SCRAM ENERGY BULLETIN

NUCLEAR POWER? NO THANKS

No 29

40p

CHeaP Heating
Sea Dumping

Nuclear : Expensive
Australasian News

Nuclear Free Wales

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Copy date for next issue:
Friday, 30th April, 1982.

DIARY

Apr. 10th	Scottish Campaign Against Trident demonstration in Glasgow.
Apr. 24th & 25th	WONT Conference at Bristol University Union, Queens Rd., Bristol. Contact Bristol WONT c/o 73 Cumberland Rd., Bristol.
Apr. 17th	Birmingham. Campaign Against Naimibian Uranium. Contract, National Strategy Conference.
May	Anti Nuclear Festival in Ullapool.
June	Meadows Festival Edinburgh. National CND Event
July 28th	Green Gathering, Worthy Farm, Glastonbury, Somerset.
July-Aug.	Peace March Scotland, Inverness to Edinburgh.
Aug. 21st	Nuclear Free Scotland Conference, Boroughmuir High School, Edinburgh.
Oct. 26th	International Conference to discuss the siting of American PWRs in the UK.

Credits

This magazine is produced for the British Anti-Nuclear campaign by the **Scottish Campaign to Resist the Atomic Menace, 30 Frederick Street, Edinburgh EH2 2JR. 031-225-7752.** We welcome contributions.

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Comment

Renewed Vigour

It has been a very busy month for the anti-nuclear movement in Britain. After the closure of British Aluminium's smelter at Invergordon in the North of Scotland, it became clear to many people that Torness is completely unnecessary.

The debate renewed itself with an interview with Dr. Norman Dombey of Sussex University on Radio Four. He claimed that the Scottish electricity consumer would receive a net benefit if construction at Torness were simply stopped. The Torness discussion continued on February 1st when Parliament debated the Select Committee on Energy's report [see page 3].

Suggestions from the media that the anti-nuclear movement is winning and the Government is backing down has not been met with cheers and cries of "we told you so". Instead, a renewed campaigning vigour is becoming apparent all over the country. On the Torness front this took the form of SCRAM erecting our sign and appearing on TV alongside the SSEB chairperson [see page 15].

As we go to press, Lothian Regional Council has voted by 28 to 17 to call for the abandonment of Torness. The Council will also be submitting evidence to the forthcoming Pylons Inquiry on April 19th in opposition to ALL the proposed routes, suggesting the lines should be 'undergrounded' for their entire length.

Meanwhile, an eminent body of academics has published a report reiterating the conclusions of the Scottish Consumer Campaign document "Cheap Electrickery" [available from SCRAM mail order; price £1.50 + p&p]. They claim that nuclear power is not, never has been, and never will be cheap [review page 10].

One reason for the media thinking that the Government is backing down is the postponement of the Sizewell Inquiry until January '83. Pete Wilkinson of Greenpeace clearly shows in his article [page 6] that the cancellation of the test drilling programme is a prelude to worse things and hence must be viewed with a certain amount of scepticism. We must remind ourselves of the 'leaked Cabinet minutes' suggesting the Government adopts a "low-profile approach" on nuclear power.

It's becoming increasingly obvious that nuclear power is unnecessary whilst the Government is renewing secret deals with the USA to sell plutonium for their weapons programme [see next issue of the Energy Bulletin]. We therefore applaud the declaration of a Nuclear Free Wales, and the work of the Nuclear Free Scotland Campaign, but must now consolidate our advances and inform Nuclear Free Councils that nuclear power is an integral part of the arms race.

We do recognise advances made in the appropriate technology campaign, albeit slow. The recent meeting in Manchester to discuss the Government CHP studies, and the Jobs from Warmth Campaign [see pages 8&9] are both examples of this increased momentum. But we must make sure that the alternatives are implemented in a way which is democratically accountable so that we don't slip into another State-controlled system. A State-run alternative energy programme which is simply designed to discredit those alternatives and subdue the population into accepting the nuclear industry with all its inherent dangers MUST NOT be allowed to flourish!

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IN PARLIAMENT

Energy Debate

Six months after the Government published its White Paper on Nuclear Power in response to the Select Committee on Energy's report, Parliament finally got round to debating the nuclear power programme on 1st February.

Nigel Lawson, Secretary of State for Energy, opened the debate by making it clear that the Government was still committed to its nuclear power programme on the grounds that it will reduce our dependence on fossil fuels and because "it offers the prospect of cheaper electricity supplies". But the nuclear industry is also expected to pull its socks up. The Government sees:

> "the need for a strong nuclear industry able to meet the increasing demands which will be placed on it, building safe and reliable plants to time and cost."

Hinkley Point B AGR station, which was the first of the Central Electricity Generating Board's Advanced Gas-cooled Reactors to be completed, was given as an example of how cheap nuclear electricity can be produced.

But, gone are the days when such statements could go unchallenged in Parliament. David Penhaligon, MP for Truro, had available a pre-publication copy of a report by the Committee for the Study of the Economics of the Nuclear Industry. The arguments in the report have been well rehearsed in the Energy Bulletin (see no. 25). The full cost of inflation, increasing reprocessing and fuel costs have not been taken into account.

Tony Benn, who was Energy Secretary when Torness and Heysham were given the go-ahead and when the last Government announced its intention of pursuing the Pressurised Water Reactor option, has either changed his views recently, or he is making full use of his position as a backbencher to say what he really believes.

He pointed out that the Department of Energy had produced a report when he was Secretary of State showing that there was no cost difference between coal and nuclear stations. He also says that "... I am, and always have been, entirely opposed to the pressurised water reactor..."

The following day when the report "Nuclear Energy; the Real Costs" was published, Tony Benn described it as a very important document which he believed would "scupper" the Board's plan to build a PWR at Sizewell. Had the report been available in 1978 the Labour Cabinet would probably not have authorised even the advanced gas-cooled reactors.

Scottish MP's were furious that nobody from the Scottish Office was present at the debate to answer criticisms. Since the closure of the Invergordon Aluminium smelter, it has become more obvious to many MPs that if there ever were any arguments for building Torness, they have now evaporated.

Two weeks earlier, Dr. Norman Dombey, an advisor to the Select Committee, and a physicist at Sussex University, attacked the SSEB's so-called 'robust economic case' for continuing with Torness:-

> "Torness is a very expensive reactor; the estimates of its cost probably make it the most expensive nuclear reactor ever built in any country, which means it will provide very expensive electricity. Now if that electricity is not wanted I think it quite likely that if work on Torness were just simply stopped then there would be a net benefit to the Scottish electricity user."

It was against this background that Scottish MP's began to demand some answers. John Home-Robertson, MP for East Lothian and Berwickshire will "not join those who wish to halt the construction of Torness, because the contract is irreversible and there are 2,700 jobs in my constituency..." but he goes on to say that:-

> ing of nuclear weapons or compre-
> storage of nuclear wastes in the Pac
> by any government as having deleteri
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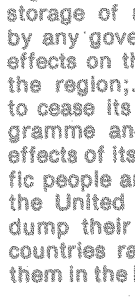
> the United States and Japan to store
> dump their nuclear waste in their hor
> countries rather than storing or dumpi
> them in the Pacific.
>
> WISE, 29.10.198



> "It will be hard to justify the commissioning of Torness when it has been completed unless the Government decide to close coal burning units. If that is the Government's intention, I tell them here and now that any such proposal would be (a criminal waste of our human and natural resources, and it would be) fiercely resisted..."

The Government are having increasing difficulty justifying the nuclear power programme on the grounds of cost. Robin Cook, MP for Central Edinburgh, pointed out that "the net effective costs argument did not cut much ice with the Select Committee nor with the Monopolies and Mergers Commission..."

Reg Race, MP for Wood Green offered another explanation of the Government commitment to the nuclear power programme:-

> "The policy of.... installing P.W.R.'s is an attempt to remove the bargaining power of a section of workers and to protect the supply industry from that problem."

But the Government remained unmoved. The debate was summed up by Mr. Moore (Under-Secretary of State for Energy) who is so convinced that the Government is right that he ended by saying that:-

> "straightforward commonsense underlines the Government's commitment to the development of nuclear power as a source of electricity."

But with growing opposition in the House of Commons to the Government's original strategy of building one P.W.R. ever year from 1982 onwards, and the increasing scarcity of public funds, their policies were bound to moderate sooner or later. Mr. Moore announces the Government's current viewpoint:-

> "It makes no sense to adopt a rigid plan or programme" and he draws M.P.'s attention "to the fact that the Government are not in the business of a 15GW, 10-year programme. We have made it clear that we are not committed to such a programme of new stations. Each will be considered on its merits."

Not quite a U-turn, but perhaps we're getting somewhere very slowly. The issue of nuclear power is very rarely raised in Parliament, but with an increasing number of M.P.'s taking an interest, it looks likely that it will be the M.P.'s who will take the final decision on the construction of a P.W.R. at Sizewell in '83 or '84. Let's hope we don't have to wait that long for another debate.

Refs.

"Nuclear Electricity: The Real Costs" Committee for the Study of the Economics of Nuclear Electricity, Worthyvale Manor Farm, Camelford, Cornwall, PL32 9TT.

"Hansard" Monday 1st February 1982.

Transcript of interview with Dr. Norman Dombey, Radio 4 World at One. 17.1.82.

News News

MW Muddle

On the 14th February Bradwell nuclear power station in Essex was restarted, by the CEGB, after cracks and been found in its gas cooling circuits nearly three years ago. The investigation and repairs have cost £11 million and the CEGB calculates the net cost of replacing its output by other stations was £60 million.

In the Number 1 reactor, one of the six carbon dioxide cooling circuits has been blanked off until next summer when the equipment to repair it will be ready. Until then the reactor will maintain a gas pressure 10%-15% below normal and run at an output of 92MW, two thirds of the original design rating and less than its previous 122MW.

Guardian, 16.2.82

The C.E.G.B. hopes for approval to start producing power from Dungeness B this summer. The plant is already 11 years late and will run much below the design output of more than 600MW. They hope initially to run the reactor up to 150MW and then gradually increase it to 300MW.

The reactor will still need modifications to stop hot carbon dioxide from overheating the prestressed concrete reactor vessel. The problem is due to inadequate insulation on the "penetrations" — channels passing from the reactor through the pressure vessel wall. The modification allows cool carbon dioxide to be blown into the regions likely to overheat.

This increased nuclear capacity will allow the completion of a £30m refurbishing programme on seven Magnox reactors, which is expected to restore the CEGB's Magnox capacity to 3,200 MW by next winter. This may prolong their life by up to 10 years. As well as this, two more AGR's are to be commissioned this summer at Heysham and Hartlepool.

F.T., 3.2.82

Leaking Rods

The results of the Nuclear Installations Inspectorate's investigations into the circumstances of the release of radioactive iodine from Windscale in October have been reported to Parliament.

About 8 curies of iodine-131 were released to the atmosphere between 4th and 23rd October last year. Investigations by both British Nuclear Fuels Ltd and the Central Electricity Generating Board have established that the cause of the release was the processing of six irradiated fuel rods, only 27 days after they had been discharged from the Oldbury nuclear power station. The fuel should have been kept in storage ponds for at least 90 days at Oldbury.

The fuel elements were taken in error from a fuel skip containing newly discharged fuel, and sent in two skips to Windscale with other fuel identified as adequately cooled. At Windscale, BNFL relied on the accuracy of the documentation, and the fuel rods were sent for reprocessing.

The NII emphasised that BNFL must continue to store, for an additional 60 days, any irradiated fuel delivered for reprocessing, irrespective of documentary evidence, until improved methods have been developed for measuring the cooling of fuel after discharge from the reactor. The report also draws attention to its view that BNFL should have informed the Radio-chemical Inspectorate, the NII and the Ministry of Agriculture of the incident, before restarting the plant.

Electrical Review, 15/1/82

Channel Linkup

France has given the final go ahead for its part in a £500 million cross channel power link, which will allow the UK and French authorities to swap electricity supplies.
(What a neat way to get rid of the SSEB's embarrassing overcapacity).

The scheme will involve laying 8 cables under the sea-bed, to carry a total of 2000 MW between Bonninges-le-Calais and Sellinde in Kent.

The CEGB have already received authorisation to spend half of its £258 million share of the cost and expects to obtain outright consent for the ambitious project.

There has been a small cross channel power link of 160MW in operation since 1961.

F.T., 2.3.'82

Torness

On March 2nd, Lothian Regional Council passed a motion declaring its total opposition to the construction of the Torness Nuclear Power Station as the latter is unnecessary and undesirable. They called on the Government to abandon the entire project.

Furthermore, the motion that was passed, stated that if the Government mistakenly proceeds with building the station, then the transmission lines should be routed underground.

The Council also intend to take part in the Torness Pylons Public Inquiry.

Lothian Regional Council have already declared the area a Nuclear Free Zone and are refusing to partake in this year's civil defence exercise; 'Hard-Rock'.

The Public Inquiry on the proposed high voltage transmission lines from Torness will be held in Haddington on April the 19th.

The Inquiry will only concern itself with the routes the lines will take to connect with the National Grid, not whether, in view of [illegible] ey

F.T., 3.2.82

Dounreay Pills

In the last Bulletin we carried a story about how people who resided within thirty miles of a nuclear installation in Sweden were being issued with Potassium Iodide. Well, now, the people in Caithness living close to the Dounreay experimental Fast breeder are to get the same consideration.

Wot! No Alarms

Forty-eight US Nuclear Power plants failed to meet the Nuclear Regulatory Commission's deadline of July 1981, to install Nuclear Power plant emergency equipment.

The NRC obligingly extended the deadline to February 1982, but again not all the plants have complied. Ten out of the forty-eight still do not have the necessary systems.

The blame lies equally with the utilities who have flaunted the deadline and with the NRC who have not made significant efforts to enforce it. Given this approach, it is doubtful if the NRC will adequately fine the non-compliant utilities.

The regulation requires all plants to have emergency warning systems which are capable of alerting residents, who live within ten miles of the plant, within fifteen minutes of an accident at the plant site.

WISE, February.

Ginna Tomic

The accident at the 450 MW, Westinghouse built, Ginna Nuclear Power plant, at Ontario New York, began at 9.28 on the 25th of January. The 11 year old PWR which is operated by Rochester Gas and electric, was brought to a cold shutdown at 4.30 p.m. on January 26th. This was 31 hours after a steam tube rupture automatically shutdown the unit and vented radioactivity to the atmosphere.

A site emergency, which is the second most serious category in the Nuclear Regulatory Commission's four mandated levels, had been declared seventy five minutes after the accident began. This level lasted for nearly ten hours, when it was downgraded to an 'alert'.

Radiation monitors at the edge of the site recorded increases of 3 millirems which later receded. These releases to the atmosphere consisted mainly of xenon and krypton gases. Traces of iodine -132, -133 and -135 were found in nearby snow but were not considered a health problem by RG&E. An additional 1000 cubic feet of xenon gas has to be kept in a holding tank for at least one month. Later additional 'small amounts' of radioactive gases were emitted to the atmosphere but 'luckily' the wind was blowing away from the nearest city, Rochester.

There have been similar steam tube faults in a lengthy list of USA installations. It is feared that these will occur more frequently as the reactors age. This type of accident was anticipated, but seemingly not so serious as it transpired.

The chronic problems with the tubes are blamed on poorly understood water chemistry and hydraulic forces especially in a radioactive environment. NRC spokesman Frank Ingram said: 'they've resolved a lot of problems, but others keep springing up'. Others say that the tube failures are the result of an immature technology being scaled up to commercial size too fast and are worried that these ruptures are leading up to a disastrous accident, with a major loss of reactor coolant.

News News

Fried Swedes ?

In March 1980 the Swedish people voted in a referendum, to limit the number of reactors in Sweden to the twelve already built or under construction.

In June 1980 the Swedish Government stated that the decision not to build any more reactors applied also to 'thermal' reactors — ie. hot-water-for-heating-only reactors and to Fast Breeder Reactors.

Regardless of this, Asea-Atom has started a large scale campaign to promote their thermal reactor SECURE. The SECURE reactor is a low-pressure, low temperature unit which would be built in populous areas to provide hot water.

Asea-Atom have even tried to introduce a referendum on SECURE in their hometown Västeros. This was turned down by the local council. The Swedish anti-nuclear movement argue that such a referendum would be completely illegal.

However Asea-Atom persists in trying to introduce SECURE in other communities. Other promoters are Develop Sweden which is backed by the notoriously pro-nuclear American Labor Party.

S.A. Reactor

South Africa is considering building further nuclear power stations to compliment its Koeberg plant which is nearing completion near Cape Town.

South Africa has an abundance of coal and relies on it for more than 88% of its power. An expanded nuclear programme could have several benefits for the South African government. It would allow them to scale up the uranium enrichment plant at Valindaba to an economic commercial operation; it would allow coal to be diverted to export and oil conversion. The government is also worried about sabotage. Most of South Africa's coal-fired stations are based near the coalfields in the Transvaal, which means that electricity has to be transmitted long distances to the coastal areas. The South African Finance Minister has also stated clearly another reason for the expanded nuclear programme: "If South Africa wishes to use its nuclear potential for other than peaceful purposes, it will jolly well do it according to our decisions and our judgement."

However, if South Africa does want to expand its nuclear programme, it may have problems finding a supplier for the plant. It is unlikely that the French government would allow the consortium building the Koeberg station to supply further reactors.

However, it is thought that President Reagan would like to deprive the Nuclear Regulatory Commission of its power to approve the export of nuclear materials and to place this power within the State Department which is under Presidential control. So any relaxation in the United States' attitude to nuclear exports would be welcomed by South Africa.

Electrical Review 15/1/82

Mexico Too

Nuclear power station builders who foresee flagging interests during the 1980's throughout most of the world, are showing great enthusiasm for Mexico's new nuclear programme which could be worth more than $25,000 million.

Mexico's efforts to join the 'nuclear club' are without parallel among developing countries. A leading nuclear scientist said:

"This is the biggest nuclear rush the world has ever experienced. Usually a government which is buying atomic power stations negotiates privately with one or two companies. This is the first time so many bidders have been involved."

Invitations for bids on the first $1,000 million contracts were issued last October. Babcock & Wilcox, who built Three Mile Island, were not asked to participate. The companies which are working on bids are: Westinghouse, General Electric and Combustion Engineering of the United States; Atomic Energy of Canada; ASES-Atom of Sweden; Kraftwerk of West Germany and Framatome of France. Tennessee Valley Authority has worked out a 'preliminary' agreement with General Electric for the company to offer two 1,287 MW units at the Hartsville nuclear station as an 'option' to the new reactors GE will offer to Mexico. The Hartsville units are two of the five reactors the agency has deferred.

The Mexican production target is 20,000 MW by the end of the century. Although Mexico has the world's fourth biggest reserves of oil and gas, they consider they are too valuable to be turned into electricity, although the country faces a serious energy problem with a population of 50 million expected to double by the end of the century.

Electrical Review, 22/1/82

U.N. Special

The dates for the United Nations Special Session on Disarmament have been set for June 6th to July 9th 1982.

Activities are being planned by various groups around the world. On June 12th a broad coalition of organisations will participate in a demonstration in the USA. Many peace, anti-nuclear and other groups in Japan are planning to send over a thousand delegates to the Session.

The Pacific Peacemaker, the ship which is travelling from Australia to Washington to protest against the launching of the Trident submarine system in the Pacific, is also sending a delegation.

Holy Smoke!

Have you heard the one about the Vatican?

The Vatican will begin building its first bomb shelter in June: to protect its priceless library collection against 'possible' nuclear attack.

The shelter will serve the added function of protecting the seventy thousand precious manuscripts and more than a million books from earthquakes.

The $1.6 million cost will be financed by a loan from the West German Episcopate.

Nuclear Free Pacific

At the Commonwealth Heads of Government meeting in Melbourne, Australia, on October 7th, last year, Mrs. Thatcher (U.K.), Mr. Trudeau (Canada), Mr. Frazer (Australia), Mr. Muldoon (N.Z.) and Mrs. Ghandi (India) endorsed a resolution which had been adopted by the Twelfth South Pacific Forum held in Port Vila, Vanuatu, on August 10th-11th, 1981.

The endorsed resolution includes the following passages: "The Governments comprising the South Pacific Forum,... Reaffirm their strong condemnation of testing of nuclear weapons or dumping or storage of nuclear wastes in the Pacific by any government as having deleterious effects on the people and environment of the region;.... Urge France immediately to cease its nuclear weapons testing programme and provide full details of the effects of its past testing activities on Pacific people and the environment;..... Urge the United States and Japan to store or dump their nuclear waste in their home countries rather than storing or dumping them in the Pacific."

WISE, 29.10.1981.

Austranium

The Australian Telecommunications Employees Association is maintaining its industrial campaign against Minatome, the French company which plans to mine uranium near Townsville in North Queensland.

A spokesperson for the association said that they were "trying to change the emphasis of the campaign to prevent new sites from being developed". The association feels that it is easier to stop mines opening than to try to close down operations which are employing people.

In this respect they regard the Ben Lomond site, near Townsville, as the most hopeful option to prevent a mining operation getting underway. Already some unions are denying Minatome communications services and power that the company needs to make the site operational. The community of Townsville is strongly opposed to the mine since they have experienced fallout from the French tests in the Pacific.

The Australian, 20.1.82

The world's biggest uranium mine is moving closer to opening. The mine is to be sited at Jabiluka, in the Northern Territory of Australia, and is in one of the world's richest uranium deposits. The site's estimated reserves are reported to be of the order of 200,000 tons of uranium oxide.

In October, despite opposition from some of its members, the Northern Lands Council agreed to let Pancontinental Mining proceed with the mine. On March 1st, this year, a draft agreement was initiated between Pancontinental, Getty Oil, and representatives of the Aborigines, the owners of the land.

Pancontinental have been trying to develop the deposit for 10 years, and now has a 65% share in the venture whilst Getty holds the other 35%. Pancontinental estimate that the mine will have a life of around 25 years and will produce uranium worth £10,500 million but will not begin construction until sufficient advanced sales have been made.

The agreement has still to be approved by the Federal Government and to be put to the local Aborigines representatives for further comment. This agreement will probably be followed by another with Denion Mines of Canada which owns the smaller Koongarra deposit, also in the Katadu National Park, where the reserves are estimated to be 11,300 tons.

WISE, 26.11.81, F.T., 2.3.82

Sea Dumping?

Now that the excitement following the cancellation of the test drilling programme has died down, it is time for us to sit down and take stock of our present, and future, position. Why did the Government make the decision they did? What are they now planning? How can we stop them doing it?

SCRAM has always campaigned against test drilling and the disposal of nuclear waste underground. We have always said the nuclear programme should be stopped immediately — no more waste will be produced — then store the remaining waste above ground where it can be observed. Maybe then the 'experts' will find something to do with it?

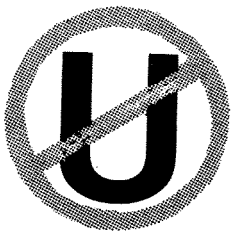
In this article, **Pete Wilkinson** of Greenpeace, suggests possible Government intentions for this high level waste — call it medium level and dump it in the sea! But Greenpeace are still in there fighting...

The recently announced decision that the Government is to abandon plans for the land-disposal of highly active nuclear waste has rightly been hailed as a victory for local communities and the movement as a whole. The influence exerted by determined groups of people throughout the country and indeed by district and county and regional councils has paid off. But, as always, the moribund nuclear industry has a few tricks up its sleeve and recent events within the forum of the London Dumping Convention indicate that governments are planning now to take the line of least resistance in their search for an ultimate grave for this most embarrassing and lethal legacy of the nuclear folly. Sea-bed or sub-sea-bed disposal suddenly looks much more attractive to the rubbish disposers.

At the October 1982 meeting in London of the delegates to the London Dumping Convention an agenda item stuck out like a sore thumb — "de minimus". De whatimus? Roughly translated, it means how to reclassify radioactive waste from any source to the point where it can be shoe-horned into the existing limits for disposal at sea. If, it is argued, highly active waste, after lengthy storage, can be packaged in such a way that its leaching rate can be shown to be comparable to low-medium level waste, why bother to stick to this complicated classification? Why not just call all radioactive waste simply that and set maxima which embraces all categories? Why not indeed.

This concept opens up a whole panorama of possibilities for the nuclear industry. They will be able to "prove" that adequately treated and packaged highly active waste is no more dangerous than the stuff they've been dumping since 1949 and has anyone died as a result of this 30 year programme or has there been any perceived detriment to the marine environment? Of course not. Not that anyone has bothered to carry out anything more than laboratory modelling and mathematical calculations as to the supposed effects. So if the release rate of radioactivity can be shown to be no more than that of currently "acceptable" limits from low-medium level waste, sea dumping is fine. Out of sight, out of mind but who could criticise the nuclear industry for this approach? Their track-record will be seen to have been impeccable. Land-storage was safe but, understandably, those communities which were opposed to it, had been whipped into an anti-nuclear fervour by communist-paid loonies of their back-yard. So now the decision is to store it for a long time, glassify it and then take it hundreds of miles out to sea where it can't harm anyone. Perfect. They'll only have Greenpeace to deal with and a few disgruntled scientists. No problem.

That is how the new battle lines are shaping up. The London Dumping Convention is the forum in which this confidence trick will be perpetrated and it will be our oceans, the common property of us all, which will become the repositories for the entire inventory of nuclear waste. Greenpeace has recognised since 1978 that the low-level dumping programme was a forerunner to such a move. That is why we have sought to "nip in the bud" the disposal practice as carried out today. We must continue to work through the unions (the National Union of Seamen is about to decide on policy regarding carriage and disposal of nuclear cargoes), through the London Dumping Convention, (the 1983 meeting will be attended by Pacific Island representatives and for only the second time in its history will be asked to vote on two resolutions calling for a ban on dumping) and through direct action. We must keep our fingers in the dyke 'ere the flood begins.



On Monday the 15th of February the Planning Committee of Lancaster & Morcambe City Council turned down an application by Edmunson's, a local haulier, to store uranium ore at their local depot. The application was rejected, 11 votes to 5, by the Tory dominated committee and during the course of the meeting no one spoke in favour of the application. The decision was taken after extensive lobbying by Half Life and flew in the face of the Council's Chief Planning Officer, Mr. Charles Wilson, who had recommended that permission be granted.

Sitting in the meeting it was difficult to believe that this was the same authority which, fifteen years ago, granted the C.E.G.B. planning permission for two Advanced Gas-cooled Reactors without expressing so much as a murmer of concern. The myth that nuclear developments were not detrimental to tourism had clearly been dispelled and most speakers stressed that the holiday resort of Morecambe could not afford the 'stigma' associated with a uraniam dump. 'Is it not enough that we already have two nuclear power stations?', asked Jean Yates.

Other councillors stressed that the public had a right to be concerned when 'the experts' had been shown to be so wrong, so often in the past. The general tone of the meeting was perhaps best expressed by Councillor Rushton in a written submission. She stated quite simply, "I think permission should be refused. Councillors are elected to speak for the people and in this case the people are definitely saying refuse permission."

Exactly why Edmunson's want to store uranium on their premises remains a mystery as does the source of the uranium and the identity of the customer that has contracted the firm for these purposes. During the course of their inquiries Lancaster's planners were given written assurances that the ore was not part of the illegal shipments from Namibia. Mr. Garry Edmunson declared that the uranium would be 'awaiting delivery to BNFL' on Radio Blackburn whilst BNFL maintain that the ore has nothing to do with them though they would 'be prepared to process it if we are approached'.

These and other matters may receive a further public airing as it appears that Edmunson's may appeal against the decision which could mean an inquiry later this year. One thing that has been made clear by the case though is the changed attitude towards things nuclear in the area. Had Heysham nuclear power station been proposed now it would most certainly have met with a similar rejection.

Australasian News

Uranium Exports

Australia's uranium export industry is worth A$4000 million, and has entered contracts for the export of almost 43,000 tonnes of yellowcake.The Australian Government believes that the industry has hardly scraped the surface of the market.

The Australian Federal Government gave the go ahead for production and export of uranium ore after the Fox Inquiry in 1977, and has now concluded Nuclear Safeguards agreements with 17 countrie , made up of all ten EEC members through Euratom, the United States, Canada, Sweden, Finland, Switzerland, Korea and the Philippines. Japan has as yet failed to ratify a similar agreement.

Australia's Government claims that the conditions for use of Australian yellowcake are the toughest in the world. The conditions insist that the purchasing country must be a signatory of the IAEA rules and also:.

(a) Undertake that it will not be used for any explosive or military purpose,
(b) Take appropriate physical security measures, and
(c) Obtain Australian consent before it may be transferred to other countries, enriched beyond a 20% U235 level or reprocessed.

The agreements also provide for bilateral consultations, on a regular basis, on the implementation of the conditions. If the conditions are broken, Australia has the right to suspend, or stop, uranium supplies and require the return of any nuclear material already supplied.

Australia's assured yellowcake resources are 317,000 tons and it has additional estimated resources of 285,000 tons. This may be compared to the U.S.A. which has 605,000 tons assured and 1 million tons in reserve.

Since 1977, there have been just over 100 shipments of uranium concentrate from Australia to Japan, West Germany, Finland and the United States; totalling 6000 tons, all being supplied from the Mary Kathleen mine in Queensland and Nabarlek mine in the Northern Territories. Most of these were approved before 1972, when the Whitlam Government stopped the Australian uranium industry and commissioned the Fox Inquiry.

Up to now, contracts have been signed for 43,000 tons of uranium to be supplied from the Ranger and Nabarlek mines. These have been concluded, by Petro EZ Queensland Mines and Energy Resources of Australia, with the United States, West Germany, Japan, France, Finland, Belgium and Sweden. Most of these are for the period 1982 to 1996. The largest of the contracts, for 12,168 tons of yellowcake, is between Energy Resources of Australia and Japanese interests.

The Australian, 2.2.1982.

Enrichment Imports

In mid-November, President Reagan decided to allow U.S. companies to compete to become partners in the establishment of a uranium enrichment enterprise in Australia.

United States DOE Secretary, James Edwards, said in a letter to the Australian Ambassador to the U.S., and to the Uranium Enrichment Group of Australia, that U.S. gas centrifuge technology would be available for use in a two-year feasibility study. The study is likely to end in the construction of an enrichment plant by 1990.

The transfer of this technology will be by private U.S. companies, although this would be conditional on amending the current bilateral agreement for nuclear cooperation. The U.S. has never before allowed the transfer of its enrichment technology to another country.

WISE, December 1981

Mururoa Madness

The French have been conducting tests on nuclear weapons on Mururoa since the 1950's. In 1975, they switched to underground tests. Each blast has reportedly caused the island's core to sink 2cm with a total drop now of 2 metres. In 1981 alone, France conducted 10 tests, six of which took place after Mitterrand's election. The most recent tests being on December 5th and 8th.

In an article published in the **National Times** of Australia in November, civil engineers stationed on Mururoa revealed that plutonium-239, and other radioactive debris, stored on one of the atoll's beaches had been swept out to sea by storms earlier in the year. The debris reportedly had been on the beach since 1975, when several pounds of plutonium were dropped on the beach during safety design tests. It had been covered with cement and left to be cleaned up at a later date. Since then waste, irradiated clothes and equipment have been stored in steel drums and vinyl bags on the beach. Last March it was said to cover 30,000 sq. metres.

The engineers claimed that due to the pressures of an escalated nuclear arms race, the French had stopped sealing off their radioactive waste in drums and burying them 300 metres into the earth, as required by international law.

The day following the storm, in March 1981, the beach was said to have been strewn with ripped bags and pieces of asphalt containing plutonium. Barrels of radioactive waste were floating in the lagoon.

An appeal was made to the French government to aid in cleaning up the mess but President Giscard was hesitant since the elections were two months away. The staff on the island began a clean-up but could not collect as much debris as was being washed ashore.

Shortly after the French elections, in July 1981, civil engineers brought the matter of beach contamination to the attention of Defence Minister Charles Hernu. A quick clean-up was ordered by the army before Hernu visited the island on August 4th. "Unfortunately" a storm hit the island the night before his arrival and he was greeted by scattered debris and hastily erected barbed wire fences. Though he promised immediate action, nothing has been done in the following four months. Thus, the engineers decided to go to reporters and also to appeal to the government, through their union, to improve medical surveillance of the island's staff.

In August, the French authorities announced that water around parts of the island were already too contaminated with radioactivity to swim in, and had posted signs to that effect, although workers claim no warnings were given other than advising people against swallowing sea water.

In September, Australia started an enquiry into claims that the French underground tests had blown a hole in the atoll, allowing seepage of radioactivity into the ocean. The seepage appears to be due to damage caused by the detonation of a nuclear device, on July 25th, 1979, which had jammed part way down its underground shaft, at a position in the coral rather than the underlying bed rock. The blast registered 6.3 on the Richter scale and caused a crack on the surface of the island, 2km long and 40cm wide.

In October **Greenpeace III** sailed from Manzanillo (Mexico) for Mururoa, in order to investigate the high radiation levels in the surrounding waters, and arrived near the island towards the end of November.

On the 11th December, the French government agreed to an independent inquiry on the situation at Mururoa. Brice Lalonde, the Ecology Party candidate in the last French presidential elections, and a crew member of Greenpeace III, was invited to take part in the enquiry. Upon receiving this announcement from the French Government, Greenpeace III left the island for Tahiti.

Greenpeace, whilst agreeing in principle to an enquiry, have listed a series of requirements for an enquiry, but will not agree to it unless all conditions are recognised. These include the availability of all health statistics on the island.

Just before Christmas, the BBC reported that a new testing site would be set up on an island 30 miles to the south of Mururoa. Another report suggested that the French were thinking of moving to the Kerguelan Islands in the sub-Antarctic part of the Southern Indian Ocean

WISE, Greenpeace News, The Guardian

MEB Leads

The Central Electricity Generating Board Midlands Region and the Midlands Electricity Board are jointly investigating a scheme to convert part of Nechells power station in Birmingham, to supply process heat, in the form of steam, to five neighbouring factories.

The scheme would cost some £3 million to convert two of the 56MW generating sets and another £2m for the heat mains.

As further evidence of the CEGB's interest in Combined Heat & Power, Mr. Glyn England, chairperson of the CEGB told the annual general meeting of the District Heating Association that the Board was making seven power stations and their sites available in the event of the go-ahead for the lead city for a CHP/district heating scheme. The stations are: Barking (London), Agecroft and Carrington (Manchester), Fiddlers' Ferry (Liverpool), Dunston (Newcastle), Neepsend (Sheffield) and Leicester.

Most of the credit for the Nechells scheme is due to the Midlands Total Energy Panel, made up of technical and commercial experts from the MEB, the CEGB Midlands Region and the East Midlands Electricity Board. The Panel has been preaching the benefits of CHP throughout the Midlands for the last eight years, often in the face of strong disapproval from the supply industry. It is unfortunately the only active group of its kind in the supply industry, and its work has been treated with scorn by some Area Boards who think that the industry should stick to electricity.

Three Area Boards are particularly opposed to CHP schemes in industry and have threatend to withdraw supplies if an industry decides to use CHP to generate electricity for themselves. The Boards were named by Mr. Wilkins, who is a partner in Power Management Associates, when giving evidence to the Commons Select Committee on Energy. The Boards, on order of their antagonism, are: Merseyside and North Wales, Yorkshire and North Western.

By showing its readiness to take on the role of heat distributor and retailer, the MEB has shown how an Area Board, working in cooperation with the CEGB, can bring large-scale CHP to Britain. Unfotunately the MEB was the only Board represented at the District Heating Association's AGM. Many other schemes like Nechells could certainly be set up to the enormous benefit of the CEGB, Area Boards and industry if the foresight of the Midlands Total Energy Panel was more in evidence elsewhere.

Meanwhile Geoff Shepherd, chairperson of the MEB, will be retiring at the end of March, but his skills will not be lost to the CHP cause as he is now president of the District Heating Association.

Electrical Review, 22/1/82, 5&12/2/82

We Need Warm Homes

Anti-Dampness Groups Lobbying Parliament in February.

By the time you are reading this, a weighty report will have landed on the desk of the Secretary of State for Energy. W.S. Atkins, the engineering consultants studying the feasibility of Combined Heat & Power [CHP] schemes in nine major cities, have finished the work they began last June.

And the Government? Will it vigourously grasp this energy-saving, job-creating, proven technology which it has been looking at for years? By all accounts, it seems likely that the grasp will be rather limp and the vigour definitely lacking. Latest information suggests that with its characteristic 'swift decisiveness', the Government will ponder over the report until about June this year and then may make the momentous decision as to which city or cities will be lucky enough to have a further in-depth study and maybe in the 1990's a CHP and district heating scheme of their very own....

In his evidence last month to the House of Commons Select Committee on Energy, currently investigating the potential of CHP, Dr. Walter Marshall, Chairman of UKAEA, declared that his goal of getting Britain's first PWR established at Sizewell would be straightforward compared with getting CHP off the ground. In a country where 15 million people are wedded to cheap natural gas for domestic heating, there are few institutions ready or capable of championing large-scale district heating schemes, he said. Of course when there is the political will, we all know how rapidly new departments or institutions such as British National Oil Corporation can be set up; but then energy-saving, low cost heating schemes are not familiar territory for Dr. Marshall.

But how should the government be involved? Another view suggests that it is best to let the government go hang themselves on the long rope of indecision. The benefits for local communities might well be foregone if the government implements large-scale centrally controlled CHP/DH (District Heating). Far better, as in Denmark, for such schemes to be locally run and

managed. This would ensure that the price would not be manipulated in relation to other fuels and that the management, if properly constituted, would be more responsive to consumers.

Local Benefits

The benefits to the community were clearly outlined in Newcastle-upon-Tyne City Council's report to the Secretary of State for Energy in 1979. They stressed that Energy Paper 35 (CHP in the UK) was primarily concerned with **national** energy resource considerations. In contrast, Newcastle's report concentrated upon the **local** benefits of developing CHP/DH and sets these against the initial investment necessary for such schemes. The local benefits of a CHP/DH scheme can be seen primarily in employment, housing and fuel costs.

Employment

This factor has increased in importance since Newcastle's report, as the unemployment figures rise grimly upwards. In today's context of diminishing job opportunities, the most important gain would be the creation and maintenance of jobs within a local economy. This would particularly benefit the construction industry, which has suffered a recession over recent years — Newcastle estimated that in terms of direct employment, 1000 man-years work would result from connecting 5,000 dwellings. Indirect employment would result in continuous work for the engineering, heating and ventilating equipment industries.

Positive employment effects of CHP/DH investment will produce savings to the exchequer due to a bigger tax yield and reduced welfare benefits. (The New Statesman recently estimated that it cost the government £4,500 a year to pay benefit to an unemployed adult). These savings are not insignificant — there could be savings to the Exchequer of between one fifth and one quarter of the gross capital cost in the case of installation of heat mains and domestic appliances. The availability of relatively cheap process heat could also be used to advantage in establishing local industries.

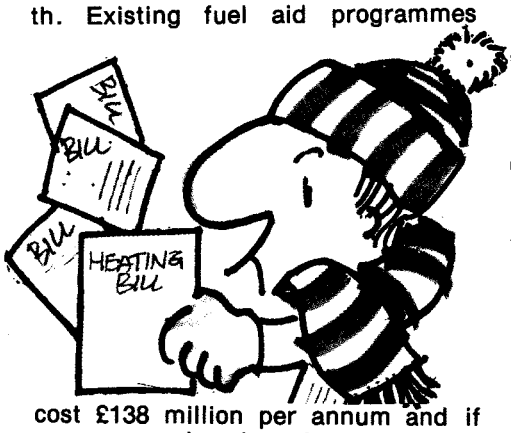
Dampness

Problems of condensation and dampness and of inadequately heated dwellings in the public housing sector are of mounting concern to local authorities. The number of council tenants in Scotland living in houses affected by condensation and inadequate heating is equivalent to the entire population of Edinburgh (approx. 450,000). The resulting deterioration in quality of housing stock leads to a considerable waste of physical and manpower resources of a local authority eg. in building maintenance. In some areas actual reductions in rent and rates have been successfully achieved by tenants. In Westminster, London, over 700 tenants had the Gross Value of their flats reduced by 20% in addition to a rent reduction already agreed by the local authority of 15% because ⅓ of these flats suffered from dampness and condensation. There is of course considerable expense to tenants in frequent redecoration, replacing spoilt furnishing and drawing on Health Service resources.

All these costs could be reduced by an improvement in heating in such dwellings as well as a reduction in required expenditure from local and central government sources.

Heating Costs

More than 5 million people are now dependent on Supplementary Benefit. The Supplementary Benefits Commission has now suggested that there is a need for a comprehensive fuel allowance to enable all low income households to afford the cost of warmth. Existing fuel aid programmes



cost £138 million per annum and if more comprehensive schemes, such as one suggested by the Electricity Consumer Council, were adopted, the figures would reach some £300 million.

Payments for fuel debts exceed all other items of expenditure by local Social Work Departments under their special powers to help families in need.

The social and economic cost of these current and future fuel assistance schemes must be set against the capital element of any CHP/DH scheme.

As Mike Cooley, ex-shop steward at Lucas has said:

> "We have a level of technological sophistication such that we can design and produce Concorde, yet in the same society we cannot provide enough simple heatings systems to protect old age pensioners from hypothermia."

Local Control

So, in all these areas, there would be direct and indirect savings to local and central government through the introduction of CHP/DH schemes. The social benefits are even more important — warm houses, jobs and less environmental stress, but these benefits could be foregone if such schemes were managed by outside, private or governmental bodies who might be tempted to accrue profits or fix prices in relation to other fuel costs.

CHP is economic and presents no major technical problems if adequate standards of installation are adhered to. Because of the current limits imposed on their borrowing, local authorities are not in a position to set up their own schemes but there is ample evidence that they could be instrumental in setting up non-profit making, locally managed Boards with representatives from tenant and community groups in a majority. These local 'CHP Boards' could borrow from the EEC or national clearing banks, both of whom have expressed interest in funding such schemes.

Jobs from Warmth

These and other issues were discussed recently at a meeting in Manchester which set up a national "Jobs from Warmth" campaign. Energy campaigners from most of the nine 'lead' cities met and shared ideas on how to broaden the campaign for CHP begun by the Trade Union Information Studies Unit (TUISU) based in Newcastle. This was felt to be vitally important to prevent individual cities competing with each other to be 'chosen'. It was decided to initiate a national campaign concentrating on three broad areas.

- To promote, by informing and lobbying councillors, trade unionists, and voluntary organisations, eg. Age Concern and tenants groups, the social benefits of CHP.
- To campaign alongside these groups for the government to give a financial go-ahead to **all** nine cities and to initiate district heating schemes widely in more cities, which can eventually be connected up to a local CHP station.
- To fight for these schemes to be locally controlled and managed as they are built.

This campaign will be co-ordinated by Ken Ternent, TUISU (Trade Union Information Studies Unit) Southend, Fernwood Road, Newcastle-on-Tyne. Tel. (0632)-816087, and groups in other major cities, especially from Leicester or Liverpool (who weren't represented at the meeting), should contact Ken as soon as possible.

MP's Briefing

There will be a Special Briefing for MP's on CHP in the House of Commons on Wednesday, 21st April, 11.00 - 12.30 p.m. Local groups should encourage their local MP's to attend this. More details from Dave Gordon PARLIGAES, 14, Carroun Road, London SW8. Tel. 01-587-0194.

Nuclear Energy: The Real Costs

For years the electricity Boards have had their own way. Their facts and figures, as well as the decisions based on them, have gone largely unchallenged. It is hard to produce an independent analysis, when the information for such analysis is denied to outside bodies. But the tide is changing at last. Independent bodies are now examining the figures and it is becoming abundantly clear that the Electricity Boards are guilty of gross mismanagement. Their arguments for a rapid development of nuclear power do not stand up to careful scrutiny.

We first revealed the real costs of nuclear power in "The Great Nuclear Fraud" in the SCRAM **Energy Bulletin** last summer (No.25). A recent report by the 'Committee for the Study of the Economics of Nuclear Electricity' now backs up the case in much greater detail. The Committee, chaired by Sir Kelvin Spencer, former Chief Scientist to the Government, has produced a carefully argued critique of the Government's decision to proceed with the construction of 15,000 MW (megawatts) of nuclear power plant over the next 10 years.

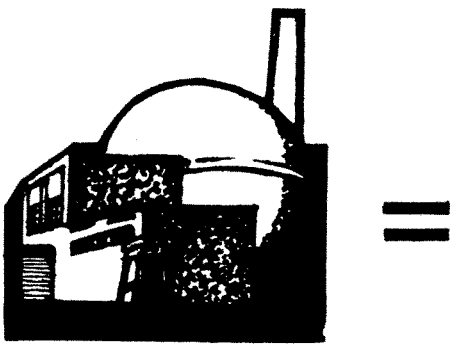
The Report concludes that the 15,000 MW programme should be abandoned. In addition, work should stop on the two Advanced Gas-cooled Reactors under construction at Torness and Heysham. The amount invested in these two stations is "paltry in comparison to the money (they) would lose" over their lifetime. Instead the Central Electricity Generating Board (CEGB) should embark on a programme of modernising existing coal-fired plant (with modern pollution control equipment). At the same time a body should be set up to organise "a massive nationwide campaign of energy, and in particular electricity, conservation."

A call is also made for the appointment of a new Board to the CEGB, with people chosen for their wide experience in public affairs." Technicians who have spent most of their professional lives in the electricity generating industry should be a small minority on the board. Electricity supply is too important for our national well-being to be left under the control of bigotted specialists." continues the Report.

The conclusions and recommendations of the Report are based on a detailed analysis of the costs of electricity generation, based largely on the work of Professor Jeffery, a consultant to the committee. Forecasts of future demand for electricity and future costs of coal and nuclear fuel services are central to the electricity Boards' case for more nuclear stations. The sorry record of the Boards' and the Government's efforts in this field are spelt out in the Report.

In 1957 a nuclear programme was justified on the grounds that there would be a gap in coal availability. In 1963 the perceived facts changed and the urgent need to develop nuclear power disappeared. By 1969 the argument had become that nuclear power would replace useable but obsolescent conventional plant. A year later there was a return to a growing concern about coal supplies, and a warning was given in 1971 of "the dangers of heavy dependence on coal". Despite this the CEGB in 1972 "did not have any plans to order new nuclear stations". Another about face led the CEGB in 1973 to say it wanted to order 18 new 1,200 MW nuclear reactors within the space of six years, with a similar number to be ordered between 1980 and 1983! The South of Scotland Electricity Board (SSEB) was also infused with the desire to build reactors, suggesting building 8 up until 1980!

By 1975 there was another change of tune, with the CEGB seeing no need to order any new stations before 1978. In their words, "The Board... sees no justification for the electricity consumers having to bear the extra cost of advanced orders". This is the first admission that electricity consumers will have to pay for



building unnecessary power stations — now quietly forgotten.

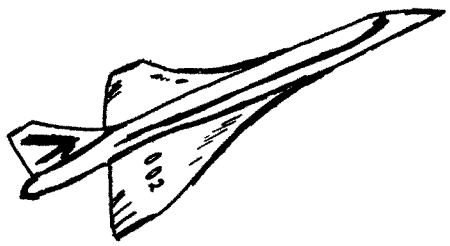
The CEGB has revised its forecasts of electricity demand downwards every year since 1972, in acknowledgement that they were getting them very wrong. The forecasts actually started going wrong almost twenty years ago, but they have been slow to learn. In consequence the CEGB's surplus capacity (ability to generate electricity in excess of demand) is now 33%, and will rise to around 50% by 1988. The SSEB has a staggering 90% excess capacity, which will rise to 122% if Torness is completed.

The CEGB has been trying to reduce its embarrassment by retiring small power stations before the end of their useful lives. At the same time it has been found to be indulging in an accounting trick, as revealed in this Report, which means that there is no financial penalty for scrapping older stations surplus to requirement. It does this by assuming that all surplus plant (that in excess of a 22% planning margin) has no value. Professor Jeffery finds "it difficult to understand how around £3,000 million of public assets can be written off without the auditors even commenting on it."

A further cost burden to the consumer is being added by the Boards' decision to have a 28% excess capacity instead of the previous 22% (a certain excess is necessary to cover breakdowns). It is calculated that this policy would involve an additional investment of around £6,000 million in new plant up to the year 2000. This would be unnecessary if the Boards would concentrate their efforts on making power stations more reliable. In this regard the problem is made worse by opting for large units. A breakdown in one large power station now represents a significant proportion of peak demand (around 2.8%). The situation would be eased with a change to smaller power stations.

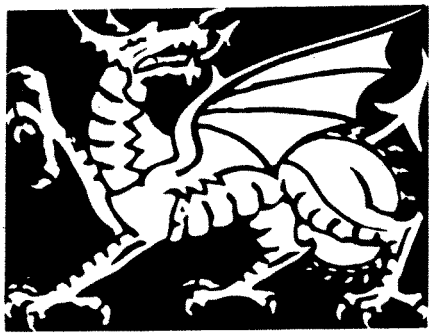
The poor record of forecasting electricity demand clearly provides no confidence in the Boards' abilities in this field. The Report also highlights the Boards' unrealistic approach to future coal and nuclear fuel cycle costs. One amazing set of figures reveals total disagreement between the CEGB and the SSEB over future costs. The CEGB forecast that coal costs will rise (in real terms) by about 230% by the year 2030, whilst the SSEB say the rise will be around 530%. For nuclear costs the CEGB expects a rise of around 120%, whilst the SSEB say about 40%. In recent years nuclear costs have actually been rising much faster than coal.

The Report devotes a considerable amount of space to a detailed examination of the costs of electricity. It is clearly shown that nuclear electricity is much more expensive than that from equivalent coal-fired station. Indeed electricity from Magnox stations, the first generation of nuclear plant, has always been more expensive than coal. Yet the Boards continue to publish figures which seem to show nuclear electricity to be cheaper. They do this by indulging in the fraud of using historic costs in the calculations. The real costs, though, to the consumer can only be calculated if the figures are first adjusted to current costs — the real value in today's terms of money spent as long as 20 years ago. (This is explained more fully in SCRAM **Energy Bulletin**, No. 25).



The Report clearly demonstrates that there is no rational argument for the 15,000 MW nuclear programme for Britain, just as there is no economic case for continuing with Torness and Heysham B. But the battle is not over. The CEGB and SSEB refuse to accept that they are misleading the public over the true costs of nuclear power and that their policies have in the past and will in the future lead to more expensive electricity than is necessary. This excellent Report should, nevertheless, provide another nail in the coffin of the CEGB and SSEB.

Nuclear Energy: The Real Costs, available from The Smiling Sun, 37 West Nicolson Street, Edinburgh. £2 + 35p. Back copies of **Energy Bulletin** No.25 30p + 15p.



Cymru Ddi-Niwcliar

On 23rd February, Clwyd County Council voted 41-15 to declare its area a Nuclear Free Zone. This vote marked the culmination of a campaign by the Welsh Anti Nuclear Alliance. Starting with Dyfed in April 1981 and followed steadily by all the other counties, the campaign has succeeded.

The campaign started in 1980 with a public opinion poll* carried out for the Alliance, showing that 82% of the people in Wales were against waste dumping and 58% against the expansion of the nuclear power programme. These results were used in the run-up to the County Council Elections, along with the Nuclear Free Wales stickers and posters, which are now widespread in Wales. Candidates were canvassed for their support and a favourable picture of the new councils was built up; in Gwent all the Labour Councillors came into the Chambers wearing Nuclear Free Gwent badges, in Powys the vote was won by the narrowest of margins - 25-24.

CEGB Defeat

The motions passed were largely based on the Manchester City Council resolution ("This Council... calls upon Her Majesty's Government to refrain from the manufacture or positioning of any nuclear weapons of any kind within the boundaries of our city..."), although 2 Councils, Powys and Gwent, included opposition to nuclear power. Gwent is the strongest anti-nuclear county in Wales, having defeated the Central Electricity Generating Board's Porskewett plans. The Trades Council and local trade unions there are also strongly anti-nuclear. In contrast, nuclear power is a very sensitive topic in Gwynedd, where Wales' two nuclear power stations are sited.

Following the vote in Clwyd, a Declaration, signed by leading political, cultural and religious figures has been sent to the European Parliament and the Governments of all the European countries, calling on them to declare their countries nuclear free. Signs were erected along the border informing motorists that they were now entering a nuclear free country, and hundreds of balloons were released with messages asking English counties to follow suit.

These decisions are not the end of the battle — Dyfed has decided to take part in Operation Hardrock (this year's civil defence exercise). We are now campaigning to make sure that no Welsh Council takes part in the Exercise. Mid-Glamorgan is at the centre of a row over renovation of its Bunker. As a result of a permanent picket set up, outside the bunker, the Council has retreated a little, in that wartime use of the bunker will be dropped but renovation will go ahead anyway — apparently to provide a 'snow and flood' control centre.

A Clean Sweep

Late News: Labour MP's have tabled a motion in the House of Commons congratulating the Welsh Counties for their stand. The Ministry of 'Defence' have said they won't pay any attention, and the CEGB say the decisions won't affect them either — decisions on waste transport are made by the Home Secretary.

*Nuclear Power in Wales, a Public Opinion, from: **WANA, Hafren, Market Street, Lampeter, Dyfed, Wales; £1 + 20p p&p.**

SIZEWELL REACTIONS

Two historic meetings have been held since the Government announced that the Sizewell Inquiry, into an application by the CEGB to construct an American-style Pressurised Water Reactor (PWR) on the Suffolk coast, should begin in January 1983.

The first, which was convened by the Town and Country Planning Association (TCPA), brought together councillors and senior officials from 17 local authorities affected or potentially affected by nuclear power developments. While making NO commitment for or against the proposed PWR at Sizewell they recognised the importance of the forthcoming Inquiry. It might be the only opportunity for councils to question the safety aspects or the need for more nuclear reactors because subsequent Inquiries could be very limited — for instance to the colour of the reactor shed and landscaping. They have asked the TCPA to investigate further with a view to possibly co-ordinating action at the Inquiry.

WORKING TOGETHER

The second meeting on the 27th February was most significant because it confirmed the intention of all the major groups opposing Sizewell 'B' to work together. Of the 30 organisations present some are considering mounting formal opposition at the Inquiry while others wish to devote their energies to activities outwith the Inquiry.

It was agreed that a formal list of around a dozen requirements would be presented to the Inspector, Sir Frank Leyfied, at the first Pre-Inquiry Meeting due on 22/23 March but since postponed. These cover: funding for objectors, selection of Assessors, Inspector's remit, sequential format for the P.I., free availability of all documentation and others along with a formal clarification of what is and what is not admissable evidence to the Inquiry. The response to these points will enable groups to decide whether or not it would be useful to participate in the Inquiry.

A surprise announcement was that the CEGB have to pay the **full** costs of the Inquiry including fees of the Inspector! This is because it is not a local Planning Inquiry but one held under the Electricity Act of 1909. The Board will thus be the paymaster as well as the main actor in what promises to be a lengthy and costly pantomime.

Those groups planning related activities urged potential participants not to back down on the agreed conditions for taking part. For themselves they recognised the need to co-ordinate activities — both in drawing attention to the Inquiry and in broadcasting information from it and providing a critical appraisal as it develops. So there was talk of a small publications unit and also a special fund to raise money for non-Inquiry activities.

Most importantly the groups agreed to continue meeting in this loose forum and they asked the E. Anglian Alliance (EAANP) to convene a further meeting in April.

For further information and fuller notes from the last meeting please contact:-
EAAANP, 2 St. Helen's St. Ipswich.

Appropriate Technology

Ducks vs Clams

In January, each wave power research team made a 30 minute presentation of their devices to Dr. Tony Challis, chief scientist at the Department of Energy, as part of the coming evaluation of their prospects.

Coventry's Lanchester Polytechnic research team claim that it is the only one ready with a prototype design that could provide 2.5MW of generating capacity. This would be a two thirds scale prototype of 180m. long, 10m high and 8m wide.

The team started in 1975 with a device based on Salter's duck, which they tried on Loch Ness. But four years ago they switched to Sea Clam, which now consists of flexible air bags attached to a floating hollow concrete spine.

The bags, made of rubber and reinforced fabric, swell in and out under the influence of the waves and cause air to be driven through air turbines mounted on top of the spine. The hollow spine acts as an air reservoir.

The Sea Clam project has received £1.16 million altogether from the DoE and from Sea Energy Associates, which is a consortium of the Ready Mixed Concrete and Cawood groups and Fairclough Construction, who are involved in building concrete structures for the offshore oil industry.

Dr. Bellamy, who leads the Lanchester Poly. team, would like to build the prototype at Kishorn on the west coast of Scotland and then tow it to Milford Haven for tests off the Pembroke coast. He believes that a full-scale device could generate electricity at 5p/KWh, comparable with the cost of power from conventional stations.

Sea Clam is one of the front runners for a prototype if the DoE decides, as expected in March, to go ahead with the next stage of the wavepower programme.

Other front runners are: Professor French's Lancaster Bag, which is similar to Sea Clam; The National Engineering Laboratory's oscillating water column; the Bristol cylinder, which rotates under water; the Vickers seabed device and Salter's ducks, which now appear in a sophisticated design with sealed gyroscopes providing means of power take-off and energy storage.

Electrical Review, 5/2/82

Do Not Adjust Your Set

The first wind and sun powered television transmitter started transmission in January.

The project was completed by the Independant Broadcasting Authority at Bossiney in Cornwall. To begin with the experimental station will provide ITV, BBC and later, Channel Four programmes to about three hundred people in the area.

Power for the Bossiney Station will be provided by the wind or solar generators or from a bank of thirty six lead acid batteries — about 1000Ah — which will be kept charged by the excess power from the generators.

The wind generator has an output of 150 watts at a wind speed of seven miles per second.

The twenty four solar panels, consisting of eight hundred and sixty four silicon cells, can provide 780 watts at peak sunlight.

The transmitting equipment has a consumption of 150 watts. Data will be taken daily at the IBA computer at Winchester.

More from 01-584-7011.

Financial Times

Etna Power

Recently a 1MW solar power station, on the west slope of Mount Etna, began to supply energy to the regional electricity grid. The funding for the £12 million project, called Eurelios, included a capital contribution from the EEC.

Although Mount Etna is predicted to erupt within the next five months, it is unlikely that the station will be affected since it is situated in an area that has been rarely threatened by volcanic activity.

Guardian, January 7th, 1982

Fjording Ahead

A recent investigation, carried out by the Norwegian Water Resources and Electricity Board, of the energy potential in a number of watercourses, suggests that the building of 500 small power stations in Norway could provide an average 8.6 TWh per year of energy. Although 1000 projects were considered, only 500 lay within the present range of acceptable costs. The development of these stations could offer Norway a ten per cent increase in hydropower production.

International Water Power and Dam Construction, January 1982.

Portuguese Pond Power

The first European country to utilise energy from a solar pond will be Portugal. The pond, consisting of brine, or salt water, insulated by a shallow surface layer of fresh water has a surface area of 1200 square metres and a depth of 3.5 metres. Heat is trapped in the brine, which can maintain a temperature of 35 degrees centigrade in the winter and 85 degrees centigrade in the summer. The heat from this pond will be used by the Agricultural Ministry in Porto Alto, near Lisbon.

Information on Solar Ponds can be obtained from: **Solar Energy Research Institute [SERI], Golden, CO. 80401, U.S.A.**

WISE Bulletin, November 1981

Boost For Mini-Hydro

The Central Electricity Generating Board and the North of Scotland Hydro-Electric Board are currently showing some interest in new mini-hydro projects. The Department of Energy aims to set up a number of demonstration schemes, so the future of this energy source looks brighter than it has been for a number of years.

A promising indication of the opportunities for small-scale hydro-electricity generation in the UK is the state of the largest scheme in the pipeline; the proposal to generate over 6MW from the waters of the new Kielder reservoir in Northumberland. If all goes well, next month should see the CEGB and the Northumbrian Water Authority going to their respective boards for approval to proceed.

The CEGB has also approached the Welsh Water Authority about hydro-generation at the Llyn Brianne reservoir. The NSHEB is also looking at two run-of-river schemes believed to be in Wester Ross with a combined output of 15MW. Small-scale hydro schemes would, however, have to be capable of generating more than 4 or 5 MW before the Boards would take any interest.

The second half of this year could see the go-ahead for up to eight schemes in the 10-300kW range. This follows on from the Government-funded Welsh hydro resources study and a more detailed assessment of six promising sites in England and Wales. Applying the general principles of economic appraisal has indicated that many Welsh sites would be economic. Proceeding with a number of projects with a range of outputs will allow sites and available technology to be proven. Funding these projects could prove a problem; the DoE has not set aside any funds for the demonstration schemes and the Area Boards are showing little enthusiasm. Despite changes in the legislation covering water charges for power generation, the National Association of Water Power Users is still having to press Water Boards for a satisfactory interpretation of the legislation.

However, there has been an overall improvement in the interest in, and prospects for, small-scale hydro stations. This is reflected in the number of companies manufacturing packaged hydro-generators. By the end of this year mini-hydro may have renewed impetus in the UK, but this is by no means assured. So like many of the other appropriate energy systems (CHP and wave power for example), this could be the 'make-or-break' year for water power.

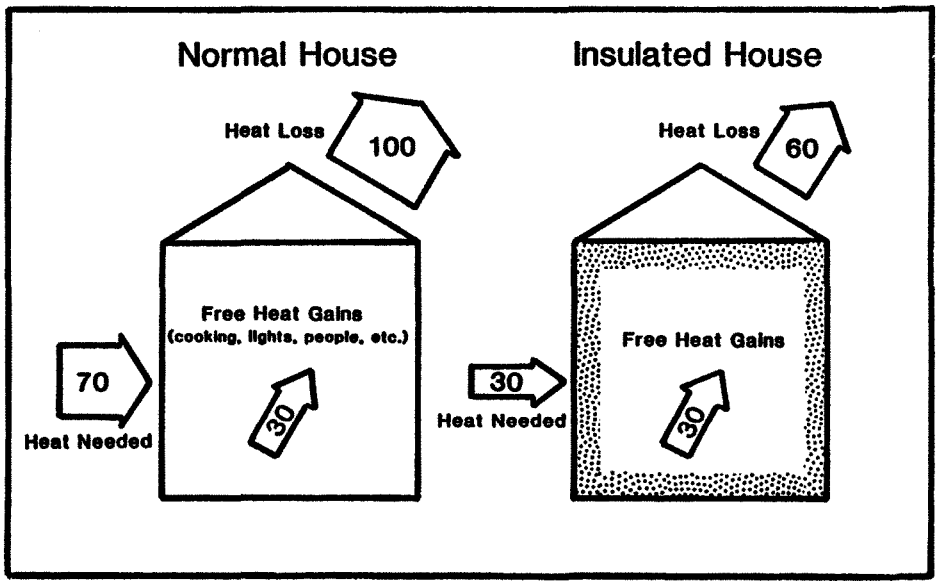
Electrical Review, 12/2/82

Appropriate Technology

SOLAR HOUSES IN EUROPE

Solar houses are being built and tested all over Europe, but we rarely hear how well they are doing. To remedy this the EEC has recently published a comprehensive study of 31 projects, with the aim of providing a realistic assessment of the benefits of solar heating.

The study concludes that "over two-thirds of a year's fuel requirements for a family dwelling may be replaced by energy gained locally from the sun". For less elaborate systems of moderate expense "solar energy can save one-third of the fuel needed to provide space and water heating".



A full 220 pages are devoted to detailed reports on all 31 projects, including six in Britain. The projects range from using solar energy to provide hot water only, to an attempt to supply the total heat requirements for both space heat and hot water for a whole year. Both active and passive solar systems were used. The project reports include information on design, performance and energy savings, although several are incomplete. Perhaps more valuable are the chapters which bring together the results. This is no easy task given the differences in climate, design and availability of information.

A particular problem with solar heating is that the sun provides least heat in winter when it is most needed. For this reason only about half the energy collected by the solar panels over a full year can be turned into useful energy. Most projects used between 30 and 40 square metres (m^2) of solar collectors with an average of 4.5 cubic metres (m^3) of water in a tank to provide a temporary heat store, sufficient for a few days. Three projects installed longer term stores, but information was only available for one, which was not very successful. Obviously, improvements in the long term storage of heat will help the performance of solar heating systems.

Insulation can reduce the amount of heat required, and this is of clear benefit for solar systems: they can either be made smaller or provide a greater proportion of the heat needed. Insulation also has the added advantage that free heat gains will proportionally make a higher contribution to the total heat demand. Free heat gains arise from people (body heat), appliances (cookers etc.) and direct solar gain through windows. Their importance for a well insulated house is illustrated in the diagram. The buildings studied in this EEC report varied from being poorly to extremely well insulated.

Two projects are particularly worth mentioning. The first, and possibly most successful is an office block near Florence in Italy. Solar energy is used for space heating, air conditioning (not at the same time!) and hot water. The massive area of solar collectors ($110m^2$) supplied 72% of the total energy requirements for a year.

A completely different approach was used at Odeillo in France. Built 15 years ago, it was the first occupied house heated using 'trombe walls'. A trombe wall has a dark outer surface which is glazed, with an air space a few inches wide between the wall and glazing. Air warmed by solar energy is transferred inside the house partly by conduction through the walls, and partly by convection through the airspace and vents. At Odeillo, solar energy provided 70% of the annual space heating, although during the summer months problems arose from excess heat, due to lack of controls.

How well did the UK solar houses fare? Of the six projects included in the study, only four have produced any results. Two schemes were designed to use solar energy for hot water only — a block of University residences in Cardiff, and a row of terraced houses in London (see photo). In Cardiff $25m^2$ of solar panels supply about 30% of the hot water for 20 students. In London fourteen terraced houses were each fitted with $5m^2$ of solar panels whilst being rehabilitated. The panels are designed to provide just under half the hot water. Results from this project were not available when this report was being prepared.

The Centre for Alternative Technology at Machynlleth, the home of small scale alternative energy systems, also features in the study. There, $100m^2$ of solar panels and a $100m^3$ water storage tank are being used to supply heating for an exhibition hall and offices. The aim is to provide all the energy requirements this way. The system was not entirely successful in 1978/1979, the only year for which data is available, with only 70% of the collectors being operational. However, during 1978, the building maintained internal temperatures above 15.5°C (60°F) from the end of February to the end of November without the use of auxiliary heating.

The second project using trombe walls is a scheme at Beddington near Liverpool, where 14 houses are being studied. There are two blocks of five terraced houses, one with trombe walls and the other of the same basic design but built to 1976 building regulations. Four further semi-detached houses were also included, all having trombe walls. Unfortunately results from this study were not available.

The two remaining schemes used solar energy for both space and water heating in single dwellings. A solar house near Macclesfield used $42m^2$ of solar collectors to provide 24% of the annual heating requirements. In addition to participation in the EEC study, this house was used by Granada Television for a series of programmes on currently available energy conservation techniques.

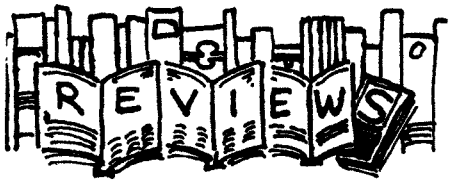
Possibly the most successful British project was a three bedroomed terraced house in Milton Keynes. Fitted with $35m^2$ of collectors, 48% of the annual heating demand was met by solar energy. The house was poorly insulated in order to compare it with conventional houses on the same estate. This house has now been fully insulated and monitoring of its performance is continuing.

The results from this study are encouraging. However, new technology always suffers from teething troubles, and solar energy is no exception. Indeed, many are documented in this report along with suggested modifications, many of which have already been carried out. This report will prove to be an invaluable information source for newcomers to the technology.

London Borough of Southwark's Solar Houses

The book is accomplished by a set of slides: a picture and a table of results for each project. The slides may be hired from SCRAM, 30 Frederick Street, Edinburgh EH2 2JR, cost £4 (including postage).

Solar Houses in Europe, How They Have Worked, edited by W. Palz & T.C. Steerness, Commission of the European Communities, Pergamon Press, '81: cost £8.50 + p&p (book and slides) from **SCRAM** mail order service, 37 West Nicolson Street, Edinburgh 8, 031-667-6203.



SOLEC

SOLEC Report, 25p single or £1.40 for 10 [including p&p], briefing only — send a s.a.e. to SOLEC, 44a Arlington Road, London SW12 [01-675-1542 evenings].

A new report entitled 'Local Authorities and Energy Conservation' has been published by the South London Energy & Conservation Group (SOLEC). The report urges local authorities to recognise that energy conservation is an alternative to cuts in services.

Most large local authorities spend between £2 and £7 million every year on energy. Energy conservation projects are self-financing with payback periods often less than three years, and offer the prospect of savings up to 40%. Most other ways of reducing expenditure lead to an erosion of the quality of life in the community and more redundancies.

Savings can be made by staff education, correct use of heating plant, reviewing electricity tariffs, insulating municipal buildings, modifying the kind of lighting used, and using solar energy to heat swimming pools.

The report discusses how a successful programme can be implemented and stresses the need for real commitment from councillors and staff. An energy conservation officer should be appointed and an energy conservation fund set up to finance the programme.

Chesire County Council, for example, has cut its annual energy budget by 20% and estimate that another 20% saving is possible. It intends to spend £2 million over the next five years giving an annual saving of £1.3 million.

Coventry City Council have set up a fund for energy conservation which will be self-financing as half the savings made are returned to the fund.

SOLEC have also produced a free briefing document about campaigning at Council level on energy conservation. Drawing on the insight gained from campaigns against the transport of hazardous nuclear materials through London, this is a wonderful example of a local group sharing its knowledge and its experience in a no-nonsense form. It is a step-by-step guide on how to start a campaign and has sections on campaign aims, how councils work, and getting the right information for the council, and where this information can be obtained. It also has sections on making contact with councillors, tactics, lobbying, publicity and follow-up.

One small point which is not clearly explained is the different roles a local District Council has to a Regional or County Council. Explaining that, and the relationship between local and central government (when the Tories have finished monkeying with it) would be a valuable service. Any offers?

Anyway, if your group is wondering which way to go next, using this 5-page briefing, with the new report will give some invaluable pointers for local lobbying.

Missiles, Reactors, Civil Liberties

Missiles, Reactors and Civil Liberties: Against the nuclear state, Ed. Garl Donn, Pub. Scottish Council for Civil Liberties. £1.40.

Nuclear power and nuclear weapons are inseparable; more and more people are realising this, and opposition to both is becoming more united. The authors of the essays which make up this booklet take our awareness of the links between weapons and power one step further. Colin Sweet, Stuart Hall, and others explain how nuclear technology works in the interests of a ruling class only, so that we are misinformed and discouraged from provoking any debate about the social issues involved. They show how nuclear technology has given certain people the opportunity to make decisions which affect us all, insulated from public scrutiny. The same technology allows them to increase controls in society in general, and especially over workers in the nuclear industry. The authors explain **why** the development of nuclear technology is considered desirable by a ruling class.

In conclusion, the writers claim that opposition to nuclear power and nuclear weapons must mean opposition to the nuclear state: the political system in which the interests of the public are disregarded.

The book brings out very interesting points, but it is less cohesive than one might wish. At present it is the only book which is covering the links between nuclear power and nuclear weapons and relating them to civil liberties, and for that reason it is worth getting. It is also cheap, which is rare these days.

Stewart Milne

Whoosh!

When The Wind Blows: Raymond Briggs. Hamish Hamilton March '82. Available from SCRAM Mail Order. Price £3.95.

This is an attractive-looking, large picture book. The presentation is deceptive however, just like the instructions in Protect and Survive:- simple but deadly!

As the tale goes, simple Jim reads in the Library papers that war is imminent. Whilst eating their chips and sausages for tea, Jim and his wife (called 'dear' or 'ducks' throughout) receive a **three day** warning over the radio.

Luckily Jim had picked up some government leaflets that day in the Library. So they set to; painting the windows and leaning doors against the walls, covering cushions with plastic so that they wouldn't get grubby, etc. etc.

Like all children's stories it is also meant for adults. I'd recommend it for any of those people who think that a nuclear war would be good for the morale of the country.

The latter, like Jim and his 'ducks' and most others, for that matter, probably just cannot conceive of the eventualities.

Berni Graham

Nuke Nos.

The Nuclear Numbers Game: Radical Statistics Nuclear Disarmament Group; price £1.50.

Whether we like it or not we are all faced by arguments based on statistics when we argue for disarmament. The statistics come from diverse sources and are compiled for equally diverse reasons. This pamphlet by the Radical Statistics Group gathers together statistics from a wide range of sources and provides some analysis of the reasons for their compilation, how to argue against some of the conclusions drawn from them and how to construct arguments from some others.

Overall the pamphlet is valuable but it does have some bad points which probably stem from trying to cram so much information into 95 pages, and the academic background of the contributors.

I have two general criticisms. Occasionally the authors allow academic style to crowd out clarity; in particular the argument on counterforce and MX missiles is obscure. My other criticism is that equations and jargon are introduced on a couple of occasions without any explanation. I found the equation for lethality of warheads completely inscrutable and the account of rads and rems equally inaccessible.

The bulk of the pamphlet is split into three chapters; on the nuclear balance, world armaments (focussing on the UK) and the effects of nuclear war. The arguments in the chapters reflect the strengths and weaknesses of the arguments put forward by disarmers.

The chapter on the nuclear balance does a good demolition job on official comparisons of military force but lacks arguments for alternatives to conventional defence. This chapter also suffers from lack of space; the potted history of nuclear strategy is deficient and the failure to investigate how statistics have been used to blur the distinction between conventional and nuclear weapons is a glaring omission.

Chapter two reflects the strength that the disarmament movement has in arguing against the arms trade and the effect of arms production on the economy. It provides a good analysis of arms production and trade in the UK. However it is quite weak on the crippling effects of a "cold war" economy and barely mentions conversion from war production. This is partially compensated for by some discussion of conversion in the conclusion of the pamphlet.

Chapter three is a good summary of the massive amount of literature on the effects of nuclear war. The best part of the chapter is the section on how groups can construct a map showing the effect of a nuclear attack on their local area. The major deficiency is the amount of space devoted to domestic nuclear shelters; I can see no reason for devoting nearly four pages to this topic.

Overall this pamphlet is a good contribution to the disarmament campaign. It draws together a large number of sources in a single pamphlet, evaluates their strengths and weaknesses and points to further sources. It should become the first reference for anyone answering the statistical disinformation provided by state agencies.

Technical Authors Group, Scotland

In the last issue of the Bulletin we pointed out that there appears to be no indication at Torness to inform people the purpose of the construction site. Well now there is! On Friday, 29th January, Lothian Regional Councillor, Madeleine Monies unveiled a sign which clearly states: "Torness Plutonium Factory under construction". It can be seen by travellers passing in either direction on the A1. The text reflects SCRAM's assessment of the proposed installation's only possible function. It also points out many of the reasons why the project should be abandoned **NOW** before any more of the Consumers' money is wasted on unnecessary generating capacity.

Messages of support were received from folk singers Ewan MacColl & Peggy Seeger, Julie Christie, Jim Sillars of the SNP and six members of Lothian Region's Labour Council. Special thanks to all the 'alternative' mags who covered the story when most of the others ignored it!

Now the bad news. The SSEB have moved into the land speculation game again! They bought the land around the sign and removed it to their depot in Edinburgh as soon as the SCRAM 'caretakers' had left. We were eventually allowed to go and retrieve it but on the understanding that the Board "reserved the right to charge (us) for the cost incurred in dismantling and looking after it". Their idea of looking after the sign was to tear off the Smileys, deface some of the text and generally damage the backing boards.

They wished us to sign an undertaking that "the notice boards... will not be placed or erected on any land or property owned or controlled by the South of Scotland Electricity Board". Tell us what land you own or control and we won't put the sign there! Oh yes, the Board also erected a sign of their own — "Torness Power Station".

WANA

YNNI (meaning ENERGY) is the new magazine of the anti nuclear movement in Wales. It aims to provide a news focus for all the groups fighting nuclear power and weapons in Wales. It appears bimonthly, alternating with The SCRAM Energy Bulletin to provide a more frequent news service for the British anti nuclear movement.

YNNI

Subscriptions for one year:
£2.50 - individuals
£6.00 - institutions
from: Nicolas Lampkin,
10 Maes Cambria,
Ffordd Llanbadarn,
ABERYSTWYTH
SY23 1EL

"No Cause for Alarm"

... an anti-nuclear show to raise the spirits from the dead. Poems, quotations and songs performed by the combined talents of Leon Rosselson, Roy Bailey, and Frankie Armstrong.

At the Queen's Hall, Clerk Street, Edinburgh, on Sunday 2nd May 1982 starting at 7.30 p.m. by candlelight. Doors open 6.30, Bar and restaurant open from 6.30 p.m. All tickets £2 at the door, or available in advance from Usher Hall Box Office.

Concert promoted by Edinburgh WDM, supported by Campaign Coffee Scotland, CND and SCRAM.

Don't miss it!! It's a superb show, arousing huge acclaim both here and in the states.

For those who are interested Leon, Roy and Frankie have made a record with some of their friends, called, "Nuclear Power No Thanks!!?" released in Aug. '81 on the Plane Label and Inter-Action Impress. Look out for it at The Smiling Sun and the First of May bookshop.

Berridge in the Porridge

Trumpet-blowing time — SCRAM has been on TV again. The BBC Scotland programme 'Agenda' on 21st February carried a special report on nuclear power — where do we go from here? It was seen as so important that arms were twisted producing Mr. Roy Berridge, the SSEB chairperson for his first major interview in two years. He retires at the end of March. Also appearing were Robin Cook, MP for Edinburgh Central, Alex Fletcher, MP at the Scottish Office, and six SCRAM people.

Unfortunately, our 20 minute interview was cut to two or three minutes. Because of this we didn't get across some of the things we really wanted to say. Like the weapons link, our line on dumping and more stuff on appropriate energy and employment. But that was more than made up for by some of the answers that Mr. Berridge gave and some of the points Robin Cook brought out.

"completely awry"

Mr. Berridge admits that: "... we are in a situation in which forecasting is extremely difficult..." but he explained: "We've been thrown completely awry by a lot of massive changes and I make no apologies for getting our estimates wrong. I think that was just not foreseeable". When asked how late Torness must be in order to make the "carefully woked out figures" completely wrong, Mr. Berridge replied: "... if we were about four years late we will forego the savings that we believe we will make".

The interviewer asked Mr. Berridge for the cancellation cost of Torness. He replied: "I don't know. We have no intention of calling off the Torness project. It is supported by this (and the previous) Government... we haven't worked out the figure and I see no reason to do so".

Mr. Cook disagreed. He said: "We were not allowed to see the detailed basis on which the forecasts were based... these forecasts were wrong... the SSEB should now reveal details of the costings".

Mr. Cook was also asked about the 'knock-on' effect of Torness on local employment. He reckoned that Cockenzie, a coal-fired station aout ten miles from Torness would be the most likely choice for closure. He went on "the effect on the coal-burn in Scotland would be drastic... 1½ to 2 million tons of output in Scotland. Now that would mean pit closures... it is a direct consequence of turning on Torness".

A full transcript of the report is available from SCRAM for the photocopying cost.

Consumer Campaigns

BRITAIN'S FIRST ANTI-NUCLEAR DISCONNECTION

The first disconnection in the Anti-Nuclear Consumer Campaign happened on 11th February 1982, when an Edinburgh household had its electricity supply cut off. For the previous 18 months it had been paying 20% — the 'nuclear portion' — of its electricity bills into the Scottish Consumer Campaign Trust. The household, consisting of Alan Reid and Simon Taylor had paid £10.08 into the Trust — that is 8p. over the SSEB's usual 'cut-off' point.

It was a completely 'premeditated' disconnection. The decision was taken last December, after Consumer Campaigners Nigel and Sally Griffiths lost their court action to interdict the SSEB from disconnecting them. (See SCRAM Energy Bulletin No. 28, p.10).

The flat has a wood-burning stove for heating and cooking, as well as a gas cooker. The radio runs on batteries, and lighting is provided by tilly and calor gas lamps.

COUNT-DOWN TO DISCONNECTION - Simon Taylor reports:

Our experience is what 16-17,000 households in Scotland go through every year because of their inability to meet soaring electric bills. We were lucky enough to have the choice, as well as not to be an 'electric household', heavily reliant on electricity.

The first time the SSEB came was January 15th. They were turned away, but told us that a warrant of entry would be sought. But we were not told **when** they would be coming back — with the right to break in, if necessary. This started an anxious time of waiting, with us never knowing whether we would come home to find the door having been forced and 'resecured', and the electricity off, as well. Eventually in early February we received a standard registered letter requesting us to provide access on the 11th, otherwise entry would be forced, and we would have to pay for any damages so incurred.

On that day an SSEB man and a self-employed joiner, there to 'obtain access' if necessary, arrived about lunch-time and removed the fuse from the fuse box in the tenement close. They had wanted access to the flat to get a final meter reading, and to check that they had pulled out the right fuse.

We intend remaining without electricity until the conditions of the Trust have been met — that is until Torness has been stopped; the phasing out of nuclear power in Scotland has begun; and serious political and financial commitment is shown by the Government and the electricity boards to conservation and non-nuclear energy systems.

For a fuller account of the disconnection, as well as other Consumer Campaign News, see WITHHOLDING NEWS (Spring '82), the newsletter of the Scottish Consumer Campaign, available from the Consumer Campaign, c/o 37 W. Nicolson Street, Edinburgh. (10p + SAE). Consumer Campaign Leaflets are also available from this address: 25p for 10; £2 for 100, plus carriage.

Disconnections Worldwide

NEW ZEALAND - 25 households were disconnected in Christchurch in 1980, as part of an electricity consumer campaign in which consumers were only paying 75% of their bills. The point at issue was that 25% of their bills were going to subsidise multinational aluminium smelter development contrary to the interests of the New Zealand people and their environment. One of the main multinationals involved is RTZ in the guise of COMALCO. More information from CAMPAIGN POWER POLL, 33 Glen Rd., Auckland, New Zealand.

W. GERMANY - there have been several score disconnections in the STROBO, the biggest anti-nuclear consumer campaign in the world, which claims about 10,000 participants. Some households have set up their own pedal-power generators. A standard tactic there has been for a household to remain disconnected until another ten households have joined the Campaign. The draw-back with this in Britain is the £11 reconnection fee.

A further Consumer Campaign is being organised against the so-called 'Breeder - Thorium Reactor Penny' — a new structure about to be levied on all electricity bills in the Federal Republic.

The reason for this is the soaring cost of the Fast Breeder at Kalkar and the Thorium High Temperature Reactor at Hamm-Uentrop (Ruhr).

Little Pale Rabbit

Owing to circumstances beyond our control, Little Black Rabbit has taken a long awaited rest to recuperate from a slight dose of myxomatosis! Don't worry, she will reappear in the next issue.

There is no truth in the rumour that Little Black Rabbit is taking up a new post on April 1st at Cathcart Warren, Glasgow (SSEB HQ for all our foreign readers).