

SCRAM

ENERGY BULLETIN



No. 14 October/November 1979

"A single major nuclear accident could cause 3,300 deaths, 45,000 injuries, billions of dollars in property damage, 45,000 cancers over the next several years, and render an area the size of Pennsylvania uninhabitable.

"Only 10 to 20 pounds of plutonium are needed to make an atomic bomb. More than 400 pounds of plutonium are currently missing from US storage facilities. The possibility of nuclear theft and blackmail by criminal or terrorist organisations is a real threat at this time, and it will grow as more nuclear plants are built."

- US Atomic Energy Commission [pro-nuclear]



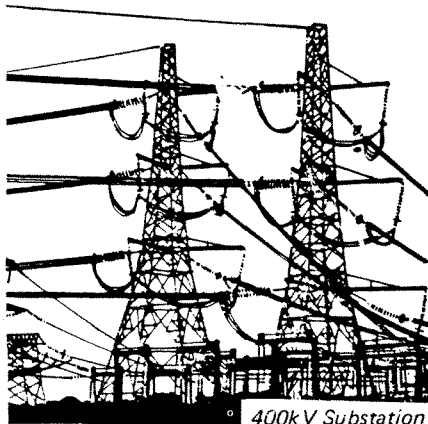
- MINING - U.S. INDIANS SPEAK OUT
- HUNTERSTON AGR LEAKS
- GORLEBEN ERUPTS AGAIN - EYE-WITNESS REPORT
- DANGERS OF HIGH VOLTAGE PIPES
- TWO PAGE PULLOUT ON THE NUCLEAR CYCLE



Safe height
5'

DANGER: high voltage cables

The hazards of overhead power lines, like Gaul, may be divided into three parts: first, gross accidents resulting from the structures and hardware involved; second, the subtle bio-effects engendered by low-frequency electromagnetic radiation, with accompanying abnormal air ionisation; and third, the threat posed by the CEEB's attitude towards these hazards.



400kV Substation

This last is in some ways the most menacing, because it is now clear that this vast statutory monopoly prefers to resort to obscurantism, cover-ups, personal defamation and even lies, rather than take an objective look at a problematical situation for which it is directly responsible. We should remember that this same body of bureaucrats is in charge of our nuclear power programme. Having met many of them, and tried in vain to get straightforward statements of information or intent from them, I can think of nothing more frightening.

The worst kind of gross accident due to overhead power lines is either a fatal direct touch, or else a flash-over, which is an equally fatal lightning-like discharge caused by some object coming close to the lines without necessarily touching them. A young farmer was electrocuted two years ago when he up-ended a frozen slurry pipe near 400kv lines. At the inquest, the CEEB refused to accept any responsibility for his death, saying that they sent out an annual warning letter to all farmers.

However, last month a wood was set on fire and a farmer nearly killed by two similar flash-overs; the CEEB said: "a tree must have blown within 16 to 20 feet of the line, and that is enough to cause a flash-over" (Guardian, July 28th 1979). As the minimum clearance from ground-level (not head-level) set by the CEEB for high-voltage lines is 25 feet, the resulting sum is not reassuring for the many people living under such lines.

People living near high-voltage cables experience black-outs, fits, exhaustion, heart palpitations and other illnesses. And the problems increase with the huge cables needed to transmit electricity from the large nuclear power stations.

In this article, Hilary Bacon, a resident of Fishpond in Dorset discusses the problems and the lack of solutions. Fishpond is a small village sited under the 400 & 345 kilovolt transmission lines between Hinkley Point and Dungeness nuclear plants.

Further ineptitudes may be observed in the routing of the National Grid; the section over our village crosses directly through a notorious slide-area, clearly so marked in the Geological Survey. Finally, there are many strange and frightening phenomena, such as strong shocks and even burns experienced by people standing under the lines; showers of sparks from the conductors; and the lines glowing live red, or emitting a loud droning noise, effects which a CEEB physicist said publicly he could neither understand nor explain. All these effects have been reliably witnessed.

INTERNATIONAL CONCERN

In 1976 we present research from Russia, Italy and the U.S.A. on low-frequency radiation bio-effects, which appeared to corroborate symptoms we were experiencing while living under 400kv lines. We presented this material at a closed meeting with influential members of the CEEB, among them a medical doctor who is Deputy Chief Officer for Nuclear health and Safety in the CEEB.

Nothing at all was done about this evidence, nor about our claims of ill-

health; in fact, the CEEB later increased the voltages over our heads without telling us. We discovered it by experiencing black-outs when immediately under the lines. When exactly the same evidence was presented two years later at the Innsworth Public Enquiry, the Health and Safety Executive decided to pursue the subject as being worthy of proper concern. Despite having had two years in which to carry out some sort of enquiry into our complaints, the Deputy Chief Office for Nuclear Health and Safety preferred to defame the characters of the scientists who had carried out the research.

ILLNESS

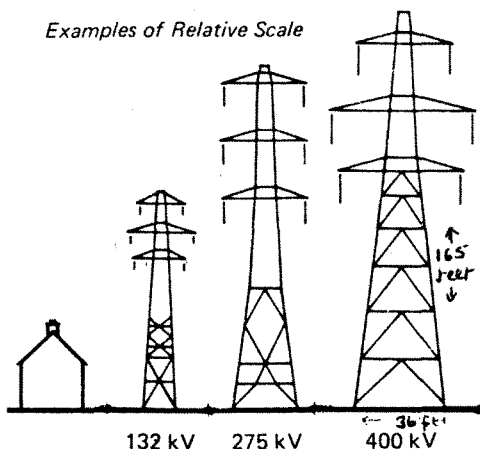
The bio-effects experienced, which are being corroborated by further research and personal testimony, are, overtly, headaches, exhaustion, depression, restlessness, insomnia, loss of appetite, skin rashes, heart palpitations, eye strain, dizziness, epilepsy-like fits, and black-outs as described. Research indicates that these symptoms are due to the effects of electro-magnetic radiation and abnormal air ionisation on the cardiovascular system, the central nervous system, the leucocyte count, the blood serum triglycerides, and possibly certain brain hormones. There may also be long-term effects such as chromosomal changes like those produced by higher-frequency but still non-ionising radio and microwave radiation. Some of the above symptoms, including a curious dropsy-like condition, are remarkably like the initial stages of microwave radiation; and the power-line frequency of 50-60 Hertz, although low, is very close to some important biological rhythms.

'BLINKERED AND IRRESPONSIBLE'

It is unfortunately all too clear that none of these hazards would be threatening anyone were it not for the blinkered and irresponsible attitude of the CEEB towards the public it was created to serve. Seen in this light, the implications of Britain's nuclear power programme are horrifying. It is obviously up to us to keep on questioning - and if necessary challenging - all such technological information and social decisions at source, however frightening and difficult that may be.

Hilary Bacon will be discussing these issues at the low-level radiation meeting in Edinburgh on October 29th [see p. 1].

Examples of Relative Scale



people against nukes...



Some 7,000 people attended the Scottish anti-nuclear march and rally in Edinburgh on September 15th. The march was the biggest in Edinburgh since the war.

The call was to Stop Torness, No Waste Dumping and No Uranium Mining, all central to Scotland at the moment. Groups attended from all over Scotland, and it was heartening to see the breadth of support, with people from all walks of life.

The march was led by Julie Christie, with Robin Cook, Roy Harper, Mick McGahey (Scottish NUM leader) and Dr. Blacklith, the expert on low-level radiation effects. The school students group, Young People against Nuclear Energy was also at the head of the march.

The rally, which took place in the afternoon was also a big success, though there was some heckling of Mick McGahey who called for a halt to Torness, but refused to come out against other facets of nuclear power.

Indications are that the next mass event will be in Glasgow next Spring, and will be organised by the Glasgow Energy Group.

dragons against nukes..



Tornessie en route to inspect the Coal, Conservation and CHP exhibition.

Photo Black Box



... stags against nukes...

Two days after the Edinburgh rally, members of a group calling itself the Stop Torness Action Group destroyed part of a display in the Electricity Board's showrooms in Dunbar (the town nearest Torness). A spokesperson for the group said that 'the group has been born out of frustration that no matter how much evidence is produced against nuclear power, the governing bodies will carry on regardless with the nuclear programme', and they said that the group are planning more actions.

and finally...

Leo Abse, MP for Pontypool, has called for the publication of secret studies on the safety of existing nuclear power stations.

Otherwise, he says, the forthcoming public enquiry at Portskewett in South Wales would be a fiasco, repeating all the mistakes of the Torness enquiry.

But the CEBG say that this is unnecessary because such surveys are 'already published in a limited sense'.

[Guardian 11/10]

HOME NEWS

Leukaemia Rate Doubles

The incidence of leukaemia in Lancashire's major towns doubled between the late 1960's and the early 1970's, according to studies carried out by Manchester University.

The cause of the Leukaemia has not yet been found, but the patterns of the increases is said to be very similar to that observed amongst the survivors of the atomic bombs in Japan.

The report of the studies, in the *Lancet*, comments 'recent studies of radioactive contamination of molluscs off the Cumbrian coast, and government monitoring of radioactivity in coastal waters and fish show that radiation exposure to the population in this part of North-west England has risen steadily over the past 10 to 15 years.'

The incidence of leukaemia does not quite follow the same pattern as the increase in radioactive leaks. But no information has ever been made public about releases during the bomb making period in the 50s and 60s, when a lot of

waste was almost certainly released into the atmosphere and the sea.

Scientists have also been hampered by the lack of statistics about the national incidence of leukaemia. These statistics, vital for any survey of radiation induced deaths, have not been made public since 1970. No explanation has been given. (Footnote; this is the area around Windscale)

British Nuclear Fuels have dismissed any connection with Windscale as 'highly speculative' (as is to be expected).

But government safety officials are worried, and will be investigating the increase.

A spokesperson for the National Radiological Protection Board commented 'There certainly appears to be an increase in the leukaemia death rate. It is not obvious that radiation is the cause, though. A lot of things can cause leukaemia, including chemicals, and there is a big chemicals industry in Lancashire'.

[*Lancet* 2/10]



Die Today . . .



... The Nuclear Way

Leeds anti-nuclear group hold a die-in. After a brief procession round town, over 50 white faced, sheeted, corpses litter the pavement outside one of Leeds' biggest stores.

The display included the Civil Defence checking for radiation, barrels of nuclear waste, a jazz band, an exhibition, and real life policemen. [photo Peace News]

In Brief

British Nuclear Fuels Ltd., has admitted that it dumps 1500 gallons of radioactive waste each week into the sea near Liverpool.

The fluid, technetium 99 and uranium, goes along a 3 mile pipe into Liverpool bay off Meols on the Wirral, Merseyside. It comes from the uranium enrichment plant at Capenhurst.

But a recent report says that this dumping is completely safe, and will have no effect on holiday-bathers or fishing. The report was compiled by - guess who - BNFL.

[*Guardian* 12/9]

Several Scottish islands would make excellent sites for the dumping of high-level radioactive wastes, Mr. Keith Johnson, Director of Fuel Processing for the UK AEA, has told the British Association.

The benefits of Scottish islands would seem to be not the safety of the rock structure - which has not been properly surveyed yet - but because they're 'far away from centres of population' who might object.

The other advantage of an island is that 'if the government wanted to keep people away, they can keep people away' (for 100,000 years?)

The waste could be buried deep enough, he said, 'to make sure any leak (sic) would go into the sea and not the drinking water'. They're so sure their waste containers are perfectly safe they're planning for leaks.

[*Scotsman* 8/9]

A BNFL exhibition, Atoms for Energy, is touring the country. It's in London at the moment and will then be going to Cardiff (Univ. College Nov 1-15), Newcastle Civic Centre (Nov. 29 - Dec. 13) Edinburgh Royal Scot. Museum (Jan. 24 - Feb. 7) and then Glasgow McClellan Galleries, in March.

Members of the public are invited to go and express their views. SCRAM Edinburgh will be demanding the right of reply when it comes here.

The CEBG (Central Electricity Generating Board) are expected to announce soon a decision to build an American designed Pressurised Water Reactor (PWR).

This is the type that blew at Harrisburg and - more recently - Red Wing, Minnesota. The decision has been taken as the generating boards have finally accepted that the AGRs (the British design, as planned for Torness) are totally uneconomic to run. The American design, which cuts corners on the safety costs, is the only design to have even an outside chance of not making a crashing loss. The CEBG have refused a demand from Friends of the Earth to release safety studies relating to these reactors.

The site is not finally decided, but Dungeness (Kent), Sizewell (Suffolk) and Hinkley Point (Somerset) are all on the shortlist.

[*Hastings News* 13/9]

Workers

The 11 week strike which closed Windscale reprocessing plant ended at the end of September.

100 workers walked out demanding better safety after 8 workers were contaminated by a radiation leak. But they have now settled instead for more money for working where the accident occurred - an extra 5p an hour.

The strike cost £1 million.

*Residents living within a mile of Windscale are all to be given fact sheets on what to do in an emergency. The fact sheets, which tell people to shut all doors and listen to the radio in the event of an emergency siren sounding, appears to have taken just over 22 years to prepare.

Union officials are assessing more than 70 compensation claims against the defence ministry arising from plutonium leaks at Aldermaston.

And the body of a worker who died of cancer after leakages there, has been taken to Windscale for radiation tests.

[*Guardian* 28/8]

6 workers at Trawsfynydd nuke in North Wales have been contaminated with radioactive dust which passed undetected through 2 decontamination rooms. An inquiry has started.

[*Guardian* 31/8]

INTERNATIONAL NEWS

Literally hundreds of accidents at West German nuclear plants have been covered up, a report issued last month shows.

West Germany's nuclear industry has always been held up to be the safest in the world. But a report by the Federation of Environmentalist groups has revealed a secret list of accident reports made available to the government between 1965 and 1977. In the last two years there has been on average one nuclear accident every three days.

The report discloses an agreement between the government and the Society for Reactor Safety, whose job it is to allay public fears about safety. This agreement gives the operators of nuclear plant 'copyright' on all disclosures of nuclear accidents. It gives the government no power to reveal incidents if the operator wants them to remain secret.

As an example of public lying, the FEG cites the government 1976 public documentation of accidents. This claims there were only (sic) 14 accidents during that year, while their secret internal documents show the real figure to have been well over 100.

The content of incident reports is also criticised - they were all produced by the power companies involved, with no double checking by outside observers.

The FEG has called on the government to reveal details of all accidents in future. Until these revelations, the public had no idea there was any cover-up of accidents at all. Shows how easy it is!

[Guardian 27/9]

US - the submarine nuclear fuel plant at Erwin, Tennessee, has been ordered to close down for a uranium inventory examination, after the disclosure that 9 kilograms of highly enriched uranium have gone missing in the last year. Around 120 kilograms are unaccounted for over the last decade.

The problem is at least partly due to the industry's inability to find an adequate stock-checking system for their nuclear store. The operators of the store claim that this does not necessarily mean that 9 kilograms have been lost; just that 'random errors and biases are so potentially large that they may wholly mask any actual theft that is taking place'. Reassuring.

[Guardian 9/10]

U.S. - several thousand radioactive Tritium tubes have been found in a paper bag on a waste tip in Tucson, Arizona. Now police are searching for possibly several thousand more.

They come from the American Atomic Corporation factory, which made luminous dials for watches before it was taken over by the state two weeks earlier because of lax safety.

This follows an earlier, still unexplained incident when Tritium was discovered in chocolate cake about to be served to 28,000 school children in the area.

[Guardian 11/10]

442 victims and heirs of victims are suing the US government for compensation for cancer they say was caused by fall-out from the atom bombs tests in Nevada between 1951-62.

[Guardian no date]

Metropolitan Edison recently announced the planned re-opening of Three Mile island 1 nuclear reactor, which was shut down for repairs when unit 2 had its wee accident on March 28. The anti nuclear groups of Central Pennsylvania have warned that thousands of local residents will occupy the site when the plant is due to start up.

[WISE]

The World Council of Churches, meeting in Massachusetts, has called for a five year halt on building new nuclear power plants to enable widespread public debate on the risks, costs and benefits of nukes.

[New Scientist 2/8]

Radioactive gas escaped from a nuclear power plant at Red Wing, Minnesota, after a steam generator pipe burst at the start of October.

A state of emergency was declared at the plant which is about 40 miles from Minnesota. But authorities decided not to inform local residents about the alert.

One of the reactors at the plant had been scrambled, and protestors are demanding that the other be closed down immediately for safety checks.

[Scotsman 3/10]

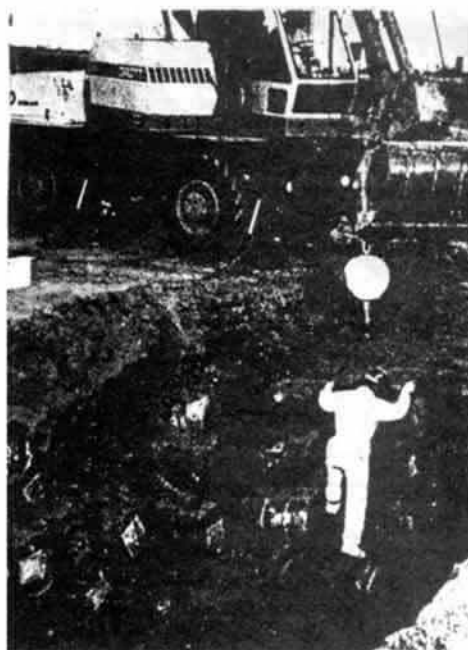
At least 20lbs of weapons grade enriched uranium has been 'lost' from a uranium plant in Tennessee, since the last stock check in June.

And the American NRC has now admitted that over the 11 years to December 1978, a staggering 242 lbs. of uranium has been lost from that plant alone; enough to make at least 6 atomic bombs.

The plant has now been closed down for enquiries.

Meanwhile the US Air Force has been searching the atmosphere to see if any of the missing stuff is up there, but has found nothing so far.

[Guardian 25/9]



Waste dumping at Idaho, US. And they call it safe!

The Irish government has decided to have a public enquiry into the proposed nuclear plant at Carnsore, Co. Wexford this autumn and wants a conclusion by the end of this year. Special legislation will be introduced to bypass local council and to adjudicate the inquiry in Dublin.

They plan to build 4 reactors at the site - even though the Ministry for Energy claims only two are necessary.

[WISE]

Spain

97 mayors from towns and small villages in Western Spain have started a sit-in protest strike against the construction of nuke at Valdecaballeros. The mayors belong to all the main political parties, including the ruling UCD party. The mayors have called for a general strike throughout the area, and a total breakdown in local government has been reported.

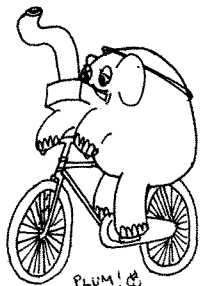
[Guardian 31/8]

Sweden - 50,000 people demonstrated against nuclear power in 90 towns and cities throughout Sweden on August 26th. The action was organised by the Swedish group 'Women fight for Peace', and at least 90% of those demonstrating were women.

The action was part of the attempt to educate the Swedish people about nuclear power in the light of a proposed referendum next Spring. Recent opinion polls there suggest that 63% of Swedish women are against nuclear power, compared with 36% of men.

The Nuclear Cycle

THE FUEL CYCLE STRETCHES ROUND THE WORLD...



Nuclear Power is not just a load of leaky reactors.

There's plenty of other places where things can - and do - go wrong.

It all starts at
THE URANIUM MINE



Uranium ore is mined and concentrated into yellow-cake - a mixture of two uranium types (isotopes) called U-235 & U-238. Only U-235 can be fissioned to give energy, but it makes up less than 1% of the uranium.

Down the mine, radioactive radon gas gets into the lungs...so not many uranium miners collect their pensions. The U.S. Public Health Service out of a total of 6,000 underground miners, between 600 and 1100 will die of lung cancer through radiation. And they say nuclear power hasn't killed anyone!

US miners - and their widows - say that miners can sometimes swing a geiger counter to its limit just by breathing on it, they have so much radioactivity in their lungs.

The SSEB (South of Scotland Electricity Board) propose to build a nuclear power station with planning permission for four reactors at Torness, East Lothian.

No AGR has ever achieved its expected output. None have ever been built on time. None is as cheap as conventional power stations or conservation. Most of them have had safety problems.

The British designed AGR is an economic disaster. 'A catastrophe we must not repeat' - Sir Arthur Hawkins, former head of the CEBG. So now the CEBG (Central Electricity Generating Board) are planning to buy in Pressurised Water Reactors (PWR) from the US. These are marginally cheaper because they make various short-cuts in the safety of the materials used. And export models are notoriously less stringently made than those intended for the home market. The Three Mile Island reactor near Harrisburg was a PWR before it blew. Cracks have been found in PWRs in France. (Mind you, some of our AGRs aren't too good this way either).

Japan may buy uranium from S. Africa, convert it in Britain for enrichment in the US, push it through a reactor at home, send the spent fuel to France for reprocessing, and get back a load of plutonium....

Many think the risk of accident, theft or sabotage is the greatest during the transport of nuclear materials around the cycle.... they're moved by road, rail, sea and air....and today's flow of traffic threatens to swell to a flood over the next two decades....

ACCIDENTS HAPPEN!

SHIPS SINK

LORRIES CRASH...

SO DO TRAINS AND PLANES!

PEOPLE GET CARELESS!
PEOPLE GET CORRUPTED!
PEOPLE GET BLACKMAILED!
PEOPLE STEAL!

TERRORISTS GO IN SHOOTING!

Cartoons & some of the text from "Nuclear Power for Beginners", published by Writers' and Readers' Publishing Co.-Gp. Available from SERAM, 2a Arndie Place, Edinburgh 3. Price £2.00 inc. p.p.

THE NUCLEAR LOBBY IS

-The Electricity Boards, who get their advice from pro-nuclear scientists working for them. The advice is one-sided; anti-nuclear scientists are obviously unlikely to work for nuclear organisations.

- The Defence industry, who need the plutonium produced by reactors for making atomic bombs. This was the primary function of Britain's first nuclear power station at Calder Hall (in spite of what the Queen said!)

- The main uranium mining countries - Australia, South Africa, America, etc. They're sitting on a radioactive goldmine if they can persuade us to buy it.

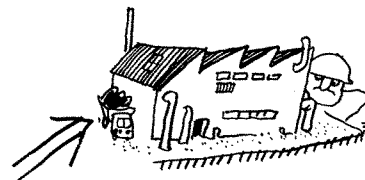
- British Nuclear Fuels Ltd. (BNFL), the major nuclear company in Britain. Their first responsibility is to make as much profit from nuclear power as possible.

- The Atomic Energy Authority (AEA) - the government body responsible for planning the nuclear programme. A quango not yet axed by Thatcher. They have huge resources available, and can put aside over £100,000 for defending nuclear power at a public enquiry.

THE ANTI-NUCLEAR LOBBY consists of the People.

TOGETHER WE CAN STOP NUCLEAR POWER!

THE ENRICHMENT PLANT

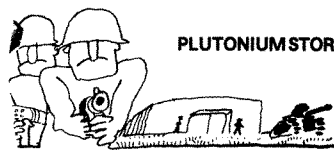


Where the U-235 content of the uranium is raised to 2-4%. Enrichment plants cover hundreds of acres....they're tremendously expensive....and they consume as much electricity as a city of half a million people....

The Anglo-Dutch company, URENCO have got one at Capenhurst. Other lucky owners include Russia, China and France.

They provide the raw material for A-bombs....South Africa's got one and Brazil's getting one (if they can sort out internal opponents....)

PLUTONIUM STORAGE

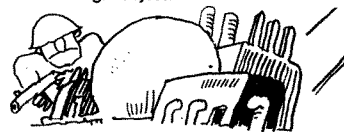


Where plutonium is kept for possible re-use as breeder fuel....

FAST BREEDER REACTOR [FBR]

Besides running on plutonium it converts U-238 into more plutonium (but very slowly....) which can be used after reprocessing to fuel more breeders. Britain is currently looking for a site for a first FBR; Downreay looks good, but it's rather a lot of cable to the nearest population centre. And the trouble with other places is they're near population centres, which might object.

or put aside for....



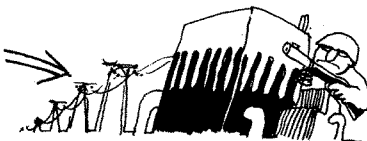
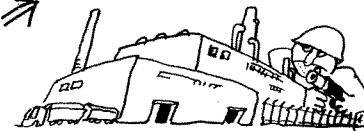
MILITARY USE

A lump of plutonium the size of a potato will give you quite a respectable little bomb.... There's 'statistical uncertainty' (they've lost it) about 4 or 5 tons of nuclear weapons material in the US alone....



FUEL CONVERSION PLANT

The enriched uranium is converted into oxide pellets which are packed ready for use in the reactor..



THE NUCLEAR REACTOR

The fuel fissions in the reactor core to generate heat for electricity production....and plutonium and radioactive 'fission-product' waste.

Fission; a neutron hits the nucleus of a uranium atom, which absorbs the neutron but becomes unstable and splits in two, releasing energy and 2 or 3 new neutrons. These fission more atoms, and so on, and you get a chain reaction. The fissions occur every 50 billionth of a second, so a lot of energy is released very rapidly, and it's not so easy to get them to stop reacting in an emergency....



THE REPROCESSING PLANT

The spent fuel is broken down by acids....the unburnt uranium and plutonium are recovered... and the waste remains....

A reprocessing accident can be at least as dangerous as a reactor accident, yet the reprocessing plant lacks most of the reactor's safety barriers.

Britain's is operated by BNFL and is at Windscale, as the people of Cumbria know to their cost; in 1957 2 million litres of milk in an area 500 square kilometres downwind became contaminated and had to be thrown away after a fire there. (Don't believe their pictures of happy looking cows chewing the radioactive cud in the field next to the plant).

In 1973, 35 workers were contaminated because of a poor emergency drill; radiation alarms sounded so frequently that the workers took no notice of them, according to the report of the accident.

In 1977 two widows were awarded £20,000 compensation for their husbands who died of cancer and leukaemia as a result of working at Windscale.

And a recent report has shown that the incidence of leukaemia in towns near the plant has doubled in 15 years.

75 accidents have been reported at Windscale over the last 2 years. And the waste remains...and remains...and remains....

WASTE STORAGE AND DUMPING

Highly radioactive (high level) waste is so toxic that it must be isolated away from all life for centuries or millennia! Meantime it's being stored in leaky tanks while they try to figure this one out.

Interim storage is a neat way of passing the buck....but liquid radioactive gas is a sizzling peril. In the US more than 400,000 gallons have seeped away from one storage facility at Hanford on the Columbia River.

There was also a big leak from Windscale's storage tanks in 1976. The management responded in the true spirit of the nuclear industry - they tried to hush it up, as they wanted to expand the plant further.

BECAUSE OF THE IMMENSE TIME IT TAKES FOR A HIGH LEVEL WASTE TO BECOME HARMLESS, NO METHOD CAN BE GUARANTEED COMPLETELY SAFE:

Any area set aside for waste dumping, like the Galloway hills must be kept secure from the public for **hundreds of thousands of years** by an armed security force geared to combat terrorist threats.

Faulty containers are already leaking under normal conditions. So how can they be guaranteed for 100,000 years in the sea, under the hills?

THERE ARE ALTERNATIVES. WE MUST RESEARCH THEM. WE CANNOT AFFORD TO GO AHEAD BLINDLY WHILE THESE PROBLEMS REMAIN COMPLETELY UNSOLVED.



URANIUM MINING and NATIVE PEOPLES

In early October, 2 representatives of the Indigenous peoples of North America visited Edinburgh on their way to a conference on Copenhagen on the impact of uranium mining on indigenous cultures. At a well attended and powerful meeting on 4th October they told of thousands of their people dead and dying of cancers, radiation sickness and genetic deformities caused by vast uranium extraction operations on their lands; and they told of the devastation of their reservations by 30 years of coal and uranium mining. Here is a written message left by Winona LaDuke, a Chippewa.

To the people: About 100 years ago a Lakota (Sioux) man named Crazy Horse said "One does not sell the earth on which one lives". To sell the earth, or to allow the earth to be sold to or controlled by an interest far away is to lose control of your lives and your children and the generations to come.

As Indigenous Americans coming to Scotland, we see this happening here, and we want to speak from experience as to the consequences - the issue of nuclear power.

Native nations in North America live on 4% of their original land-base (now called reservations). These reservations contain some two-thirds of all North American uranium; and one third of all North American coal. The federal governments of the US and Canada completely dominate our land, having forced us into poverty, disease, and colonialism in their efforts to make us American wage-slaves. This we have no desire to be.

Up until 1974 100% of all US government controlled uranium production was on Indian reservations. Today it is between 60% and 70% of US government production, representing some 85% of the total US uranium production. Although nuclear utilities and the governments never talk about it, uranium is killing many people. The figures run into thousands, including both uranium workers and the people in the communities surrounded by the mines and mills. Here are two of the very few 'official' figures:

In Canada: From uranium mining operations in Northern Ontario carried out by the Canadian government corporation Eldorado Nuclear, out of a total work-force of c.275 miners, 81 have already died from radiation-induced lung cancer.

In the Navajo Nation (S.W.U.S.):

As of this year (1979) in a group of 100 Navajo uranium miners being monitored, 25 have died of lung cancer, and 45 have the disease: it is expected that eventually all 100 will die of it. These miners are all from one mining operation carried out by Kerr-McGee at Red Rock Cove, who employed a total of 250 Navajo miners.

Uranium is what kills, not nuclear power plants. Our people are told to work in the mines for wages so we won't be so poor. There is no other employment in the area. The mines last an average of 20 years, and the cancer shows up in 25 years after exposure to radiation. By then the companies are gone, the reactors fuelled, and the bombs made.

The people live off the land in agricultural and ranching communities (most do not speak English), with little need for the electricity. It goes to cities and industrial centres far away. In fact whether they need it or not local people don't get it: in one year the Navajo nation exports enough energy resources to fuel the large and highly industrialised state of New Mexico for 32 years. Yet 85% of the Navajo are without electricity. This is an energy colony; this is genocide.

A Navajo and a Chippewa came to Scotland to help stop it from happening here. There are many similarities in our economic and political situations, as well as in the life-styles and strengths of our peoples.

When about 60,000 acres of Scotland are owned by the military, with the NCB owning another 60,000; with

over 1 million acres under foreign ownership, and with the mineral rights throughout the Highlands in the hands of exploration companies, there is good reason to be concerned over the future of the land on which you live. What is happening on our land is a blueprint for what will happen in Scotland.

We have come to communicate with the people because we are all being treated like 'Indians', 'Aborigines' & 'Blacks' now. The people are becoming burdens to the plans for technological 'progress' of the nation states and the multinationals.

These plans are not for the benefit of the people but for future industrialisation, mining and militarisation of the area. We must organise to fight for the earth and future generations.

Go to the people who do not come to demonstrations or read about the issues or know about the dangers. Go to the schools, the churches, the land-owners, the workers, the press. As Einstein said: 'To the village square we must take the question of nuclear power.'

We would like to thank SCRAM of Edinburgh and the Orcadians for their support and hospitality and inspiration. We are also grateful for a view of the 'other side of the U.K.'

Anishnabe Mishkozeewin - or - power to the people -

Herb Blatchford
Dineh Nation [Navajo]

Winona LaDuke
Anishnabe Nation [Chippewa]

200 Indigenous Indians enter the UN, Geneva for a conference on "Discrimination Against Indigenous Americans" Sept. 1977.



SCRAM SHOWS

Coming soon from SCRAM is a new film, *On Site '79*, the film of the May Tormess Gathering.

A film of SCRAM supporters captured all the action; speeches, festivities, the tense meeting on Saturday night, the occupation of the reactor site and the compound - the activities, discussions and resolutions of the weekend.

Should we continue to occupy reactor sites? What are the views of local people? The film may not provide definitive answers, but it's sure to stimulate discussion.

16mm, colour and sound, 40 mins.

Also available is 'SCRAM', the BBC Open Door film. This covers uranium mining in Orkney, waste dumping in Galloway, and Tormess.

People directly threatened by nuclear power voice their opposition. 16mm colour and sound, 30 mins. Cost £15 inc. postage and insurance, from SCRAM.

And we have two slide shows with, 70 slides each and written scripts. One is a slide show from the film 'On Site '79', the other is an introduction to nuclear power and why we oppose it. Hire of each is £2.50 inc. carriage.

Two exhibitions are available; Tormess and Nuclear Power - 15 large panels on nuclear power in Britain and particularly Tormess, hire £10. And the latest exhibition is 'Conservation, Coal, Combined Heat and power', SCRAM guide to the alternatives NOW. 11 A2 panels from SCRAM's new pamphlet of the same name. Cost £5.

All are available from SCRAM, 2a Ainslie Place, Edinburgh 3.

The occupation of Tormess May '79, from the film 'On Site '79'.



POWER MAN!

The Manx government opposed the expansion of Windscale at the Inquiry in 1977. However, in recent months they have been viewing nuclear power as the answer to all their energy problems.

The island's present needs are 45 megawatts per year for a population of 65,000. If the whole island was all-electric the figure would be 150-175 megawatts. The population has risen rapidly over recent years as part of the government's tax haven policy. The government project a growing wealthy population who are by nature high energy consumers. The projection is for a demand of 160 megawatts in 10 years. At the moment the islands' electricity is produced by three oil-fired power stations. They have all been converted from coal.

A campaign is growing on the island - contact is Hazel Hannan, Brotby, Peveril Road, Peel, Isle of Man. They are particularly interested in any information about Rolls Royce nuclear generators for commercial use; please get in touch if you have any info.

When the *New Scientist* first published a report of the 1957 Russian nuclear disaster in the Urals, Sir John Hill, chair of BNFL and the AEA dismissed it - of course - as 'rubbish' and 'a figment of the imagination'.

But since the release of surveys confirming it by the CIA and others, the argument has been about the size of the disaster, not whether it occurred.

It's now accepted that there was a major explosion, possibly in a waste storage tank, at Khystym, killing hundreds, possibly thousands, of people. An area of about 1500 square kilometres, including several lakes, has been rendered uninhabitable for centuries and some 200,000 people have had to be evacuated. This information was concealed by not only the Russian authorities, but also by the CIA, who knew of it at the time.

Now a new book on the subject has been published by Dr. Medvedev, a leading Russian geneticist now working in London, called 'Nuclear Disaster in the Urals', it's published by Angus and Robertson.



"It's simple, it kills everybody within 20 miles."

We are about to take on extra rooms in our office in Ainslie Place, which should mean that people who need to work in peace can do so while the front office can, hopefully, become more of a place for people to drop in and chat.

Meantime, we would apologise to anyone who may have felt that we didn't give them our undivided attention when they came in to see us - it's not always easy when you've got 25 things to do before 6pm and haven't had time to eat since yesterday lunch..... (boo hoo, etc.)

SMELT DOWN

After less than an hour's discussion a standing committee of parliament has agreed to give the Scottish electricity companies £11 million. This is in respect of losses made in the past year as a result of a contract to provide electricity to British Aluminium Co. for their smelter at Invergordon.

The contract was signed in 1968 by the North of Scotland Hydro-electric Board and was based on the lots and lots of really cheap electricity expected to be produced by Hunterston "B" AGR, which was then under construction. The contract provided for British Aluminium to pay an appropriate share of the running costs and the building costs of Hunterston, in return for a very low fixed price supply of electricity.

Unfortunately, Hunterston was four years late in being switched on, could not produce as much electricity as planned, and what it did produce cost far more than anticipated. And at the moment, of course, Reactor 4, damaged by the sea-water leak two years ago is still not producing any electricity at all.

So the Board is now stuck in a 30 year contract to provide electricity to British Aluminium at a huge loss, which has to be made up by the tax-payer, through a special annual vote by parliament.

Following the debate, Robin Cook, MP has complained about the matter to the Scottish Office. He has said that he will be opposing the payment next year, unless he is given a firm estimate of the total cost to the public over the 30 years, and unless there is some attempt to renegotiate the contract.

'Nuclear Power — Anyone Interested?'

Well, I suppose a few people are interested. And as time goes on more and more people are becoming interested and worried. But there is a lot of work and education to be done. We at Aberdeen People's Press, working with S.C.R.A.M. North East have produced what we hope is a lively and informative illustrated book on nuclear power. Our aim is to convince a few more people of the folly of embarking on the road to a nuclear society.

The book takes the form of a series of situations which an ordinary Scottish family find themselves in. Each situation highlights one particular aspect of nuclear power. Radiation, mining, transport, jobs, energy needs, waste and insulation are all covered in comic-strip form. As the story progresses the parents start to question the safety of, and need for nuclear power. Beneath each strip is a written text explaining in simple language that particular topic

e.g. radiation, what it is, what it does to you, how much is dangerous etc.

As publishers we would hope that the publication of this book will cover its costs but are not trying to make any money from it. The price therefore is only 60p for 32 pages plus a very colourful yellow and red cover. Distribution will be by Scottish and Northern Book Distribution Co-operative Ltd but S.C.R.A.M. and other environmental groups can order in bulk direct from Aberdeen People's Press at the reduced price of 45p per copy. Groups selling the book can therefore raise money as well as spreading the word. Any bulk copies bought by local groups may not be placed in bookshops as this is the function of S&N D.C. but may be sold in small local shops as well as individually. Please use the form below to order. Money must be sent with the order. If groups are penniless perhaps an individual would put up the cash until the books are sold.

Scottish and Northern Book Distribution Coop Ltd 45/7 Niddry Street, Edinburgh EH1 1LG



Please send.... copies of "Nuclear Power - Anyone Interested" at 45p per copy.

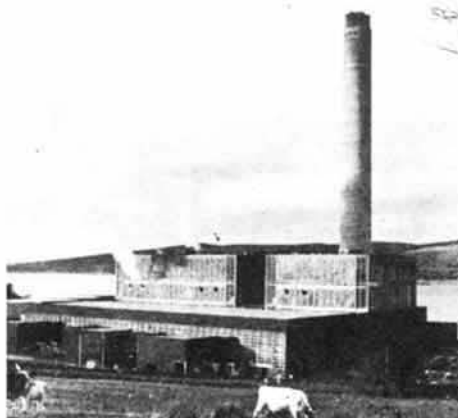
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RETURN THIS SLIP TO A.P.P., 163 KING ST., ABERDEEN, SCOTLAND.



Inverclyde oil-fired power station was opened on September 26th, bringing the SSEB's overcapacity over the highest (winter) demand to 86%.

LOW-LEVEL RADIATION AND HEALTH.

Seminar October 29th 1979. 10am to 4.30p.m.

In the light of growing controversy on the health effects associated with low-level radiation, the Medical Student's Council of Edinburgh University is organising a seminar to contribute towards an informed discussion of the issues.

Dr. Karl Morgan (former Chairman of the International Committee of Radiological Protection), Dr. Alice Stewart (Senior Research Fellow of Birmingham University) and Sister Rosalie Bertell (Researcher from Roswell Park Memorial Hospital, New York State), will explain their criticisms of the ICRP's latest recommendations (which would effectively raise dose limits) and present evidence on the medical implications of exposure to low-level radiation.

If you would like to attend this important seminar, please fill in the form below or inform other people in your area who might be interested (e.g. Trade unionists, Health Board Officials, Community Groups and Councillors).

Please return the form to: Ewan Crawford President Medical Student's Council, Students' Association Offices, Bristo Street, Edinburgh.

The fee for the day is £5, (conference fee reductions available on request) including tea/coffee, but not lunch.

If we should like to attend the meeting on October 29th, 1979.

Name.....

Address.....

A cheque/P.O. for £ is enclosed, made out to Ewan Crawford, M.S.C.

MONEY

The rally in Edinburgh was successful and got us some good publicity etc., BUT...the costs were huge and the collection wasn't.

We need £1000 extra between now and Christmas just to carry on as we

WHO IS SCRAM?

SCRAM was established at a meeting at Torness Point in E. Lothian in November 1975. SCRAM, in nuclear jargon, is to shut down a reactor in an emergency.

Our aims are:

To inform the public of the present and proposed nuclear developments, and their social, political and environmental consequences. To oppose by all non-violent means the further development of nuclear power in Scotland and elsewhere.

To press for a long term energy strategy based on conservation and the use of renewable resources.



SCRAM has no paid-up membership, and everyone who wants to help the campaign is welcome. Decisions are taken at weekly meetings which are open to anyone and are at 2 Ainslie Place, 7.15p.m. every Monday. We try to take decisions by consensus (general agreement) rather than votes.

We are funded solely by donations and sales of literature, so we depend on public approval to survive. We desperately need a regular income to rely on; so we ask supporters to fill in the Banker's Order form. It's painless - the manager does it for you - and allows to plan ahead; £5 a month from 200 people would give us £12,000 a year.

We also appreciate subscriptions to this magazine. To keep the price down we need a large subscription list. Subscribers make sure of getting each issue (before the shops), and get occasional bonuses. Buy one for your favourite politician or nuclear scientist today!

We take adverts - providing they're not sexist, racist or just plain sick.

Published by the Scottish Campaign to Resist the Atomic Menace (SCRAM), 2a Ainslie place, Edinburgh 3 (031-225-7752)

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have been. (That's before any extra activities are thought about).

So if you support us, please send us a donation, however small (or big....) The Banker's Order form provided here makes it easy for you to give a regular donation. We also need lots of subscribers - If you've already got a sub, why not buy one for a friend?



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Signature.....

Date.....

Name..... (Please print)

Please send this part to SCRAM, 2a Ainslie Place, Edinburgh EH3 6AR.

Name.....

Address.....

I have sent a standing order to my bank which will give SCRAM £..... every..... (frequency) starting on..... and finishing on..... (or when I cancel it). I would/would not like part of it to pay for my sub to the Energy Bulletin.

The single from the Cheetahs, 'I don't wanna be radioactive', is now available from SCRAM at £1.20 including p. & p.

GORLEBEN LIVES

On September 9th, 1,500 troops moved in to Gorleben to safeguard the start of the building of a nuclear reprocessing plant there.

This was despite the announcement in May by Premier of Lower Saxony, in West Germany, that 'while public opinion is not convinced of the need for such a plant I cannot recommend its construction.' This was after a demonstration by 100,000 people.

They were met by 200 local people who had camped out on site overnight. They were dragged away and beaten up. Some managed to escape into trees which were then chopped down, severely wounding many of the occupants.

Over the next few days local farmers erected road blocks which successfully kept some of the lorry convoys away from the site.

Two days after the tree cutting event, several thousand people demonstrated in Hamburg, Bremen, Berlin and other major cities. Then on the Saturday 6000 people gathered at Gorleben.

The British press has maintained a total silence on the events of that week, so we print here an eye-witness account.

Because of the West German state security laws we cannot print the author's name. Under the Berufsverbote, writing this report would bar the author from any public-paid job.

Frightful Demo

'It was a frightful demo (on the Saturday): in the woods you could see the troops. It was war-like, green helmets and uniforms, armoured cars all along the way to the site.'

'And when we arrived we faced some 2,000 troops behind a ditch, 5 ft. deep and 12 ft. wide. They had their grip on long truncheons and their chemical maces, and lots of cameras, movie and still ones. Everyone of our moves found its way onto film to be filed and later used in courts, and when we try to get a new job.'

'But that Saturday, open confrontation was avoided. The protestors brought down two masts with floodlights (to get

better photographs of the demonstrators) and then everyone left the site; an occupation, symbolic or permanent, is no longer possible.

Future Plans

For the future, there will be a mass demonstration in Bonn on October 14th and we will continue to concentrate on industrial sabotage. Road blocks, picketing of the supply firms and attacks against the site itself are being considered by the local farmers and protestors from all over Germany. Speeches about atomic power and the alternatives have no future here where the state is determined to put through their deathly atomic power programme.

'Our answer is direct action, and the kind of action is determined by our opponents; their tactics and their violence and their weakness.'

'What Happened to us?'

At the rally, Lilo Wollny, a local housewife who is in her fifties, spoke about her experiences on the day that work started. It is an example of the militancy that has developed over the last year amongst the 'ordinary' people in Gorleben, and we print an extract below.

'People who weren't here on Monday missed how saws have been used not only to cut and demolish this wood, but to demolish and cut all humanity and democracy at the same time.'

'We believe in democratic principles, but we cannot see any democratic order behind the activities the police and troops use against us. What happened to us? Brave housewives sit together and discuss the preparation of a picnic and how to behave when being arrested. Try to imagine that! We sit there and talk about



our arrests as it we were swopping recipes for our cooking. Had anyone told me about this years ago I would have laughed at them. Monday: when I tried to reach up some refreshments to people occupying trees, this 20-year old soldier says 'Get lost you bitch' and hit me with his hand. I had to stop my husband not to twist his neck as behind this fellow there were two others with their water pistols filled with chemical mace, only waiting for my husband to loose his temper.

'It had cost him all his nerves, he wept when I led him to our car. I have never seen so many men and women weeping.'

'And then on your way home you travel through the villages and see people 'peacefully' sitting in their gardens drinking coffee. What is going on inside these people?...

'Believe me when I say I haven't met one who is keen on a battle against state violence and the brutal apparatus. They are just as afraid as we are, only they have a long future in front of them which they want to defend. I ask all of you, talk to each other, get to know each other. Together we are strong. Then we can say: Even if the trees die, Gorleben will live.'

For your Diary

25 Oct: The cyclists on the tour of British nukes arrive back at Torness.

27th Oct: Nuclear Weapons protest, 2-6p.m., St. Martin's in the Field, London. Stalls, Films, Exhibitions. Rally 6.30 at Central Hall, Westminster. Details CND, 01-242-0363.

27th Oct: London seminar on the effects of low-level radiation, 10 am - 4.30pm, Greenwood Theatre, Guy's Hospital Medical School. Speakers Karl Morgan, Dr. Alice Stewart, and reps from the Health and Safety Executive, Medical Research Council & NRPB. Phone 01-407-7600. Ext. 2995.

27/28 Oct: Torness Alliance meeting in Manchester. Contact 061-273-2044.

29 Oct: Edinburgh seminar on low-level radiation - see p. 10 for details.

3 Nov: Scottish Groups meeting (reminder). Phone 041-221-6727.

10 Nov: Conference to launch the British Anti-Nuclear Campaign, London School of Economics. Bookings from group representatives to Tony Webb, 9 Poland St, London W1.

HUNTERSTON LEAKS

Hunterson nuclear power plant has had its fourth leak in two years. Now only one of the four reactors at the SSEB's nuclear showpiece is working.

Reactor A2 was shut down on September 14th when water was discovered leaking from a boiler tube. The SSEB say there was no radiation danger in the incident, but the government's Health & Safety Executive were informed.

Reactor B4 is still closed after a sea leak into the building in October 1977 which will cost the consumer at least £38 million. And in November 1978, the discovery of a leaking radioactive waste disposal pipe was hushed up for two weeks while the SSEB 'monitored' it.

Then seven workers were treated after a radiation leak in March this year only days after a press tour designed to show how safe Torness would be.

These last two reactors are now work-

ing again; theoretically - one of them, B3, is shut down at the moment for 'routine maintenance.'

Another leak was reported by BBC Radio Scotland a week before. This story appeared on one news bulletin, but was then cut, and the BBC have refused to confirm or deny.

The SSEB have denied the incident, and claim it was just a routine safety check which the BBC must have seen and mistaken for an emergency.