February the Campaign Against Sea Dumping's 15 foot "Avon" inflatable boat set off from the Sizewell Public Inquiry at Snape Maltings to start a voyage of over 100 miles by river and sea to the annual meeting of the London Dumping Convention - (L.D.C.) the international body which regulates Sea Dumping. The inflatable carried a replica radioactive Waste Drum identical to those which have been dumped in the N. Atlantic full of low and intermediate level radioactive wastes.

Last year was the first year since 1948 that Britain has not dumped radioactive waste in the N. Atlantic. The 1983 dump was stopped by a Union boycott of the operation. The Unions took this action after the British Government ignored the 2-year ban on sea dumping called for by last year's meeting of the L.D.C.

The purpose of the voyage was to highlight the implications of a P.W.R. programme for the management of radioactive waste. Britain's current policy of "What the eye does not see

the heart will not grieve over", is looking increasingly unacceptable to the international community and obviously irresponsible to all of us who care for the environment. Sea dumping is currently the only way the British nuclear industry has 'dealing' with intermediate-level nuclear waste. So it is clearly wrong to start a P.W.R. Programme while the problem of waste management remains unsolved.

The protest voyage ended in Central London shortly before the close of the L.D.C. meeting on Friday, 24th Feb. The replica drum was delivered to the convention and left there for the attention of the British delegation. The crew of the inflatable had faced delays caused by gales and fog, but were able to complete the voyage with the help of supporters in Aldeburgh, Harwich and Southend. Valuable assistance was given by C.B. enthusiasts such as "Blue Eagle" and "Angel Face" who relayed messages between the inflatable ("Clearwater") and the support vehicle ("White Whale").

from Sizewell Reactions.

The North Speaks

As Hartlepool Nuclear Power Station approaches 10 years behind schedule, Kevin Daws asks the question: will it ever produce electricity? Does AGR stand for Advanced Gas Cooled Reactor or Ancient Gothic Relic?

Hartlepool Nuclear Power Station which was supposed to have been built and functioning by 1974 is still not on stream. In late July, early August 1983 the power station did become operational for 6 days, but managed to do something ahead of schedule for once when it shut itself down on August 5th.

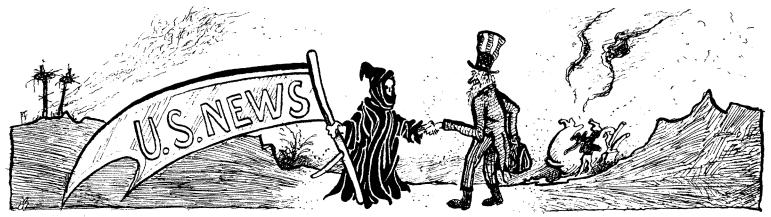
The shut down was claimed to be the result of a trivial 'plumbing' problem. But why would a reactor which is designed to stay on stream as long as possible shut down as the result of a trivial problem?

At the time of the shut down in August the Station Manager, Mr. Parkman, gave a public assurance that Hartlepool Nuclear Power Station would be back in operation within the week. Six months have passed since the shut down and there is still no prospect of it coming on stream.

Statements and information coming from the power station indicate that the problems there are far from trivial - fuel rods won't fit into the reactor core, holes for fuel rods have had to be rebored (still too small), the cooling system isn't functioning properly - and there may be even more serious problems, which we will never know about. It is unlikely that Hartlepool Nuclear Power Station will come on stream this year, it probably never will, maybe we should register it as an Ancient Gothic Relic now!

Contact "Voice of the North", 10 Scanbeck Drive, Marske-by-the-sea, Redcar, Cleveland TS11 7AU. Tel (0642) 477697. Copies of "Voice of the North" cost 20p + 15½ p postage.





U.S. FROM NUCLEAR TO COAL.

In the U.S.A. the 97% complete **Zimmer** nuclear power station is to be converted to run on coal. Construction has cost \$1.6 billion so far and has been the centre of delays and mishaps since 1982 when the Nuclear Regulatory Commission (NRC) responded to allegations of poor work person-ship by refusing permission to continue building anywhere in the reactor where safety would be important.

Now the owners, including the Dayton Power and Light Company want to convert it to run on coal. This will take a further 28 months and costing \$350 million, passed on to tax and rate-payers of course. Another indication of the serious difficulty the American Nuclear Programme is finding itself in, was the announcement that a half completed PWR at Marble Hill, Ohio, is to be completely abandoned due to lack of cash and numerous construction stoppages and delays.

The Marble Hill reactor now joins the other 100 nuclear projects that have been abandoned during the planning or construction stage in the last 10 years. It is also 10 years since a U.S. Utility company last placed an order for a nuclear reactor that it did not later cancel.

The NRC has also refused licenses for operation at two reactors in Illinois. The company, Commonwealth Edison Company, has failed to meet the requirements for quality construction over a period of years.

Other utilities with troubled nuclear projects include Long Island Lighting Company whose **Shoreham** nuclear reactor is nearly complete at a phenomenal cost of \$14 billion, **15 times** the original budget and 10 years behind schedule. Intense opposition from locals and the Local Authority may prevent the granting of any licenses.

Source: WISE Bulletin, February 1984. Nucleonics Week Special Report, 23.1.84. Nucleonics Week, 19.1.84.

Death of an Industry

The U.S. Nuclear Regulatory Commission quietly voted in January to allow the startup of the section of the Three Mile Island reactor left undamaged by the infamous accident there in 1979.

But when the reactor comes back on line, it will be to a very different environment from when it was shut down almost five years ago.

Appears to be dying

The nuclear power industry in the United States appears to be dying, though not because of fears of mass irradiation so much as horror at its costs. Billion-dollar plants are being closed, cancelled in mid-construction or converted to coal-burning across the country, and investors are desperately dumping many utilities which made decisions during the past decade to turn to nuclear power.

"Ten years ago the Public Service Co. of Indiana was about the strongest bond there was," one investment analyst noted this week. "This week they announced they're abandoning a half-finished plant that's already cost them \$2.5 billion."

The Indiana reactor, at Marble Hill on the Ohio River, is only the most recent - and most costly - of more than 100 cancellations of nuclear projects since 1974. The government of Michigan has advised a private utility to follow suit with a plant, projected to cost \$260 million in 1967, which is expected to cost \$6 billion.

In Illinois, the regulatory commission has denied a licence to a completed plant built by the country's most experienced

nuclear utility, Commonwealth Edison. In Ohio, a half-finished plant is being adapted to burn coal. In New York, it is widely expected the controversial Shoreham nuclear plant, which the Long Island Lighting Co. has built at a cost of \$3.7 billion, will never open.

Today, 26 years after the advent of nuclear-generated electricity to glowing predictions of cheap, clean energy, only some 80 plants are in operation in the United States. Nuclear power accounts for about 13 per cent of the U.S. electricity supply, and no new plants have been ordered since 1978.

Some nuclear-power advocates like the Wall Street Journal stridently blame environmentalists for the cost overruns and construction stretchouts.

'Delay and delay'

"Our most rabid environmentalists long ago began manipulating these fears to destroy the nuclear industry," their editorial said. "They'd do anything possible to delay and delay, making nuclear energy uneconomical."

The editorial also attacks "capricious regulators" but it does concede that management of the projects has also been a "villain", and most observers say the American nuclear industry is alone to blame for its downfall. Energy demand was overstated, predictions of oil price increases were exaggerated and many of the private utilities were overwhelmed by the size and complexity of their projects.

Winnipeg Free Press, 28.1.84.

URANIUM TALES

The U.S. multinational, United Nuclear Corporation, are refusing to clean-up America's largest single release of radioactive materials into the environment. The UNC mine uranium at Church Rock, New Mexico, and it is now four years after the accident.

One of the huge 'tailings' dams burst and more than 1,100 tons of solid uranium waste tailings and 95 million gallons of radioactive - and toxic metal - contaminated water spilled into the Rio Puerco River. High levels of radiation have been found 100 miles downstream in wells used by Navajo Indians. There is a distinct possibility that Lake Mead may be contaminated and with it the drinking water of Las Vegas, Los Angeles and much of Arizona.

The company is challenging the cleanup orders of the New Mexico Environmental Improvement Division which demand a halt to seepage of any further water or solids and disposal of the uranium tailings pile. The company says it will stop the seepages but will not clean up the 160 acre site containing 5 million tons of tailings.

UNC representatives claim the spill site has been entirely cleaned up but the Navajo Indians say only the upper 3 inches of the river bed have been cleared, despite evidence from the Nuclar Regulatory Commission that radioactive contamination had seeped further down.

WISE, February '84.



Believe it or not....

The Nuclear Inudstry in the U.S. is promoting visits to nuclear stations as "mildly adventurous" additions to any vacation. At Three Mile Island, the brochure advises:

A walk through the Visitors centre provides you with a close look at the work being done at Unit 2. Clean-up... Decontamination... waste handling... all are performed with the safety of the workers and public foremost in mind... and weather-permitting (watch out for that fallout!! ed.) you are welcome to have your picnic lunch at the tables behind the Centre. Enjoy your stay. Let us know of your questions and concerns we're here to help you."

WISE, February '84.

TOWARDS A STRATEGY ON **NUCLEAR WASTE**

Can we REALLY stop Nuclear Power?

Anyone following the fortunes of the Nuclear Industry will admit that it's in big trouble. While the U.S. industry backs off amidst a steady stream of cancellations, the fantasy of a nuclear third world is disappearing completely. The world recession continues and the cost of a reactor flies out of reach of countries that the Industry saw as firm customers only a few years ago. Even countries such as Egypt, still seen by the Industry as a 'firm customer', admits that it will only purchase if it can arrange adequate (90 - 100%) funding/aid from the west. So they are willing to take nuclear power only if they are paid to.

But here in Britain it's not that simple. While Sizewell looks more and more farcical, and the Inquiry becomes a sick joke, it could still be built, as could Hinkley 'C'. The Windscale saga gets daily more terrifying, yet BNFL may still be able to ride out the storm and continue its operations. Indeed the government's plans to privatise BNFL (Plutonium to the highest bidder?) are clearly being pushed forward. They may not build many more nukes but the communities around these, and around Bedford, Billingham, Sizewell and Windscale, and probably many other sites, continue to face their own nuclear night-

So what can we do? What have we got to fight with? Perhaps the major 'weapon' is the state of the Industry yet this may have disadvantages. As we continue to plug this, as we must, we may see sympathisers telling us that it's all over bar the shouting and they're really too busy to come on the demo because of Cruise Missiles/ Health Service Cuts/ or whatever Thatcherite lunacy is pressing. And

BRITISH SUCKERS?

Lord Bowden said in his Evidence to the Sizewell Inquiry:

"No new reactors have been ordered in America for several years. Contractors and Utilities are at logger-heads. Some very expensive cases are pending in the Courts. The industry will never recover until another PWR set has been built and demonstrated. I believe that this is why the British Authorities are being pressed to build one here. The Americans would represent it as a triumph for their design and use it to revive their hard pressed industry. I cannot understand why we have fallen victims to this blatent propaganda. Are we really such

(Transcript of Inquiry Day 105, 20 Sept. 1983, page 20).

of course these campaigns are every bit as important. The clear fact is that we are now unlikely to ever see a mass national movement against nuclear power as a single issue.

But what we have got is a whole range of local campaigns, mostly wellorganised and effective. If the lessons of Luxulyan, Galloway, Donegal, and the sea dumping issue count for anything, then they have every chance of succeeding. When a project has been opposed massively from the word go, the nuclear industry has regularly back-pedalled. Stopping nuclear power has got to involve building these campaigns out of a local into a regional frame-work and linking them as a national movement, with a coherent strategy.

The urgent campaigns lead into the medium-term campaigns and so on into the long-term aims of a nuclearfree future. We need a strategy that every concerned organisation can understand and support in its own manner, be it giving out leaflets on a street corner, blocking the Windscale pipeline, or lobbying SDP members of parliament.

So what are our aims? Tim William's letter last issue laid out the framework for such a strategy:

Firstly and simply [Near]-Zero Discharges from Windscale. The current beach-closing furore has tended to obscure what Greenpeace were there protesting about in the first place - the slow but steady dumping of unacceptable material into the Irish Sea. Towards this aim there is another set of

End the import of spent fuel for reprocessing at Windscale. Aside from the risks associated with this transport there is no reason, apart from BNFL's profits, why we should continue to take other countries poisons. Such a move would provide a valuable boom to the Japanese and various European antinuclear groups in affected countries.

This in turn leads on to a more medium term aim:-

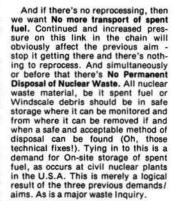
A total end to reprocessing of spent fuel at Windscale. Even if Windscale could operate on a 'clean' basis, in terms of the regular discharges, the high-level waste, medium level waste. and potential accidents continue to pile











Those aims all revolve around radioactive wastes. At the same time there has got to be an end to all construction of new nuclear reactors. pending full public hearings on an energy plan for Britain, perhaps? And at the same time an end to import of all Uranium is an obvious corollary, linked to a demand for an end to fuel enrichment for home use or export.

which would start to become glaringly clear very fast, ignores much of the international situation, and is extremely optimistic. But it's basically what most of us want. You know it makes

In that structure is room for every campaign group in Britain at the moment, working on one, some, or indeed all of those issues. You and your group fit in somewhere and at that somewhere your pressure can be effective. Let's go for it.

Chris Church

Dear SCRAM

We all know, or should know, that a lot of low level and medium level radioactive waste already awaits safe disposal. Such waste has been steadily increasing since work on the British atomic bomb started in 1946. Much has been buried at Drigg. Much more awaits the discovery of what NIREX will judge as suitable sites for such burial now that Drigg is becoming surfeited.

Every area that NIREX proposes to examine to see whether it would be a suitable radioactive waste dump evokes, rightly, widespread opposition from the local inhabitants.

Such opposition is vital as it helps to educate the nuclear fanatics that they have an insoluble problem on their hands. This problem far transcends the narrow technological knowledge of those drilled into the science of nuclear physics. The problem is to get over the well-known difficulty: you can fool all the public some of the time, and some of the public all the time: but you cannot fool all the public all the time.

The way round this problem is to stop fooling the public that radioactive waste can be buried in such a way that it can never - ie. for periods longer than recorded history - escape into the environment. For both low level and intermediate level radioactive waste contains a small and variable proportion of long life radioactive matter such as plutonium.

At a recent meeting in Devonshire the following idea was put to the Nirex representatives there; that as and when nuclear power stations are ripe for decommissioning, the sites of some of them should be used as above-ground storage dumps, in engineered structures. They might be made even an asset to the tourist trade if they were designed as the modern counterpart of the Egyptian pyramids, ornamented perhaps with statues of the Great and Good (in their own estimation) of the twentieth century nuclear energy 'Scientists'.

The Egyptian pyramids have lasted for thousands of years. Surely with modern techniques, and with competent engineering, we could at least do as well as the ancient Egyptians?

This idea was put to Mr. Ginniffe, executive head of NIREX, at the meeting referred to. His response was: it would not be possible to make such a structure that would last more than, I think he mentioned, sixty years.

Admittedly, the proposed structure would have to resist the attack of its radioactive content, which the Egyptian pyramids were not exposed to. But does this make the task of constructing a structure that would safely contain the waste for some thousands of years mpossible?

Probably it does, because it would need competent engineering. And that is a scarce commodity in the nuclear industry.

> Yours etc. Kelvin Spencer.











This glass paper weight represents the amount of vitrified high level radioactive waste that would result from an individual's lifetime use of electricity, domestic and industrial, if it was produced entirely from nuclear energy. Now imagine 55 million of them... (Never mind the millions

of tons of "medium and low level" wastes).

And finally of course, a commitment to phasing out of all operating nukes as fast as is possible, balancing out the environmental problems they are creating against any problems in supply that would result. And what of the nuclear Industry? There has obviously got to be a major redirection of all nuclear research into the problems of decommissioning and waste

As Tim pointed out such a programme ignores all the military links,





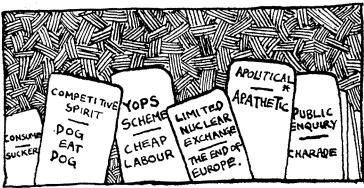


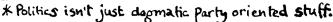














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SCRAM Journal April/May '84

WISE Move

In October, a new alternative energy plan was published which, if carried out, could reduce Denmark's total energy consumption by half by the year 2,000.

The plan is the product of 10 years work by six scientists in response to the government's official plan in which renewable energy is given a low priority and emphasis is placed on large power generating stations, with nuclear reactors looming over the year 2,000 horizon.

However, the chief emphasis of the new alternative report is on conservation and renewable energy, without loss to the standard of living, and is based on official government data. Important points are:

- 1. Natural gas will be used in small combined heat and power units supplying district heating rather than piping gas directly to peoples' homes.
- 2. An extensive insulation programme of existing buildings, up to current standards, will be introduced.
- 3. The plan assumes construction of 60,000 small and 2,000 large windmills plus the installation of 2.3 million m² of solar panels.

The costs are difficult to speculate but it is estimated that 470 billion kroner (\$52 billion) will be spent on energy up to the year 2000. If the alternative plan is adopted the massive saving due to conservation means it would cost less than this.

In response to the new report the Organisation for Information about Nuclear Power (OOA) has started a campaign to spread knowledge and generate support for the plan.

Contact: WISE COPENHAGEN, OOA Ryesgade 19, 2200 Copenhagen, Denmark, for more detailed information.

Fewer fumes

A new fitment for car engines, being marketed by a Glasgow firm, is claimed to cut fuel consumption, reduce emissions and prolong engine life. The device could be revolutionary in car manufacturing, especially due to its simplicity and cheapness - it costs only £50 to buy and install.

The basic idea of the thing is to improve combustion of the fuel, decreasing the amount of non-used fuel. It makes sure that the fuel/air mixture is correct, but also adds water which as super-heated steam helping to improve the combustion of the fuel even more. The water also cleans out the deposits of carbon particles which happens in all engines, thus prolonging its life.

Michael Feeney, the managing director of Applied Water Energy, the designers of the "Gefarator" device, believes that the principles behind the "Gefarator" are not yet fully understood by the motor industry. There is little in the literature, he says, about exhaust gas "aspiration". He hopes to change this, once sales are underway, by recruiting the expertise of specialist laboratories.

These steps to reduce exhaust emissions are all very well, but why don't they all just get a bicycle instead?

New Scientist, 2.2.84.



EVERYDAY CHEMICAL HAZARDS

Of the tens of thousands of chemicals in everyday use in developed countries, only a handful have been thoroughly tested for their toxicity, according to a new report by America's National Research Council.

The Council spent four years looking at a random sample of the 50,000 or more common chemicals, pesticides, drugs and cosmetics on sale in the U.S.A. It found that there was sufficient data on toxicity to make full evaluations of the health hazards for only 10 per cent of the pesticides and 18 per cent of the drugs in general use. There is no data at all for 38 per cent of pesticides and 25 per cent of drug ingredients.

Knowledge about other chemicals that are not ingested or worn is even more scarce, says the report. Almost nothing could be found on the dangers from 80 per cent of these chemicals.

The quality of the tests carried out on chemicals varies enormously. Most tests are carried out by the companies that market the products!

New Scientist, 8,3,84.



Turbinews

The EEC has awarded nearly £3.5 million to nine countries in Europe to build 24 wind-turbines. They range from a 1.2 megawatt turbine in West Germany to a small 4 kilowatt wind and solar generator on an Italian mountain.

Britain too will gain from the scheme, receiving £609,500 for four projects. In North Devon there are plans to build the first phase of a wind farm which will have three turbines, generating 200 KW each.

The Wind Energy Group, a consortium of Taylor Woodrow, British Aerospace and GEC, have several sites in mind in the North Devon area. The machines will be similar to the one constructed in the Orkneys last year but will have three blades instead of two.

The winds in Devon are far less harsh than the ones in the Orkneys. but are typical of most possible sites throughout the world.

The grants available will only cover 40% of the cost so the decision to take up the offer rests with the managers, so far they have not confirmed whether to go ahead with the project.

The South West Electrickery Board will have to buy any electricity produced by the group.

New Scientist, 2.2.84.

CORROSION from the

The Acid Rain issue has, for a long time, been shaping up as another example of classic campaigning confrontation. The CEGB and the UK government are playing "Goliath" to the environmental groups' "David". But within the Goliath camp is another duo. The National Coal Board is handin-glove with the Central Electricity Generating Board in resisting moves to reduce emissions of sulphur dioxide (SO²) from fossil-fuel power stations.

In August 1983 the CEGB suggested 1 that unusual volcanic activity in the South Atlantic could account for high levels of sulphur deposition in Western Europe. Research conducted for the European Commission 2, however, lays the responsibility for over 90% of SO² emissions squarely on man-made sources!

Earlier this year, in an attempt to reinforce the rampants of the 'no problem' lobby, **Sir lan McGregor**, chairman of the NCB, made an important pronouncement on the effects of Acid Rain:

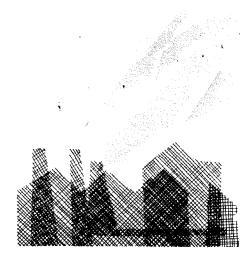
"The truth is there, it is no scientific consensus".

On the possibility of installing remedial technology:

"There is a distinct possibility that after we have crippled some of our basic industries we could then find we had not solved the problem".

And what should appear in the NCB Press release of 27th January but a page of information on volcanic activity! Of interest, perhaps, to those tackling 'O' grade Geography but when a Chairperson of a major industry scrapes up facts about Krakatoa to back up arguments, are we not justified in starting to question his assurances about the UK not being a major polluter?

This is one of a number of smokescreen arguments being propagated by the CEGB/NCB duo - a latter day Torvill and Dean?

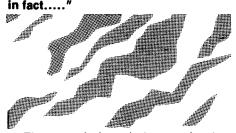


On announcing at the Royal Society last September, the joint CEGB/NCB funding for acidification studies in Sweden and Norway, Sir Walter Marshall, the CEGB Chairman, played down the UK's primary role in Western European acid pollution. Sir Walter's geography led him to include the USSR in Western Europe's emission calculations, thereby placing Britain's contribution to European sulphur emissions at 7%.

True, polluted air does find it's way from the Eastern bloc, but prevailing south-westerly winds dictate that the Soviet Union is a net importer of sulphur dioxide. These same winds ensure that 76% 3 of the 4.3 million tonnes of SO² emitted from UK stacks every year find deposition sites all over northern Europe. The rest is deposited in Britain itself. An estimated 80% 3 of all sulphur deposited in Britain derives from home sources and the EEC nations collectively are responsible for a similar proportion of all acid depositions in their own territories.²

In January of this year it was Sir lan's geographical and metereological knowledge which was found wanting as he trotted out, on behalf of the NCB, the threadbare CEGB dogma:

"The United Kingdom does not make a major contribution to sulphur emissions, less than 7 per cent of the total for Europe (including the USSR) in fact...."



The associations between the two Board's are easy to appreciate. The CEGB is the Coal Board's largest customer and has a certain influence over it's policies. One would hardly have expected this to extend as far as the Press Offices of both organisations propounding clone-like assurances regarding environmental acidification.

Whilst we are analysing the issues behind the issue consider how significant is the £5 million that the CEGB/NCB alliance has provided for five years of research work in Scandinavia. The CEGB's income during 1982/83 totalled £7039 million which paid for their contribution to a year of the five year study in just 37.2 minutes. But we should really consider their research funding as a proportion of profit (£705 million). Reassuringly a less derisory time of 6.2 hours is the result. Against a background of some

3000 studies of a variety of aspects of acidification already conducted worldwide, we can see this 6 hour financial contribution as the stalling operation it is so clearly designed to be.

There is clear evidence that electricity prices of under 4% would pay for a major programme of flue-gas desulphurisation and energy conservation measures 4 to reduce emissions of SO² by 60% by 1995 and satisfy a proposed EEC Directive ⁵.

The CEGB's evidence to the Royal Commission on Environmental Pollution 6 estimated a 6% price rise for a 50% cut in CEGB emissions of SO², equivalent to a 30% reduction in total UK SO² emissions. As the Commission states:

"To put the figure of 6 per cent in context we note that during the last nine years the retail price of electricity has increased on average by about 4% per year more than retail prices in



general".

Is it unrealistic to interpret the CEGB's entrenched position in the face of a large and growing body of scientific evidence and mounting public pressure as a reflection of their continued desire for seeking an expansion of nuclear generating capacity?

When the music stops, and Sir Walter Marshall abandons the deft Paso Doble he has been dancing with Sir Ian McGregor, and goes headlong for the nuclear line, will the NCB's "Torvill" be left slithering on the ice?

Andy Kerr (FOE Scotland).

References:

- 1. Personal communication with Press Officers 10.8.83.
- ACID RAIN: A review of the phenomenon in the EEC and Europe. Environmental Resources Ltd., published by Graham & Trotman Ltd. (1983).
- Acid Deposition in the United Kingdom. Warren Springs Laboratory (December 1983).
- Research for Friends of the Earth Ltd., conducted by Earth Resources Research.
- Proposal for a COUNCIL DIRECTIVE on the limitation of emissions of pollutants into the air from large combustion plants. Com ('83) 704 final (15th December '83).
- Royal Commission on Environmental Pollution. Tenth Report. Tackling pollution - Experience & Prospects (February 1984).

CLOUDS

From Monday 2nd - Saturday 7th of April an International Week of Action Acid Rain will against place, designated by the International Youth Federation. Activities in Britain are planned by Friends of the Earth (Scotland): FOE Ltd: Ecology Party: Young Liberals (Ecology committee): Greenpeace. It is hoped thousands of people will come together to say NO to Acid Rain and demand appropriate technologies, which do exist, as the only possible way of ensuring a safe and sane future for the precarious life on Earth. Acid Rain is



an international problem which must be stopped and the events organised throughout Britain will be a chance to show the electricity boards that we won't swallow their crap. (Literally).

Scottish activities so far arranged by FOE (Scotland):

Monday 2nd April: ACID RAIN films in GLASGOW. 7.30 p.m. Glasgow Film Theatre, Rose Street.
Films: ACID RAIN - Who Cares
*Acid Rain: Requiem or Recovery & Discussion.

Tuesday 3rd April: ACID RAIN films in EDINBURGH. 7.30 p.m., Filmhouse, Lothian Road. Films * As above.

Wednesday 4th April: ACID RAIN -WHO CARES? + talk by Andrew Kerr. FOE (Scotland). Glasgow University Chaplaincy, 65

Some interesting facts about the government's priorities.

1. British research and development on conservation in 1981 was £229,000. Whilst every day, £1 million of North Sea Gas is flared off

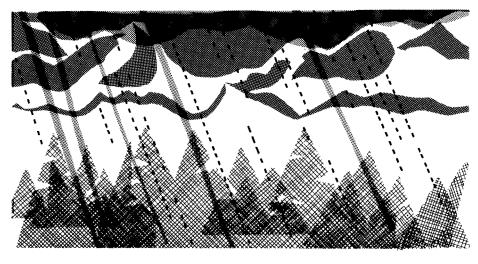
(FOE Ltd)

2. Domestic energy conservation budget in the UK for 1979 was £35 million.

In West Germany it was £217 million. In France it was £130 million.

Economics Advisory Group (EAG) 1981.

3. On the topic of a large scale domestic energy conservation programme.... "such a programme would PRODUCE ECONOMIC RETURNS



"In northern Europe, Canada and the North-east of United States, the rain is turning rivers, lakes and ponds acidic, killing fish and decimating other water life. It assaults buildings and water-pipers and tanks with corrosion that costs millions of dollars every year. It may even threat human life, mainly by contaminating drinking water. It is a particularly modern, post-industrial form of ruination and is as widespread and careless of it's victims and of international boundaries as the wind that disperses it."

These are the words of the Executive Director of the UN Environment Programme in his report of June 5, 1983.

Oakfield Ave., Glasgow, 7.30 p.m.

Wednesday 4th April: Environment Question Time in House of Commons. Questions being submitted and collected by SERA on acid rain.

Thursday 5th April: Presentation of acid water to as yet unknown dignatory.

On the Saturday 7th April actions are still being organised and will be the main day of events. Possibilities are wide for anyone to get involved in organising them.

A «SHOWDOWN AT THE SHOWROOMS»

is being jointly organised by FOE (Scotland), FOE Ltd, Ecology Party and others.

to the country up to three times as high as investment in nuclear power or for other types of supplied energy."

EAG (1981) in U.K.'s Response to the World Conservation Strategy.

4. Renewables - R & D 1980 - 81

Wave power -	£3.0m
Geothermal -	£2.2m
Tidal -	£1.4m
Solar -	£0.8m
Wind -	£0.8m
Biofuels -	£0.3m
Total	£8.5m

= 3% of R&D Energy budget.

Nuclear - 52% of Energy R&D budget.

1981-82 Renewables £13.6 m. 1982-83 Renewables £11.12m. (projected) Here are some ideas.

* Coal washing exercises showing the SSEB how to remove up to 20% of sulphur from coal.

* Sulphur Dumps.

UK emissions of SO² are 4.3 million tons every year. And the Electricity Boards account for 60% of this, (2.6 million tonnes). So, for every year, the sulphur dioxide emitted into the atmosphere, per head of the UK population is:

for whole UK - 38 kg = 80 lb. for CEGB - 23 kg = 51 lb.

Feel like returning some of it? (Soya flour?, sacks of sand?, contact FOE).

* Leafletting outside electricity showrooms. 25,000 leaflets are being printed and are available from FOE (Scotland), 53 George IV Bridge, Edinburgh EH1 1ET, 031-225-6906.

Contact FOE for any other ideas, help, information.

Watch out for direct action during the week!

NOTE: A Friends of the Earth special report has been released. It deals comprehensively with all the implications, effects and causes of ACID RAIN. It is packed full of information the government doesn't want you to know, or tries hard to screen you using statistical jibberish. Find out for yourself or pass them round the dole queue etc.

Just send a stamped addressed envelope, (with perhaps another stamp as a donation if you can afford it) to:

FRIENDS OF THE EARTH, 377 CITY ROAD, LONDON EC1 TEL. 01-837-0731.



The Nuclear Delusion: Soviet-American Relations in the Atomic Age by George Kennan, Hamish Hamilton, £12.50.

Wars are not what they used to be:-

"But war was (normally) the expression of a hostility limited both in time and intent. It was limited in time because it was coincidental with the existence of a formal state of war. It was limited in intent because the aim it was designed to serve were normally ones of a limited nature: the transfer of a province from one sovereignty to another; a change in the arrangements governing maritime commerce; the replacement of one ruler by another for dynastic reasons."

It is the loss of the rational war that outrages Kennan, because it has been replaced by wars of total destruction, with the object of annihilating opposing ideas and systems. Wars and threats of war have taken on the nature of religious crusades, when the aim is to change or destroy the hearts and minds of a people, or of expropriation, where colonising aliens drive out the original inhabitants. Considering what kind of massacres those sorts of war produced in the past with labour-intensive methods, you cannot hope for much when such hatred can be expressed through high technology. Wars are Final Solutions to simplify once and for all the complexities of policy towards different sorts of people:-

"that policy [towards the Soviet Union] will continue to be only too often the football of the extremists, the special-interest groups, and all those good people who find it impossible to live without the image of a totally inhuman enemy against the background of whose supposed infinite iniquity their own sense of virtue can be indulged and gratified."

If wars are no longer wars, weapons are no longer weapons. This is what Kennan wrote of them in 1958:-

"the weapon of mass destruction is a sterile and hopeless weapon which cannot in any way serve the purposes of a constructive and hopeful foreign policy. The true end of political action is. after all, to affect the deeper convictions of men; this the atomic bomb cannot do. The suicidal nature of this weapon renders it unsuitable both as a sanction of diplomacy and as the basis of an alliance. Such a weapon is simply not one with which one can usefully support political desiderata; nor is it one which readily springs to the defense of one's friends. There can be no coherent relations between such a weapon and the normal objects of national policy. A defense posture built around a weapon suicidal in its implication can serve in the long run only to paralyse national policy; to undermine alliances and to drive everyone deeper and deeper into the hopeless exertions of the weapons race.'

Kennan was an American ambassador to the Soviet Union in the thirites; he is now a diplomatic historian. He writes about the world in which nuclear weapons live as a classical musician would write about punk that is, he finds the words he is accustomed to are useless, or becoming so. Alliances, national policy, defence, foreign policy, war - all his stocks are getting past the sell-by date. Nuclear weapons, which will eliminate things, have started by distorting the meaning of words and concepts. One of his favourites, "diplomacy", has become a show played to a gallery that the player assumes to be both vicious and ignorant:-

"there seems to be a number of people in our political and journalistic world for whom a certain Cold War has long been the staff of life... The result has been the emergence of a school of thought which appears to believe that something useful could now be achieved in our relations with Russia by a policy of strident hostility on our part, by reversion to Cold War slogans of the fifties, by calling names and making faces, by piling up still greater quantities of superfluous armaments, and by putting public pressure on Moscow to change its internal practices, and indeed the very nature of Soviet power."

Diplomacy, in a democracy, has to work like anything else - that is, do whoever is in power good with the electorate. If the object of the government is to pile up weapons of mass destruction, an image of an enemy deserving them must be created. Edward Liminov, an exiled Soviet dissident, said in the Sunday Times (18.3.84) of American society that it "is a more brainwashed society than the USSR. The Russians don't believe their propaganda, but in America it's incredible, you can put any idea into their head." Kennan, less contemptuous of his compatriots, wonders, when talking of the pro-Soviet propaganda their American allies put out in World War



"Whether it ever pays to mislead American opinion, be less than honest with it, even in the interest of what is perceived by the political leadership is a worthy cause. It is characteristic of wartime psychology that the end tends to be seen as justifying the means. But when the means include the manipulation of opinion by the creation and propagation of unreal images, there is always the price to be paid at a later date; for the distortions thus engendered have one day to be straightened out."

Wartime psychology seems to account for a fair part of the mood of government; this kind of mood may be aggravated by the technology. For just as Man the Motorist is much nastier, more aggressive and more destructive than Man the Cyclist or Man the Pedestrian, so do those working in an alternative society of technology begin to believe in the axioms on which that technology is based - that with this

power they gain certain rights over others:-

"it is the weapons race, and particularly our government's commitment to it, that is the most intractable. This is because the commitment has now become in a way institutionalised, and is very little responsive to public opinion or indeed to external pressures of any sort. Millions of people in this country now have a personal stake in maintenance and cultivation of this vast armed establishment, and of the Cold War psychology by which it is sustained. These include military people, industrialists, workers in defense industries, politicians, journalists, publicists and many others who for one reason or another have locked themselves into characteristic Cold War attitudes. The Cold War and the responses it engenders may in fact be said to have become an addiction for large parts of our society."

On the reasons for the Cold War drug becoming fashionable again, Kennan is not full enough. He gives very little on the domestic reasons for the new Cold War he discounts all the rationale for it (Soviet arms build-up, third world meddling, emigration, dissidents) but cannot make a convincing case for relations suddenly deteriorating and arms and rhetoric flourishing like the green bay-tree. He puts it down to "the momentary violence of feeling on the part of politically influential lobbies and minorities to whose pressures the politicians of the moment were inclined to pander or defer." Perhaps it is only freakish - like a sudden trend in cocaine sniffing - and that one simply would rather not believe the world endangered for such fads. On everything else, however, he is outstandingly clear, succinct, eminently quotable, controlled; so that books on all the dreadful, depressing detail of arms trade, military-industrial complex, strategic planning, seem like illustrations to his coherent report of the Cold War fiends, euphoric or zombies, shooting up rhetoric and war-heads and resisting the horrors of a pacific policy like cold turkey.

People in the peace movement are thus trying to subdue the ideological hysterics with suicidal and homicidal tendencies who rule us. Just as those under stress go to classes where they learn merely to cope, so people in the peace movement agitate. march and publicise for mere existence. From all sorts of directions - feminism, mysticism, religion, doctrinal politics, social concern - people have converged to ask for survival and sanity, those base lines from which a society and a person both take as starting places for development, but which have become as unattainable as the Holy Grail: they have been demanding from their idealistic and overemotional governments, ready for any sacrifice of self and others, enlightened self-interest. national self-preservation and real politics.

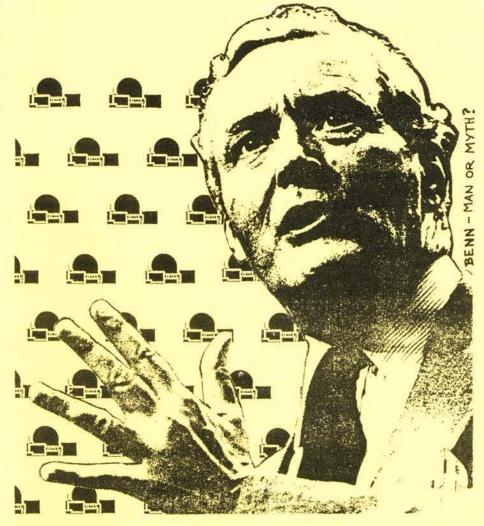


4 SCRAM Journal April/May '84

The Sizewell Syndrome: Nuclear Power, Nuclear Weapons and Public Policy by Tony Benn, END papers Seven, Spokesman, £3.50.

Tony Benn was for eight years the minister responsible for nuclear energy, the one who ordered that guards at nuclear power stations should be armed, the one who seems to have been kept very uninformed by his officials in the atomic industry. He was not told, he says, that the Central Electricity Generating Board was shipping plutonium to the USA, nor was he told of the Soviet accident at their reprocessing plant in 1957, nor was he told that 200 tonnes of uranium had been stolen in 1968, nor about leaks in Windscale. Since he has recanted on nuclear power, his officials may well feel that he knows too much. What he does know comes out with sinister implications in the gentlemanly atmosphere of the Sizewell inquiry. He recounts a conversation with Sir Walter Marshall, whom Benn had appointed to be Deputy Chairman of the Atomic Energy Authority:-

"he came hot from Teheran and told me that only if we would order the PWR the Shah would buy half our industry, and when I said, "How come you were discussing it with the Shah?" he said to me, "Because I am the Shah's atomic adviser." I said, "I did not know that. I thought you were mine," and he said, "Well the AEA have some arrangement with the Iranian Government."





If the arrangement, and the Shah, had lasted long enough, and had realised itself in pressurised water reactors, there might be something more Khomeini's forces could bring down on Iraq in retaliation against chemical weapons, to grind those particular agents of Satan into dust.

Tony Benn is generally reluctant, however, to name names. He makes a more general case against nuclear power stations:- on the hidden costs, since the Defence budget takes in part of the research and development expenses, wrapping around the civil nuclear programme its own shroud of secrecy; on the costs of security, of vetting, of spying on the anti-nuclear movement and policing protesters; on the hidden returns made on the sideline of selling plutonium to the USA; on waste disposal, since the costs, like the method, are not known. The political case is dearer to Benn than the economic, however, and there his chief complaint is the secrecy which the atomic industry, in its egalitarian way, applied to him as minister responsible as well as to the public. Both he and the public were and are prevented from deciding whether they want to maintain factories which put the punch into American missiles, from taking into account the leakages and cock-ups, and from assessing the vulnerability of dangerous substances and leakages. needing an oppressive security.

ENDpapers have devoted this, their seventh issue, to a transcript of Benn's evidence at the Sizewell inquiry. It is a good, surprisingly readable introduction to the place of nuclear power in the state. Benn believes in such inquiries; he quotes a French minister on them:—"When you drain a swamp, you don't consult the frogs." Whether the frogs will croak on uselessly as they're swallowed up by the pumps remains to be seen.

R.M. Bell

DIARY

APRIL April opens with INTERNATION-AL ACID RAIN WEEK Mon 2nd -Sat 7th.

Tues. MILITARISATION OF PREST-WICK AIRPORT CONFERENCE, contact Ayrshire Federation, Alan Miller, Irvine 218 405.

-9th 'WINDPOWER' Residential Course covering the basics of wind energy, including output, costing, design and practical sessions, at the National Centre for Alternative Technology, Llwgngwern Quarry, Machynlleth Powys, Wales. Tel. Machynlleth 2400.

Sat. INTERNATIONAL ACID RAIN
7th DAY, contact Friends of the
Earth (locally) see Acid Rain
Diary, SCND Political Lobbying
Day School, Glasgow College of
Technology, £3.00 Details from
SCND office.

"MOTHERS FOR PEACE" Edinburgh Coffee Morning and stalls 10 a.m., - 12 noon, Corner Stone Coffee House, St. John's Church, Princes Street. Julie Longman will be there - just returned from her peace-visit to Hungary.

Hungary, SYCND. "Make the Link" plan to link RAF offices in Queen Street (Glasgow) to the Stirling Library across the road, to highlight spending on nuclear weapons and education cuts. Assemble George Square Glasgow. 1 p.m. 'Link Up' 2 - 2.30 p.m. Rally afterwards.

DISARMAMENT: An Independent Foreign Policy? Michael Meacher, Audrey Wise & Tony Benn to speak; with leaders of the European peace movement and trade union disarmament campaigners. Cost: Residents £25, Non-residents £5. Details:

14th -

15th

Sat.

21st

Sun

27th -

Sun.

29th

Bertrand Russel Peace Foundation, Camble Street, Nottingham NG7 4FT

18th - EDINBURGH CHRISTIAN

22nd COUNCIL Gathering for Peace.
All ages, members of all branches of the Church from many parts of the world, 2,000 people hoped for staying in people's homes.

Morning, afternoon and evening activities. Details from Carolyn Smyth, 9 Learmonth Crescent, Edinburgh EH4 1DD.

20th - ANIMAL LIBERATION Weekend
of Action and camp at Life
Science (sic) Research Labs at
Occdd nr. Eye, Suffolk. Contact
Eddie Smith, 50 Horns Lane,
Norwich.

EASTER.BIKE RIDE. For Greenpeace. From Gretna Green to Barrow in Furness Via Windscale, via the English lakes. Details SCRAM, tel. 031-557-4283 or 'BIKE EVENTS' Cleveland Place, London Road, Bath. Tel. (0225) 310859.

EASTER ALERT SCOTLAND. Two Major Demos. HOLY LOCH Dunoon. Assemble Alexandra Parade 11 a.m. with Rally in Black Park, Dunoon 2.30 p.m. Speakers include Prof. Mike Pentz. And, EDZELL, Angus, assemble 11.30 a.m. at Edzell Base, Rally at 2.30 Edzell Park, speakers include Bruce Kent.

WRITERS Day For Peace - Scottish writers against the bomb at Traverse Theatre from 1 p.m. till evening. Simultaneous events Throughout Scotland. Contact Joan Lingard, 031-556-1972.

Green City Wholefoods CND, EASTER PARTY in the Mayfair, Glasgow. Live bands, £1.50 (£1.00 unwaged) Tickets at door. All profits to CND.

"WATER POWER", residential course, concentrating on low-power hydro-electric installations (up to 20 KW), and intended for people interested in installing such a system on a commercial or DIY basis. It also covers the basics of rural water supply, and includes a practical session with water-turbines. Contact: National Centre for Alternative Technology, Lluryngwern Quarry, Machynlleth, Powys, Wales. Tel Machynlleth 2400.

Little Black Rabbit was speaking to friends in Billingham recently. As youll recall Billingham has been earmarked for an intermediate-level nuclear waste dump site.

Puring the conversation the EEC'S Energy
Research and Development Committee came
up. The Committee's Draft Motion for Resolution
was passed by the European Parliament on
26th January. This called for the establishment of Community disposal and final storage
facilities for Nuclear Waste. What particularly
worries the Billingham Against Nuclear Dump
ing group is the wording of the Motion. It
states that member countries have a Community
duty" to accept the nuclear waste of other
member nations who, for peological or other
reasons," cannot build their own facilities.
Does this mean that Billingham will become
the nuclear dump for all of Europe?
To find the answer to their question BAND
phoned Peter Curd, NIREX'S Information

To find the answer to their question BAND phoned Peter Curd, NIREX's Information Officer. NIREX is the Nuclear Industry Radioactive Waste Executive and as such is the group advising Government on nuclear waste issues. BAND were suprised to find out that Mr. Curd did not know anything about the EEC decision and had not even seen the Graft paper in question. Fortunately BAND were able to send a copy of the paper to NIREX, and assured Mr. Curd that they would keep NIREX informed on any other developments in the nuclear waste fiel!

other developments in the nuclear waste fiel! During the EEC debate, German research recommending that the anhydrite mine at Billingham would be ideal for high-level

waste was discussed. But, according to the Gaardian (30-1-84), Dr. lan Blair of NIREX believes the mine to be unsuit able for high level waste that's alright then if NIREX says so, they know what going on, don't they?

Little Black Rabbitt

MAY Sat.

Mon.

21st -

Sun.

27th

Tues.

MOTHERS FOR PEACE'.

Peebles, coffee morning and stalls, 10 a.m. - 12 noon, St. Andrews Leckie Church, Bake Hall Eastgate. Items for stalls will be welcome beforehand. Contact: Mrs Frances Cameron, 25

Gallowhill, Peebles, Tel. 21172.
BREAD NOT BOMBS, Campaign
Against the Arms Trade. Week of
Action, Working for an end to all
British arms sales and for the
conversion of military industry to
socially useful production. Details
CAAT, 5 Caledonian Rd., London

N1 (01-278-1976).

'MOTHERS FOR PEACE'
Peebles, Public Meeting, 7.30 pm
Patsy Cumming will talk on her
recent peace-visit to America,
discussion to follow. Venue: St.
Andrews Leckie Church, Bake
Hall, Eastgate.

Sun. 17th -Sat. 23rd

Edinburgh PEACE WEEK 1984.
Co-ordinated action by ALL
Edinburgh Groups. Contact
Peace and Justice Resource
Centre, "St." 968n 8 9 Church,
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