# Wise

World Information Service on Energy







**TWINDMIL** 



#### **Declaration of intent**

#### Reasons for an information service

Opposition to nuclear energy is becoming a world-wide trans-national movement. It is the most advanced manifestation so far of a broad movement of opinion against a technocratic, centralised, authoritarian, undemocratic form of society. Its strength and originality lies in the direct involvement of citizens, many previously uncritical or inactive, in deciding about things that affect them.

But the forces behind the nuclear option already operate at the international level (industry and governments). It is therefore high time for the movement to organise a flow of information and experience that can enable its action to be more effective and better coordinated. This is also needed for the development of the positive side of the movement; the elaboration and promotion of viable alternatives (renewable energy sources, other patterns of energy consumption).

#### Functions of the service

To **serve** the movement, in particular by the transmission of information and the promotion of direct contact within the movement.

For reasons of effectivness (concentration of limited resources) and clarity, its field of action is limited to **energy**, taken in the broadest sense (e.g. activities and methods of the antinuclear movement, implications for employment of different patterns of energy production and consumption, world wide activities of the nuclear industry ...).

The prime aim is to ensure the flow of information that is **relevant to action** (e.g. material for legal and political presentation of the anti-nuclear case; practical experience of alternative energies; information on impact, dangers, problems, etc. of the nuclear industry...). Information will be made available both in response to specific requests and in the form of a regular publication available to all.

It shall be a ruling principle of the service to avoid any monopoly or centralisation of infor-

mation. Thus it will seek to promote and facilitate direct contacts and information exchange within the movement, across all barriers (geographical, linguistic, political, etc.), and not to centralise or canalise contacts.

The service must be flexible to respond to the immediate priorities of the movement (e.g. contacts, international press coverage, in liaison with the preparation and follow up of an international demonstration) but never at the expense of its obligation to serve the movement as a whole througout the world.

The service will require a permanent team able to ensure communication in the widest possible range of languages (in particular English, French, German). The statute of the service must ensure its independence from all political or ideological allegiance, inside or outside the movement

(signed in Brussels, November 1977 annexed to the statutes of WISE, February 1978)

## **About WISE**

The need for better cross-frontier contact and communication has been increasingly obvious to many of us in the anti-nuke and safe energy movement. The idea of a newsletter of some kind came up regularly at all our international meetings.

In the summer of 1977, it was discussed in detail by groups attending very differents meetings: at a conference on non-violence in Guernavaca (Mexico) and one on «ecology and European elections» in Bergisch-Gladbach (FGR). The catalyst was the news that independent funds might be available via the sales of the Smiling Sun emblem.

A working group was set up, with an informal mandate from the two conferences. Those taking part had all been involved in cross-frontier work, in the energy movement, the non-violent movement or in the alternative press. In November those who had given the mandate, and others interested, met in Brussels to discuss the project. Nearly 70 people attended. Many of them signed a «declaration of intent» about setting up a «World Information Service on Energy – WISE». They also approved the main outlines of its statutes.

The preparatory group, enlarged, went on working, and called a founding meeting in Amsterdam in February 1978. Every effort was made to invite all the branches of the movement. Nearly 200

people attended, and WISE was formally established. An 8-person Council was appointed.

The potential work for WISE, at the service of the world-wide movement, is unlimited. We are determined to start up slowly and cautiously, as resources allow. In any case, WISE must be essentially a switch-board, helping people to communicate, to make contact and thus to work together. What we can achieve will depend above all on active support from the movement.

The aim is for WISE to be financed from a wide range of sources: subscriptions, supporters' dues, funds from various foundations. Initially, we start thanks to the backing of the Smiling Sun Foundation.

This WISE newspaper is only one part of planned WISE activities. The aim is a fortnightly: this year we shall bring out two before the summer, then four more. But they will already be in French, German and English, with a separate printing in North America. Another function is to promote contact among those engaged in particular aspects of the movement. We start with a trial run on uranium mining. Another move planned is better contact with and between the movement press. For all this we need active support. Please help, and ask others to do the same.

#### Cover pictures

Seabrook / Non-violent occupation of the reactor site, 1977; repeat performance, June 24 1978. See p. 12.

Melbourne / Australian demonstrators against uranium mining and export. See p. 10.

Tihange / January 1978, two «minor» accidents. See p. 13

Tvindmill / Started turning at Easter 1978, supplying electricity for schools.

This issue was put together, with material supplied by members of WISE, by: Norbert Bambach, Ulrike Breitschuhe, Christian Duremberg, Heinz Engel, John Lambert, Raoul Luschnat, Franz Metzler, André Viollier and Frank van Zaanen, with help from many others.

It is published in English, French and German language editions (print run: 3000, 2000, 2000). An identical English language edition is being printed and distribued in North America. Members of the WISE Council responsible for editorial policy: Czech Conroy (London), Georges Didier (La Clayette), Nina Gladitz (Burg-am-Wald), John Lambert (Brussels).

## The worldwide dimension

## Re-processing: the weak link

At the end of April, demonstrators from all over the United States were converging on Rocky Flats, America's «nuclear cross-roads», with its plutonium separation plant for bomb manufacture. Others were headed for Barnwell, site of the third U.S. «re-processing» plant for extracting plutonium from oxide reactor fuel.

On the same day, thousands were due to demonstrate in London against plans for a new re-processing plant at Windscale. On May 20-21, there will be demonstrations against the extension of the dangerous re-processing facilities at La Hague. As for the German Federal Republic, the government there faces massive opposition from the local population and the country-wide anti-nuclear movement if it tries to go through with its scheme for re-processing plus waste disposal at Gorleben.

The «re-processing» of used fuel from atomic reactors is itself a nuclear cross-roads. Between «peaceful» and military atomic programmes. And between the present atomic age and the looming «plutonium era».

The plutonium which re-processing yields can be used for one of two things: to make bombs; or as fuel for the «fast breeder» reactors of the future. Despite this, re-processing used fuel is being used as an alibi by governments which have found no solution to the problem of disposing of it as waste.

What is going on today is a clash of interests within the nuclear camp. On one side is the United States government, whose priority is to reduce the chances of too many politically «unreliable» countries getting the bomb by blocking re-processing elsewhere in the world. On the other are three western Europe governments (Britain, France and the German Federal Republic), mainly concerned with the interests of their nuclear industries and their economies (foreign exchange income from re-processing, sale of technology, long-term energy independence). The anti-nuclear movement is against both kinds of reprocessing: American plutonium is no less dangerous than any other.

#### It all started with bombs

«Plutonium separation» was an essential part of the original nuclear weapons programmes, from which early atomic power programmes developed. But there was no satisfactory reason why civil reactor waste should be reprocessed. (Canada, which had an early civil atomic programme but no military programme, has never seen re-pro-

cessing as an essential or desirable part of waste management). However, the USA, Britain and France all built civil re-processing plants.

It was not until 1976 that the United States attitude changed. On October 28 President Ford announced: I have decided that the United States should no longer regard re-processing of used fuel to produce plutonium as a necessary and inevitable step in the nuclear fuel cycle / and that / avoidance of proliferation must take precedence over economic interests».

President Carter went a step further and called on other countries not to build new reprocessing plants.

Economically, the policy switch cost the American nuclear industry little (or it would probably not have happened!). Attempts at re-processing oxide nuclear fuels had proved an economic disaster, and the industry was backing off from fast breeder technology as too risky and expensive; so the plutonium from re-processing would not be needed. The field was thus clear for what does seem to have been the main reason: growing political concern over the spread of nuclear weapons. The Indian atomic test explosion of 1974 had caused a major shook, for the explosive had come from a civilian research reactor to which both the U.S. and Canada had contributed material.

## **Cynical European governments**

Unfortunately, the political leaders of Britain, France and the German Federal Republic do not show the same sense of responsibility about the spread of atomic weapons as the American and Canadian governments. The European nuclear lobby is fully committed to the re-processing – fast breeder option, and can provide the governments with convincing economic arguments for developing re-processing capacity. For Britain and France at least, one reason has to do with balance of payments problems. France and Britain have the only commercial re-processing plants operating (more or less!) outside the USA. So contracts to handle waste fuel from other countries offer a prospect of major foreign currency income (which will justify, if not offset, the high cost of the plants).

But above all, re-processing is linked to the fast-breeder option. The European nuclear establishment does not enjoy its dependence on enriched uranium supplies from the United States, which makes it vulnerable both to competitive and political pressures. Fast breeders «producing more enriched uranium than they consume» have been seen as the way out. But the five tonnes of plutonium needed per fast breeder can only come from those harmless sounding «re-processing» plants. If there is a chance to bolster failing economies and secure jobs and currency by selling both re-processing and fast-breeder technology, then as far as Schmidt and Giscard are concerned, so much the better.

## Plutonium makers

An atomic reactor is like a wood stove: burned up fuel has to be removed regularly. It can be treated as waste – which for the moment no-one in the world knows what to do with. Or it can be «re-processed». That is the kind of re-assuring, neutral, non-informative word that nuclear technocrats have always chosen. In the military programmes of World War Two and after, it was known, more honestly, as «plutonium separation». The reactors in those programmes (graphite gas

and heavy water cooled) served only to produce bomb-grade plutonium. So they operated at low temperatures, had a low «burn-up» of enriched uranium (less than 1000 MW days/ton), and used metallic fuel, which was easy to dissolve chemically to extract the plutonium. Reactors used for electricity production have to produce maximum heat, so the burn-up is 12-20 times higher; the used fuel is very highly irradiated; and the re-processing plants thus have to be bigger and more complex, and are more dangerous. The light water reactors the western Europeans have finished up with (thanks to the commercial superiority of General Elec-

tric and Westinghouse), use oxide fuel, and the techniques of separating out plutonium from it have not been fully mastered. Bombs are usually made from high-grade plutonium (it needs 5-6 kgs), but they can be made from the plutonium derived from highly burned up fuel (it needs about 20 kgs). These are «dirty bombs», which produce a «less efficient» explosion – and would scatterfar more plutonium into the atmosphere. It is these that it will be easier for Iran, Brazil and Pakistan to make, if the German Federal Republic and France supply them with re-processing plants.

Lastly, under growing pressure about the pile-up of atomic waste, governments are not hesitating to present re-processing - especially if it is in another country - as a «solution» to that problem (as though re-processing itself left no waste to be disposed of). The German authorities cleverly call re-processing Entsorgung (literally, removing worries!) and the planned Gorleben complex, with re-processing, intermediate waste storage and «final» waste disposal underground, a «worry removal area» (Entsorgungspark) !! It was early as 1971 that the nuclear authorities of France, Britain and the German Federal Republic formed United Reprocessors, to coordinate investment in re-processing facilities. They planned three large oxide fuel reprocessing plants - alongside the ones at La Hague and Windscale, plus one at Gorleben. In addition, France is due to sell one to Pakistan, and Germany to Brazil.

## North Americans put the screws on...

Now the three governments have run into the de facto alliance of Canadian and American opposition, and local protest. Canada and the U.S. are the world's major suppliers of uranium. In 1977, Canada re-negotiated her uranium supply agreement with Euratom (the nine EEC countries, including the three would-be re-processors) so that from the end of 1979 she will be able to veto re-processing of EEC atomic fuel containing Canadian uranium. The United States already has that veto power with non-EEC countries, including Japan, so French and British contracts for handling Japanese used fuel in their proposed plants may well turn out to be no more than pieces of paper.

Now the United States is putting the screws on the western Europeans. First came the efforts to stop the Brazilian and Pakistan deals. Then the ultimatum to re-negotiate the US-Euratom agreement, backed up by the threat of cutting off uranium supplies. The Nine were forced to tackle the issue at their «summit» of heads of government, only a day before the ultimatum ran out — and agreed to re-negotiate. But within days a major deal was announced for re-processing German waste at La Hague.

The French, as usual cynical about American idealist motivations, argue that the U.S., with its own safe uranium supplies, is simply trying to undermine Western Europe's

economic competitivity. All three governments tend to argue, equally cynically, that proliferation will happen anyway, so why should they accept empty sacrifices for the sake of Jimmy Carter's Puritan conscience. This sort of attitude is re-inforced by the news that India is talking of bucking the US policy and doing its own re-processing. Since US and Canadian policy may not succeed in stopping re-processing, and could change anyway, local opposition remains important. But what happened over Windscale , confirms how determined the governments are. There has been a two-and-a-half year campaign against the new Windscale re-processing plant. During a public enquiry that lasted five months, frightening evidence was given of accident dangers, health hazards and threats to civil liberties associated with the present plant, and the proliferation argument was driven home. But the «independent» report favoured proceeding at once with the plant. Parliament is likely to endorse this even though the obvious unfairness of the report has embarassed the government, and it has been admitted that the report's arguments about proliferation are wrong.

#### Weakest link

Re-processing and waste disposal are the weakest link in the atomic establishment's defences. Dangerous waste is piling up (100 tonnes a month in the US alone), and it has to be either re-processed (which produces more waste anyway, plus stock-piles of plutonium!) or disposed of. There is no third possibility. And as a report to the Californian government has just rammed home, in neither case are the techniques ready, or even within sight of being ready. Ordinary citizens may still be sceptical about the dangers from atomic reactors (at least until one is planned where they live!), but there is a widespread fear both of nuclear waste (one word the technocrats forgot to neutralize!) and of plutonium. Not only the coming demos against re-processing, but this year's world-wide mobilisation against the nuclear danger, will help bring home the facts. For the foreseeable future, we face a world-wide build-up of dangerous waste. To get us to accept this, we are being offered a «choice» between theoretically safe disposal, and «re-processing» that will usher in the plutonium era.

## An unproven technology

Re-processing may be a vital part of the atomic fuel cycle: the technology is hardly the most successful ...

The first plant in the United States for retreating oxide fuels, at West Valley, New York, opened in 1966, treated 630 tons in 6 years before being closed in 1972 for expansion, and never re-opened again because it could not meet ever-stricter safety norms, especially about earthquake risks. The cost of re-processing, \$ 23.50/kg in 1966, would have been \$ 1100/kg had it re-opened after 1972. The West Valley heritage is 2300 m3 of highly radio-active waste, in vats guaranteed for 40 years ...

Plant n° 2 was planned by General Electric at Midwest, Illinois, but owing to tougher environmental requirements they wrote it off in 1974 as unusable.

N° 3 at Barnwell, South Caroline (Allied Gulf Nuclear Services), authorised in 1970, was due to handle 1500 t/year. The section for reprocessing plutonium oxide has been judged not developed enough for use.

The Soviet-Union re-processes oxide fuel with a burn-up of 20.000 MW days/ton. It is suggested by western sources that the explosion at a Soviet bomb plant in 1958, which according to Zhores Medvadev irradiated 10 000s of people and killed hundreds, occurred during re-processing or plutonium separation; Medvadev thinks it arose from concentration of radioactive gases round badly stored waste.

In the United Kingdom, the Windscale plant has processed metal uranium since the 1950's. In 1968 part began to be converted to treat 300 t. of uranium oxide fuel/year. A chain reaction in 1970 delayed this, but the section opened in 1972 and treated 120 t. Then there was an accident, with 35 workers lightly irradiated, and the section had to written off until 1978. Plans are to re-process

400 t./year, but only after all metal uranium waste, which cannot be stored for long. The major plans currently contested are for 2 plants of 1 000 t/y capacity, one for British one for foreign waste.

The La Hague plant (France) has reprocessed metal fuel since 1958. A new section for oxide fuel was due to open in 1974: it finally treated 15 tons in June 1976. The trade unions say it urgently needs to be closed and made safe. Current plants are to build a new plant to handle waste from Japan, Federal Germany, Sweden, etc. (see below p. 14).

On the reactor at Mol (Belgium) see news item below (p. 15).

There are test reactors in Karlsruhe (opened 1970, treated 29 tons, shut for 2 years ...) and Tokai-Mura (Japan), first due to operate in 1979

The re-processing plant planned for Gorleben, to handle 1 400 tons a year of very highly irradiated oxide fuel would be 10 to 30 times bigger than anything that has worked so far, anywhere in the world ...

## **Unions and Energy**

In several countries workers have started questioning the energy-growth-jobs link. They are beginning to realize that they are effectively terrorized by governments and energy monopolies with threats of mass unemployment unless atomic plants get built. The nuclear lobby may find this sort of blackmail less and less effective in the future. In some cases, links are starting to be established between the trade unions and the environmental and antinuke movement (previously regarded with suspicion), in an effort to find out the real relationship of energy to jobs.

## Denmark: all-out campaign

Atomic power does not help to maintain jobs, it provides electricity that is used to rationalise away jobs and centralise industry ... A working party of the Danish Organisation for Information on Atomic Energy (OOA) is trying to get this message across to trade unionists. Almost all the members are themselves unionists. The group is producing a four-page paper to be sent to all unionists, and a slide series on «energy and employment». With Denmark due to decide within half a year on whether to have its first atomic power station, the aim is to mobilise trade union opposition.

Contact / Lars Andersen, OOA, Skindergade 26.1 DK-1159 Kobenhavn, Danmark. tel. (45) 1-110673

## Austria: help needed

A group called «Trade unionists against atomic power stations» (Gewerkschaftler gegen Atomkraftwerke») is trying to build up resistance against the attempt to push through an Austrian nuclear programme without debate, inside or outside the unions. They push the idea that the slogan «nuclear fission creates unemployment» is the reverse of the truth. The group is anxious for contact with those in other countries thinking along the same lines

Contact/ Gewerkschaftler gegen Atomkraftwerke. Schottenring 35/1 – 1010 Wien – Austria phone 43-222-342693

## Ireland: anti-nuke

The Irish Transport and General Workers Union is opposing the plans of the Irish government for giving Ireland its first atomic reactor.

Contact / John Carroll, Vice-president. ITGWU, Liberty Hall, Dublin 2

# Holland: moratorium demanded

The main Dutch trade union organization (NVV) has demanded a five-year moratorium on the construction of nuclear power stations. The union has also opposed Dutch participation in the Kalkar fast-breeder project, and rejected the government's plan to expand the uranium enrichment plant at Almelo.

Contact/ Industriebond NVV c/o MERO kommissie. Plein 40-45. Amsterdam. Netherlands.

## Federal Germany: repression

In the federal German trade union movement a few active groups are spreading information to comrades about atomic power and its hazards. In some cases workers who took a stand against atomic power have been treated as «trouble makers» and expelled. The expulsion of Heinz Brandt, former leader of the paper and printing workers' union was only prevented by a solidarity campaign. Heinz Brandt is one of the founders of «Life Action Group» (Aktionskreis Leben). This sets out to counter the propaganda of the «Energy Action Group» (Aktionskreis Energie), a group operating within the labour movement with strong backing from the nuclear power lobby.

Contact / Heinz Brandt – Hammarskjöldring 14 6 Frankfurt 50 – West Germany.

Der Atomfilz Gewerkschaften und Atomkraft Olle und Wolter. Edited by Lutz Mez and Manfred Wilke. A critical look at the involvement of the Federal German trade unions with the nuclear industry. Also carefully selected articles on atomic energy and its economic and political impact. Full documentation on the case of Heinz Brandt.

#### France: cautious union

The French conservative government, confirmed in office by elections in March 1978, continues to ignore demands from the atomic energy section of the main progressive French trade union, CFDT (Confédération Française Démocratique des Travailleurs), for a six-months halt to work at the La Hague on re-processing graphite-gas reactor fuel. Last October the union also called on the government to stop signing re-process-

ing contracts with other countries, and to cancel those already concluded. Instead, a major new contract has just been signed for treating German fuel (see below: re-processing). It is also pressing for the French electricity utility (EDF) to be prevented from starting to build new atomic plants until all the waste from the present ones can be handled.

The CFDT is not opposed to re-processing as such. In fact, it argues that it would be even more dangerous to store waste untreated, since the water of the storage tanks has to be changed and treated. On the other hand, it does oppose the French government's plans to build a new re-processing plant (UP3) as long as the techniques used in the two present units (for fuel from the French graphite-gas reactors, and from pressurised water reactors) have not been proven industrially. The union wants short tests on the PWR waste plant (known as HAO) to see if it could work industrially, and then towards 1981 a decision on whether to go ahead with a new re-processing plant. The CFDT condemns the commercial approach of the private company (CO-GEMA) which has taken over the re-processing business, and is interested primarily in juicy contracts for handling foreign waste. It wants re-processing handed back to a public body, and the two plants (La Hague and Marcoule) again made part of the French atomic energy authority.

The CFDT, though not anti-nuclear, is highly critical of dangerous working conditions, and is willing to help unionists from other countries seeking to get better informed about the nuclear industry before taking a stand.

Contacts / SNPEA - CFDT
CEN Saclay
BP 2 - 91 190 Gif sur Yvette - France
33-1-9418000 (ext. 4127)
or GSIEN (Scientists' group for information on nuclear energy) - 2 rue François Villon
91 400 Orsay - France

«Condemned to succeed» (Condamnés à réussir) is the title of a 55 mm colour film about the La Hague re-processing plant, made by the atomic energy section of the French union CFDT. It deals with safety, accident risks, etc., and shows what day-to-day working conditions are like. Workers and local inhabitants are interviewed. Text exists in English, Danish.

Film available from Ciné Information Documents. 56 Boulevard Voltaire. 75011 Paris.

Environmentalists for Full Employment (United States) concentrates on studying and making known not only the increasing hazards to workers and surrounding population, but also the fact that nuclear power means more unemployment.

Environmentalists for full employment – 1101 Vermont Avenue, N.W., Suite 305. Washington D.C. 20005 – tel. 202-3475590.

## Australia: tough law

The Australian government is soon to introduce special legislation to try to stifle the growing opposition to uranium mining and export. Under it, unionists or trade anti-uranium activists who breached regulations could be fined up to 50 000 dollars or jailed for up to five years. The planned Environment Protection (Nuclear Codes) Act would give the federal government almost total power to intervene in State affairs where uranium is concerned. It could override State laws in case of conflict, and federal codes would take precedence. (Opposition to mining is stronger in some states, like Victoria, than in others).

Contact / MUAM – 277 Brunswick St. Fitzroy 3065. Australia. 3-4191457.

lawyers assert. The accused were treated by the court, from the start, as «criminals». Indeed, on the day of the demo itself the regional prime minister, Albrecht, told some of the demonstrators «l'll have you behind bars». Called as a witness, he talked of «those criminals». On Feb. 25 in Hannover 7 000 anti-nuke demonstrators called for all legal proceedings to be stopped.

A lot of information is available about the Grohnde demo and this kind of trial, which could well foreshadow what will happen before long in other countries. Contact/ Atom Info Center (Presseburo) Kornstr. 28-30 / 3000 Hannover 1 / FGR

## **UK:** atomic police

The report on the Windscale Enquiry (UK) on expansion of re-processing

gives precedence to controlling terrorism in a «plutonium economy» over the defence of civil liberties against erosion. This contradicts the «Flowers report», of the Royal Commission on Environmental Pollution, which said the «unquantifiable effects of security measures that might become necessary in the plutonium economy of the future» should be a major consideration in deciding about plans for nuke expansion. Britain's Atomic Energy Constabulary, 400 strong, carry arms at all times, and have far-reaching powers of pursuit, entry, and arrest on suspicion, granted in 1976. Parker's conclusion is that to check terrorism «innocent people are certain to be subiect to surveillance, if only to find out whether they are innocent or not».

Full details in State Research, Bulletin N° 5, ISSN 0141-1667, from 9 Poland Street, London W1, 01-734-5831.

## Germany: scapegoat trial

A 22-month prison sentence imposed by a Hannover court in April on anti-nuke demonstrator Gerd Schulz is intended as a deterrent to all future reactor site occupations, by establishing that occupation is a criminal act. Schulz was one of 15,000 demonstrators who on March 19 1977 tried to occupy the reactor site at Grohnde, and were met with brutal police intervention on a massive scale. He was also one of 14 demonstrators chosen arbitrarily for arrest and one of the 11 finally brought to trial. He was sentenced for breach of the peace, resistance to arrest, threat of violence and occupation of railway lines. The judge said quite openly that the sentence was passed as a deterrent «There is no right to violence, for any goal at all».

The Hannover trials of Grohnde demonstrators have a double function: as afterthe-event justification for the brutality used by the police, and above all to establish that any site occupation is a criminal act. The defendants and their lawyers have treated it as a political trial, and have asserted the right to occupy sites. Legally, the trials have been a mockery, with the witnesses for the prosecution, mostly police, repeatedly contradicting each other, and having recourse regularly to their «limited permission to witness». The identification process was rigged, and «weapons» planted on the people assert, defence



«Local authorities are free to choose nuclear power. Force will only be employed if they refuse»

## **Wave power**

Wave power is about to become a practical alternative energy source. Within a year, accurate cost predictions for wave-generated electricity will be possible. They are expected to overlap with the upper end of the present cost scale from other sources (whereas in 1974 the forecast was costs 10 times above conventional methods.) This is on conventional calculations. But engineers working on wave power say that if hard money values are put on the insurance, security and waste disposal costs of nuclear plant, and the civil and military sides of nuclear production separated in accounting terms, then wave-produced energy is certain to be competitive. And that leaves out the non-quantifiable costs of the nuclear option. Technically, tests of one wavepower method, known as the «duck» have been carried out successfully on 1/15 scale models, and confirm detailed work on 1/150 models. The aim of the duck project is to tap the force of North Atlantic waves, average speed 55 km/h.

Source: paper presented by S.H. Salter to the «public debates» organised by the Commission of the European Communities, Brussels, Nov. 1977. Contact S.H. Salter, Dept. of Mechanical Engineering, Univ. of Edinburgh, Mayfield Road, Edinburgh, UK.

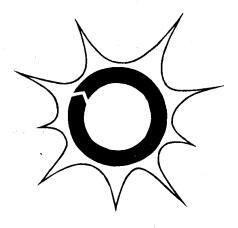
#### **Japanese**

Japanese experiments are reported to be at least as far advanced. The «duck» is only one possible wave-power method. WISE would like to hear further information on this technology.

## **Tvindmill turning**

The largest wind power project in Europe, build at Tvind on the northern tip of Denmark started up at Easter 1978. The mill will produce enough energy to provide for three schools and 75% of the town's energy needs for heating and electricity, thereby saving Dkr. 500.000 on conventional energy outlays. The project was a private initiative which came into being without any public support. Up till now there is no nuclear power in Denmark but the first atomic power plant is planned at Gyllingnaes: 666 mills of this kind would be enough to replace the planned atomic power station. These mills would cost 1,5 mrd. Dkr. as opposed to the 4,5 mrd. Dkr. estimated costs of the nuclear power plant.

Contact/ Organisationen for Vedvarende Energi, Willemoesgade 14 – DK 2100 Kobenhavn O 45-1-429091



«Katalyse» is a group of critical experts in Essen (FGR), which produces regular reports on technological developments, with critical comment. They have just analysed a project for a self-sufficient house using sunheating, developed by Bosch (Stuttgart), and claim it is the most advanced concept so far. Contact/ Katalyse. Karl Barth Haus. Wittenburgerstr. 14-16 – D 43 Essen.

An information network on alternative energy and technologies (réseau NRJ) was established in France some months ago to help build up contacts and exchange of information amongst individuals working on their own either on research or on home-made alternative technologies.

Contact/ Réseau NRJ - Bernard Lagrande Thélème - Montmurat 15 600 Maurs - France

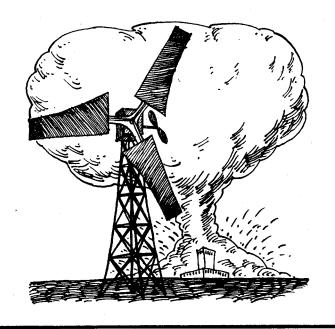
## Help us fill the gaps

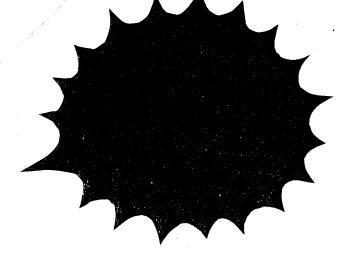
There are many aspects of the energy scene we have not been able to cover in this first issue of WISE:

- the oil industry, its impact on health and the environment:
- coal-mining, and the case for and against its further development;
- other forms of alternative energy, such as geo-thermic energy, heat transfer at sea, bio-mass;
- the energy problems of the developing countries.

We need your help to make WISE a richer and better balanced paper. We also need your comments on this first issue: the approach, range of information, lay-out, etc. Deadline for the next issue is end of May.

Texts should be sent to WISE c/o agenor 13 rue Hobbema – 1040 Brussels – Belgium Tel. (2) 733 04 15 – telex 62913 agenor bru.





## The Smiling Sun

Since January this year the Smiling Sun, known all over the world as the symbol of the anti-nuclear movement, has an extra reason to smile. A small slice of the income from the sale of the emblem is being used to serve the movement, by helping to finance WISE.

The Smiling Sun is still a baby. It was designed only three years ago, in April 1975, by a member of the Aarhus group of OOA, the Danish «Organisation for Information on Atomic Energy». It was a winner from the start, with badges, stickers, posters, tee-shirts selling faster than anyone could have predicted.

OOA consists of a lot of autonomous groups, and it was decided from the start that income from the sale of the emblem should go to the groups, not to the central OOA office. The badges and stickers are produced centrally, so the price for the groups is low; the money they make by selling them helps finance their activities.

The OOA was determined not to let the Smiling Sun be kidnapped, either by party political groups, or by private business. So it has been registered as a trade mark in Denmark and many other countries.

The Smiling Sun went to its first international gathering, the World Congress Against Nuclear Power, in Goteborg (Sweden) in May 1976. By december of that year it was being produced in several foreign languages, and from the start the OOA asked for the same principles to be respected. The Smiling Sun should help all groups in the movement.

The next step was a logical one. In September 1977 the OOA, still acting as guardian of the Smiling Sun, agreed to the idea that part of the income from sales should go towards financing a multi-langage energy information service. The decision was taken to set up a Foundation, which would receive a small percentage of the income from the sale of the emblem. This would form part of the licence agreements between OOA and groups elsewhere selling the Smiling Sun. For buttons, stickers and other products with a high margin, the percentage is 10%; for other products 3%. This Foundation was set up in Amsterdam, on the eve of the WISE founding meeting. It will have its base in Copenhagen. For the first two years, WISE will be the main beneficiary. So far, agreements about the sale of the Smiling Sun have been concluded with groups in Australia. France, Finland, The Federal German Republic, the Netherlands, Norway, Austria, Spain, Switzerland, the United Kingdom and the United States. Negotiations are going on with others in Brazil, Belgium, Canada, Japan, Mexico.

Contact / Siegfried Christiansen, OOA, Skindergade 26.1 DK - 1159 Kobenhavn K. Danemark.

## Word-wide solidarity

The self-awareness of the world-wide movement against atomic energy and for safe, clean, renewable energy is growing fast. One clear sign of this is the idea of world-wide mass demonstrations, which is springing up on all sides. We pass on here the basic facts and contacts for the appeals WISE have heard of (and which we have already put in contact with each other).

SUN DAY. An estimated 30-35 million Americans, and people in many other countries round the world, are expected to take part in «Sun Day» activities on May 3. «Sun Day» has been organised by thousands of people who want to bring in the «solar age». In the United States it was promoted by «one of the broadest citizen coalitions ever assembled (consumers, labor unions, church leaders, environmentalists, community activists, minorities, small business entrepreneurs, farmers and academics). The coalition has stuck to a «positive» stance, for solar energy, and no stance on nuclear, oil or coal. But it «clearly expects that a turn to solar will emphasize that other fuels are environmentally unacceptable and economically obsolete». For «Sun Day» organisers, the solar age means: when our society will use solar power, whether directly as sunlight, indirectly as wind or falling water, or stored as biological material, for energy; a time of simpler technology and greater institutional decentralization: it will mean self-reliance, simplicity, an age of full employ-

Sun Day. 1028 Connecticut Avenue N.W., Room 1100. Washington D.C. 20036 (202) 466-6880.

## **Timetable**

ment and local control.

May 3 – Sun Day

Demonstrations and actions for a solar society. World wide, decentrally organised.

Sun Day 1028 Connecticut av. NW Room 1100 Washington D.C. 1-202-468-6880

May 6/7 - Torness (Scotland)

Occupation of the planned site where the next nuclear power station in Britain. March to the site, exibitions, music, films, workshops, theater, etc. Bring in anything you consider interesting, useful or funny.

> SCRAM 2a Ainslie Place Edinburgh 3 tel. 0044-31-2257752

May 6/7 - Transnational Institute Conference

To discuss the possibility of an international research project on the nuclear power industry. Amsterdam.

European contact: TNI Paulus Potterstr. 20 Amsterdam 1007 0031-20-726608 USA contact: 1901 Q Street N.W. – Washington D.C. 20009, USA tel. 202-2349382

May 13/14

International meeting prepared by the Committee Rhône-Alpes to discuss and prepare common actions and coordinate information on exchange.

Contact : Denis Montet 12 Rue Royale 69 001 Lyon. France. May 20/28 - Internat La Rochelle

 Community action in E – aims, strategy and attempting to elaborate

 how were concerned ci tion, follow up, impact.
 Energy alternatives and power are one of the sub

May 27/28

Mobilisation for Surviva rence, New York City about the Movement for nucleat the special session of t disarmament.

May 27

Bicycle demonstration, A tion to ban private cars fr

June 1-3

Waste disposal. Conferen Sweden. Critical scientist by a mass rally in Stockho

HIROSHIMA DAY. August 6 is the day the first atomic bomb was dropped, on Hiroshima. For years, anti-atomic demonstrations have been held on that day in Japan. The Australian Uranium Moratorium is proposing to make Hiroshima Day an international day of support for a non-nuclear future. The aim would be to bring over a million people into the streets of the world. This massive demo. would emphasize the international nature of the struggle.

Contact / Jim Falk, Uranium Moratorium. 180 Brunswick Street, Fitzroy, 3065

Victoria, Australia - (03) 419 1457.

NATIONAL DAY OF DEMONSTRATIONS. The Swiss Association of Anti-Nuclear Organizations, which groups 52 Swiss anti-nuclear groups, has come up with a very similar idea. It is appealing for an «International day of demonstrations», in cities and/or at atomic sites. The common demand would be for a halt or a moratorium on all construction. The suggested time is October or November, with a two-day preparatory meeting in Switzerland in June.

Reactions by mid-May to André Froidevaux, Burgunderstr. 4 / CH-4051 Basle

EUROPEAN DAY. Very similar, too, is the idea of a «European Day» of simultaneous anti-nuclear action, proposed by the Rhône-Alpes Coordination Committee, on which opposition to the Malville fast-breeder centres. It will be discussed at their International Assizes on May 13-14.

EASTER MARCHES. There is a growing movement to revive the Easter marches, which started from the regular marches on the UK Atomic Energy Authority headquarters at Aldermaston, and were the spear-head of the "Ban the Bomb" campaigns of the 1950's. This time they would be on the double theme of Ban the Bomb an No to Nukes, and would be another step to the merger of the two streams in the movement, which has happened in the United States in the Mobilization for Survival.

ational Symposium

The Steel

Europe» focusing upon methods of groups te an alternative lifestyle citizens brought into ac-

i action against nuclear bjects.

Contact: Invention Sociale et Ecologie Urbaine Community Action in Europe Network.

8 rue du Puits de l'Ermite 75005 Paris, France tel. 5355886

val, International confebout the convergence of ear movement. Following the United Nations on

Contact: Terry Provance 1501 Cherry Street Philadelphia Pa. 19102 USA

Amsterdam. Manifestafrom the city.

Amsterdam Autovrij 8t. Olofspoort 4 Amsterdam, Netherlands tel. 0031-20-239341

ence and demonstration ists conference followed holm.

Contact Folkkampanjen mot Atomkraft c/o Ekoteket, Tjärhovsgatan 44 116 29 Stockholm June 24 - Seabrook USA

THE RESIDENCE OF THE PROPERTY OF THE PROPERTY

Reoccupation of the site destined for an atomic energy plant. Non-violent action. Simultaneous demonstrations take place throughout the USA, Canada and other countries in support of the Seabrook occupiers.

Clamshell Alliance 62 Congress Street Portsmouth, N.H. ESA 03801

June 30/July 2nd – Kiel anti-atomweek (Federal Germany)

European meeting of anti-nuclear activists. Comparison of the situation in the different European countries, history of the anti-nuclear struggle, national international solidarity. Organised by the independent anti-nuclear group at Kiel.

Contact: Arbeitskreis politische Ökologie. Poppenrade 5 23 Kiel West Germany tel. 0049-431-727231

August 6 - Hiroshima Day

World wide actions against civil and military use of nuclear power, particularly in Australia, Japan and USA

Contact: see article this page.

August 5/19 – International anti-militarist march

Plans are maturing in the non-violent movement for the Third International March. Number one aim will be to back regional and federalist movements in Catalonia and Sardinia. But as in 1977 the themes will include opposition to nuclear armements, to the use and export of nuclear energy, which leads to police states and totalitarian regimes.

Coordination International 79 Avenue Miribel 55 100 Verdun, France tel. 29-862046

## Mobilization for Survival

Mobilization for Survival marks the coming together, in the United States, of the two major streams of popular involvement and action against the nuclear menace: the peace movement, which previously concentrated on atomic weapons; and the environmental movement, opposing atomic power plants. The result is a nation-wide campaign, composed of over 300 national and local organizations. Its goals are to end the development and production of both nuclear weapons and nuclear power plants, and to stop the world wide arms race while forcing a reordering of priorities to meet human needs.

Strategically, the Mobilization for Survival is trying to unite not only the peace and environmental movements but also labor, third world, black, women and public interests groups in an effort to isolate the proponents of nuclear technology, capital-intensive energy and military superiority.

The initial momentum of the Mobilization for Survival came primarily from elements of the anti-Viet Nam war movement. After a successful campaign to stop the B-1 Bomber and a 1976 transcontinental Walk for Disarmament, people from various peace organizations came together in the spring of 1977 to discuss the potential of organizing a mass movement around the issues of nuclear weapons, conventional arms and their economic and social consequences. During these early deliberations and awareness of the interrelationship between nuclear weapons and nuclear power evolved. Then came the Seabrook occupation. In the early summer of 1977, the goals of the Mobilization for Survival were established: zero nuclear weapons, ban nuclear power, stop the arms race, fund human needs.

On August 6-9, 1977, in the first national project of MFS, over 140 local vigils and demonstrations were held at weapons facilities and nuclear power plants, to mark the anniversary of the Hiroshima and Nagasaki atomic bombings. This was the largest coordinated response to that unforgettable terrorism in the United States since 1945. The Mobilization plans to repeat these efforts in 1978.

In the fall of 1977, MFS sponsored a campaign teach-ins and community forums aimed at the American public. Many more people workfoce of the Mobilization and its constituency and organization broadened. The Mobilization held its first national conference in Chicago in early December when 450 participants came from 37 states.

Save Our Communities Week (March 26 to April 2, 1978) was designed to expose the results of a military and nuclear power dominated federal budget: unemployment, inflation, unsafe energy, corporate control of the economy, centralized power plants, weapons proliferation. More jobs could be created with less military spending and alternative energy sources.

A series of demonstrations and conferences are planned for the spring and summer of 1978:

- April 29 at the Rocky Flats nuclear weapons plant.

- April 30 at the proposed Barnwell reprocessing plant, South Carolina.

- May 21, Rally for Disarmament at the Hollywood Bowl, California.

- May 22 at the Trident Submarine Base, Washington

 May 27, Rallies for Disarmament at San Francisco and New York, coinciding with the UN Special Session on Disarmament.

 May 28-29 in New York, international conference to discuss the relationships between the peace and non-nuke movements: people from all countries and movements encouraged to come.

June 24, demonstrations at many nuclear power plants, in the US, Canada and other countries, to back up the Seabrook occupation.

August 6-9, Hiroshima Day activities.

 September 15-17, MFS second annual conference : people from other countries welcome.

Contact / Terry Provance – Mobilization for Survival 1213 Race Street – Philadelphia, Pa. 19107 – United States Phone 215-563-1512, 215-241-7177

## Australian struggle

An estimated 25,000 people took part in demonstrations in major Australian cities during Stop Uranium Action Day on March 31. In Melbourne they occupied the road in the centre of the city, causing a vast Friday night traffic jam, to symbolize action that will be taken to obstruct the mining and export of uranium.

Uranium mining and export continues to be the most controversial issue in Australia. There are three major bases: the unions, the Aborigines, and the Recent anti-nuclear movement. months have seen numerous spontaneous demos over nuclear events. Several hundred people protested weekly outside the Peko mining company's offices until sure that mining would not start at the proposed Kakadu national park. In Melbourne, in South Australia, 300 protestors greeted the USS «Queenfish», a nuclear-powered US submarine. At Brisbane, in the north, 11 people were charged after a banned demo. at a container terminal where yellowcake (uranium nitrate, obtained from ore, for the nuclear industry) was being loaded. At Hamilton police stopped a protest against another yellowcake loading. Over the past year, in these demos, Australia has had its first taste of police violence and brutality.

The Australian government has reacted to the growing opposition with legislation permitting very high penalties for unionists and anti-nuclear activists (see «Repression», p. 6). The Australian trade unions, at the federal level, adopted the stand that all existing contracts running to 1986 should be honoured, from stocks or from the Mary Kathleen mine, currently producing, after which there should be no new mining development. Now the executive says this will be its policy until the government provides adequate safeguards to ensure uranium is not used for weapons, to protect Aborigine rights and guarantee safety. But it is not certain that the militant unions are going to be prepared to work with the mining industry even to complete con-

The other dimension of the mining issue concerns the land rights of the Aborigines. The Aborigines oppose uranium mining. The Ranger consortium, including Peko and E.Z. Industries, proposes mining a site bordering on Aborigine sacred lands. The 5000 males of a uranium mining town cannot

be trusted to leave that land untouched. A mountain of radio-active tailings would build up. Radon gas from mining, plus acid from ore milling, would destroy the balance of the environment. There are also plans to mine in the (proposed) national park at Kakadu, land claimed by the aboriginal Northern Land Council. The Australian prime minister has halted Kakadu mining plans until these claims are dealt

Contact / Uranium Moratorium. 277 Brunswick Street. Fitzroy 3065. Australia. 3-4191457

Populations living near dumps of «tailings» from uranium mining have double the normal risk of getting lung cancer, says a US Dept. of the Environment report on waste management. It had examined 22 inactive sites in the US and claims that at none of them are tailings adequately stabilised for longterm storage - in other words, they are still emitting dangerous levels of radioactivity. The report adds in passing that many of the sites are in demand ... for alternative uses!

## Hunt the uranium ship!

Action by the Australian Movement Against Uranium Mining, to stop uranium being shipped out of the country, has started a chain reaction. A sit-in last year, backed by dockworkers, effectively prevented a German ship from taking on board a load of yellow-cake (partly treated uranium ore). Recently, the main antinuclear and environmental ganisation in North Germany (BUU, Hamburg) called for cooperation in blocking the «ACT 7», carrying ore from Australia and due to dock at Zeebrugge (Belgium), Tilbury (UK) and Hamburg. After Tilbury, the vessel in fact headed for Philadelphia. Greenpeace in London passed the word to Mobilization for Survival to prepare a welcome... **Mobilisation for Survival** 

**BUU Hamburg** 2000 Hamburg 19 tel. 49-40-402782

1213 Race Street Lutterothstrasse 33 Philadelphia, Pa. 19107 **United States** tel. 215-241-7177

Greenpeace / CIMRA c/o Roger Moody 70 Durham Road London N7 Britain tel. 44-1-2630253

**Movement Against Uranium Mining** 277 Brunswickstreet Fitzroy 3065 Australia tel. 3-4191457

## «Keep it in the ground»

The aim of WISE is to help the movement to be more effective. Publishing this paper is only one of the ways of doing that. Another is to help people and groups involved in the same part of the anti-nuclear struggle to improve their contacts, the flow of information between them, and the sharing of experience. We don't want to organise anyone (and anyway, WISE would not have the resources): we do want to help. To find out what techniques and what resources are needed to serve the movement, we had to start somewhere. The WISE Council opted for the struggle against uranium mining (which does not imply we are imposing a priority). The reasons are these:

- uranium mining is vital to the nuclear
- it is organised world-wide, and run by the multinationals; because of the military and economic implications, the governments work with them:

- the opposition is geographically dispersed: mining is going on or is planned world-wide (Canada, Czechoslovakia, Australia, France, Brazil, Federal German Republic, Greenland, Gabon, Niger, Namibia, United States, Sweden, ...);
- in Australia, the trade unions are playing a leading role in the struggle; they will need the support of unions (especially dock-workers) the world over, if boycotts are to be successful.

WISE's role will not be to centralise and sit on information, but to pass it on, publicly or confidentially, where it can help. The kinds of things that the active anti-mining groups need to know are: names and contacts of groups everywhere opposing mining; companies involved and links between them; size location and quality of reserves; methods used or proposed, with likely or existing rates of production; attitudes of miners and locals; tactics. If you can help, please contact WISE, 2e Weteringplantsoen 9. Amsterdam, Nederland.

## **Transport**

#### Swiss blockade

A truck carrying fuel elements for the atomic reactor in Gösgen was blocked for an hour in the streets of Basel, on Feb. 23 1978, by a group of anti-nuke demonstrators. They barricaded the street with building material and stones, and marked the truck with bright paint. To avoid violence, they lifted the «blockade» when the police threatened to intervene.

The Gösgen reactor is being built only 30 km from Basel. The fuel elements were on their way from Germany, and

the tip that they would be taken through the city came from the German movement. A second planned action, blocking a branch of the motorway, was prevented by a massive police cordon. The aim of both demonstrations was to protest the fact that the Basel city authorities had not refused to authorise reactor fuel transport trough the city, although 76% of the population had voted in a referendum in June 1977 against nuclear power and for a moratorium on reactor building.

## **Enrichment**

# Netherlands: all against Almelo

Nation-wide mobilisation in the Netherlands, in cooperation with several groups in Federal Germany, lead up to a demonstration of 50 000 people, on March 4, at Almelo. The aim was to express popular resistance to the proposed enlargement of the uranium enrichment plant located there. It is considered that this would boost the spread of both civil and military uses of nuclear power. The plant uses the ultra-centrifuge method and is part of Urenco, a German-Dutch-British joint venture.

Urenco is intended in the future to fuel a considerable part of the nuclear power system in North Western Europe. Part of its output would also be exported to other continents.

Urenco has a twin-plant at Capenhurst in the United Kingdom. Sixty percent of the enriched uranium from Urenco would go to Federal Germany, not only to fuel its own nuclear power stations but also to resell it. In 1975, the German government concluded a DM 15 billion contract with Brazil, and 20% of the enriched uranium from the enlarged Almelo plant is intended for Brazil. The Brazilians would also receive two nuclear power stations with an option at yet another six, an enrichment plant and a reprocessing factory. In exchange Germany will be entitled to one-fifth of the uranium ore discovered in Brazilian soil. In this way, Germany will be guaranteeing supplies for its own nuclear power programme.

Recently Urenco officials visited Australia to talk about future uranium ore deliveries. They also visited Japan to negotiate the sale of enriched uranium to that country.

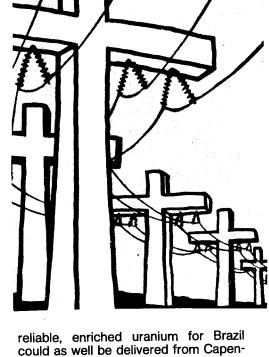
Enriched uranium can be used to fuel atomic power stations, but with the technique used in Almelo – ultracentrifuge – uranium can also be enriched to a higher degree after which it is suited for the manufacture of atomic bombs.

The Almelo demonstration was the second occasion on which the Dutch and German anti-nuclear movement have cooperated intensively. The first was Kalkar, on September 24 1977. The demo. derived its political signifiance from the fact that it clearly showed a convergence of the traditionally environmentally orientated «no nukes movement» and the peace movement – e.g. the movement against atomic weapons.

Furthermore the unusual broad political alliance – even for Dutch circumstances – for the first time included both several communist groups (the Dutch Communist party, the International Communist Alliance and the German Kommunistischer Bund) and progressive church based groups (Pax Christi and the Church and peace movement).

The political conflict around Almelo is still undecided. The strong population pressure forced the Dutch parliament and the government to demand stricter guarantees from Brazil with regard to international control over fissionable material, particularly plutonium, before deliveries would start.

Brazil, the United Kingdom and particularly West Germany however exert strong political pressure persuading the Dutch government to give permission for the extension of the Almelo plant quickly. The German government announced that it would build its own enrichment plant at Gronau 25 km. from Almelo at the other side of the border, when the Dutch government would go on hesitating. Other press comments stated that with Dutch politicians continuing to be un-



reliable, enriched uranium for Brazil could as well be delivered from Capenhurst. With popular pressure being strongest in the Netherlands there is a tendency to shift enrichment facilities to Germany and the United Kingdom.

Recently it became known that British nuclear fuels limited (the company which runs Capenhurst) is negotiating with Brazil about the delivery of a uranium hexafluoride plant to that country.

In the Netherlands resistance continues. The 29th of April there will be a national day of action with activities in all major towns.

Contact / L.E.K. – 2e Weteringplantsoen 9 Amsterdam (31 20 221366) B.I. Gronau, Theo Hendriks – Tieker Damm 22 CIMRA – 70 Durham Road – London N 7 (44-1-2630253)

«Urananreicherung» Geschichte, Technologien, Markt. P. Boskma, W.A. Smit, G.H. de Vries. Translated from the Dutch.

Contact Bürgerinitiative Urananreicherungsanlage Gronau. Postfach 1422. 4432 Gronau. West-Germany.

An extensive report of the mass-demonstration on the March 4 against the enrichment plant at Almelo, with many photos and an explanation of the historical background, was published by the German «Kommunistischer Bund» 'Die Internationale' March 1978. Contact/ J. Reents. Lerchenstrasse 75. 2000 Hamburg 50. West Germany.

## Seabrook (US): coming back

The fourth occupation of the site of a proposed twin 1150-MW nuclear plant in Seabrook, New Hampshire, USA, is scheduled to begin on June 24.

The demonstration will be similar to last year's, with all participants belonging to affinity groups of 10-20 people, and everybody required to receive nonviolent training. Once again, occupiers will approach the site from several directions. But unlike last year, there will be different occupation target areas. The organisers hope this will allow more efficient but completely participatory decision-making.

«Interest is high and we expect to have at least as many people participating as last year», said Cathy Wolff, a spokesperson for the Clamshell Alliance, a coalition of New England anti-nuclear / safe energy groups.

«This year, we intend not only to attempt to non-violently occupy the site, but also to begin restoration—restoring the land to the people of Seabrook and to its natural state», Cathy Wolff said. Occupiers hope to plant gardens, set up safe alternative energy exhibits, and establish a presence on the 750-acre site and related construction areas.

But that does not mean the attempted occupation will be a garden party. Last April 30, 2 500 people walked onto the site of the Seabrook plant. The next day 1415 were arrested and charged with criminal trespass. Many of those people spent 2 weeks in jail, refusing to pay fines, and the event sparked the organization of similar anti-nuclear direct action alliances around the United States.

Like last year, there will also be a big supporting rally the following day, June 25, in the area, for those who back the occupation but had reason not to go through the non-violent training and risk jail sentences.

The Clamshell has again laid down strict conduct guidelines all occupiers must follow: no dogs, alcohol. property weapons or drugs; no damage; no running or breaking through police lines; and no strategic movement after dark. It has also decided not to block workers' access to the site. «Our fight is not with the workers or the state, but with the nuclear industry», Cathy Wolff said. «We respect the 2000 people working on the site as individuals; although we oppose what they are doing».

Opposition to the \$ 2.5 billion plant — which is now 10% built, and is scheduled for completion, ironically, in 1984 — has grown tremendously in the past year.

A few legal challenges to the plant remain in the courts. But the United States Supreme Court recently made a ruling that leaves courts only a limited role in judging decisions made by nuclear regulatory agencies. The day of that ruling a New Hampshire lawyer who has worked for years fighting the Seabrook plant through the regulatory process called the Clamshell and said: «It's up to you now».

Contact for more information or monetary gifts to keep the Clam going / The Clamshell Alliance 62 Congress St., Portsmouth, N.H. – USA 03801

# Basques: big demo, little bomb...

Over 150 000 people – probably a record for a single anti-nuke demo. - marched on March 12 against the construction of an atomic power plant at Lemoniz, in the Basque country (on the north coast of Spain). The Spanish authorities took no notice. Five days later, the plant - which is nearing completion - was severely damaged by an explosion in the reactor core. ETA, the militant Basque independence movement, claimed responsibility. The dynamite had been smuggled into the plant in small quantities by site workers. Because the authorities ignored precise advance warnings about the explosion, two workers were killed and several wounded.

Opposition to atomic power in the Basque country has been building up steadily for several years now. In this small area, heavily industrialised along the coast, and with high population density, the Spanish nuclear industry, with Madrid government backing, has planned a total of 12 atomic power stations. The opposition has thus centred on the very concrete theme of the risks from possible accidents. The population density within a 30 km radius the Deba plant (two 1 000-MW light water reactors) is 481 km2, that around Lemoniz 849/km2 — which is seven times the American safety norms.

The Lemoniz site is only 12 km from Bilbao, an industrial city with over a million inhabitants. Many areas of the Basque country are within danger radius of several of the plants.

Lemoniz has become the symbol of the refusal of the nuclear programme that has built up since 1973. The authorities went ahead with the plant without getting the necessary building permits, and have pressed ahead at top speed, ignoring legal cases and a growing wave of public

protest. Fifty thousand people demonstrated in 1976, and 150 000 in 1977. In December 1977, in a clash been demonstrators and police guarding the Lemoniz site, a demonstrator, David Alvarez Peña, was shot.

The communiqué put out by the Commission for a Non-Nuclear Basque Coast stated:

«Again, after long years of struggle the people assembled today in Lemoniz to demonstrate its firm determination to prevent Euskadi (the Basque country) from being turned into an atomic gunpower vessel. Year after year we informed and mobilised the population, and accepted what was done, expecting that our case would be taken seriously. But the only answer was silence, a silence which we consider to be irresponsible, an insult, and a proof of guilt...

... now the overwhelming majority of the Basque population outspokenly opposes the introduction of atomic power in Euskadi. ... When after all these years of resistance the authorities' only reaction is shameless passivity, what then is there left us to do?...»

Five days later, the bomb went off. The delay to the plant is estimated at one year. The Basque country is in the process of getting back a certain autonomy, but the Iberduero company is determined to press on with the plant.

Lemoniz is a test-case for the movement world-wide.

Contacts

Commission for a Non-Nuclear Basque Coast J.-M. Escubi, Lequeitio, Biscaya 3444-159204 Jose Allende, P. Mendebil 7, Las Arenas, Biscaya 3444-636489

J.T.Elciondio, Careaga Goikoa 19, Basauri, Biscaya 3444-423415



With a mass rally and a march on the site, on May 6-7, the campaign against the Torness (Scotland) reactor project will move into top gear. It is organised by the Scottish Campaign to Resist the Nuclear Menace - SCRAM («scram» means «get out»). The march will cap a «no nukes week» all over Britain starting with the anti-Windscale (re-processing) demo, in London and including Sun Day celebrations. A Greenpeace boat will sail to the site, with a windmill on board, and the new Alternative Technology Study Centre will present another windmill. After the march a declaration of resistance to nuclear power will be adopted.

This will be the first massive citizen action against an atomic power plant in the country which was the first to build them, and which has no less than 28 of them in

operation. It was as though British public opinion had accepted reactors as a fact of life. But a broader debate started when plans to introduce fast breeder technology became known, and attention was further focussed on the issue by the recent hearings on the extension of the Windscale re-processing plant.

The Torness project is for a 1320 MW Advanced Gas-Cooled reactor, to be build on the North Sea coast 30 miles east of Edinburgh. SCRAM has not only put forward the full range of anti-nuclear arguments. It has shown that:

 other nuclear power projects in Scotland have led to local unemployment once construction was over, with no new jobs created and migrant construction workers staying on;

 the Scottish Electricity Generating Boarding already has over-capacity compared with demand (total installed capacity 7166 MW, another 1320 MW under construction, and demand in 1976-77 only 4300 MW);

 of 6 similar reactors ordered since 1965, three are from two to seven years late, add two are not working properly; one was shut down last year when 1 000 gallons of sea water leaked into the reactor pressure vessel.

There has also been opposition in Scotland to other nuclear activities:

 test drilling to find sites in granits formation for high level waste disposal were opposed by local inhabitants;

 plans to drill to find whether uranium ore was worth mining were blocked by local authorities.

Soon the population will be faced with the building of a first commercial fast breeder at Dounreay (where a small prototype already operates).

Contact / SCRAM - 2 a Ainslie Place - Edinburgh phone 44-31-225 7752

## Austria: reactor built illegally

An Austrian citizen, Ernst Zörnlaib, has won an important legal action against the construction of a power reactor at Zwentendorf (Austria). The country's highest administrative court has said the plant is being built illegally, because he and others were not admitted to hearings about the building permit, on the grounds that their land did not adjoin the site. They argued that they were affected by the decision. At the very least, the building permit hearings will be held over again. Meanwhile, Zörnlaib is preparing to challenge Austria's legislation on radiation protection as unconstitutional.

Text of the ruling available (in German) from Wieland Soyka, StedingerStr. 39, 2800 Bremen 1 FRG – send DM 2.50 for postage.

## **Atomstrom**



Damit die Lichter nicht ausgeben.

atomic electricity so that the lights don't go out

## Ireland: opposition starts

Ireland is about to go nuclear. The government has decided in favour of a first atomic reactor, to be built at Carnsore Point, in County Wexford. The decision is the result of heavy pressures from the industry, and discreetly from the European Economic Community. The nuclear propaganda machine has already swung into action, with a report from the Irish Agricultural Institute intended to calm fears of local farmers (it says the risk of nuclear accident compares favourably with the risk of death from lightning...).

An opposition front is already forming. The biggest Irish trade union is opposed (see unions). The Labour party has called for an enquiry. The Irish Sovereignty Movement also: it argues there is «no immediate necessity» for the plant, and «the necessity may in fact never arise». A spokesman called the plan «nuclear madness».

Opposition to the scheme will be a major concern of the Irish Friends of the Earth, which has come to life again.
Contact IGTWU, Liberty Hall, Dublin 2, Ireland.
FOE, 17 Arbutus Place, South Circular Road

## Swiss fasting...

Determined to use every form of non-violent action in their struggle against atomic power stations, over 500 people from the Swiss movement took part in a collective hunger strike over the Easter period this year. The fast, organised under medical surveillance in a heated tent, gave them a chance to discuss basic issues, like the role of women in the movement, defence against repression and to plan future action.

Their priority is to prepare for a coming referendum over atomic energy in the area round Basle. Support was expressed for striking Firestone workers, and it was planned to take part in union May Day celebrations. The Swiss TV was petitioned to show a film made in Luzern about the dangers of atomic energy.

Contact / Postfach 66 - 4123 Allschwil 1. Switzerland.

## ... and planting trees

To celebrate the third anniversary of the day they brought work on the Kaisersaugst reactor to a stop by an occupation of the site, Swiss anti-nuke groups met there again on April 1 1978 to plant trees. The aim is to start restoring the site to the state it was in before work began on the plant.

Contact / Non-Violent Action Against AKW Kaisersaugst. Postfach 65 – 4123 Allschwill 1 Switzerland

## Tihange: «minor incidents»

At the Tihange I pressurised water reactor, on the Meuse river in Belgium, two «minor incidents» happened on successive days in January 1978. First a «scram» (emergency shut-down), then a valve failure on the cooling circuit. As a result 80 people were exposed to vaporised iodine 131 isotopes at levels 50 times above the admitted norms, some of them for 10-12 hours. Contact/ Les Amis de la Terre (Huy), 23 rue d'Italie, Huy, Belgium (32-85-230498)

«Risk assessment on the atomic plant at Barsebäck, Sweden». A study made at the request of the Swedish Energy Commission about this twin 850 MW atomic power project in Southern Sweden, 20 km from Copenhagen. The study deals especially with the international implications of major reactor accidents.

Prepared by MHB Technical Associates. 366 California Ave., suite 6. Palo Alto, California 94 306 or contact the OOA – Skindergade 26 DK-1159 Copenhagen – Denmark

Fuller report from WISE. Send postage.

#### Malville: hard times

The local opponents of the Super-Phénix 1200 MW fast breeder at Creys-Malville (France) have begun workonan eco-house, self-sufficient in energy, on land given by a family just near the site. This is one of the signs of how the Malville opposition is pulling itself together after the impact of last summer's mass demo. On July 31 1977, 60.000 peaceful marchers from all over Europe converged on the site in heavy rain. They were met with police violence: one dead, 2 seriously mutilated (one French, one German), and a hundred wounded.

The background to that demo. was three years of growing awareness first locally then nationally of the threat from the fast-breeder: 5,000 kgs of plutonium, and as cooling liquid five thousand tons of sodium, which would explode on contact with water or at the reactor core temperature, and catches fire on contact with air (with no known means of putting out a fire of more than 200 kg).

In the summer of 1976 there was a first major demo., with a site occupation and police violence. During the following year there was a range of activity: informing local opinion and workers; «soft» sabotage (no violence to people) to delay work e.g. repeated removal of electric cable poles; civil disobedience (15% off electricity bills); theft of emergency plans for the area; refusal to sell land for rail line into the plant, etc. In the months before the big July demo. there was a major debate on violent and non-violent action.

Since last year morale in the local movement has been low. The local population are largely resigned to the plant's being built, or have a material interest in it. Those who say they are against are not prepared to act. The systematic police intimidation - house searches, police at all meetings, personal check-ups - has scared off lukewarm opponents. Faced with the French government's tough treatment of peaceful protest, there is a growing mood of violence among militant opponents. But Malville remains the symbol of the anti-nuke struggle in France, and the opponents are now planning action for the summer. The coordination committee of the Rhone-Alpes region, at a gathering on May 13-14, will plan a day of action in the Malville area and a Europe-wide week of simultaneous action.

## **New generation?**

Preparatory work has begun for a gascooled fast breeder. It is being done at the European Community research centre in Mol, Belgium, by a team from the Federal German research centre at Jülich, which has devoted ten years to theoretical work. The scheme is for a gas-cooled thorium-fuel high temperature reactor (1000°), with bullet shaped fuel elements. The surplus heat could be used for other industrial processes such as gas conversion of coal. With the Kalkar fast breeder increasingly in doubt for technical, cost and legal reasons, and the Super-Phénix at Malville a risky technological bet, the European nuclear establishment may be tempted to cut its losses and go straight for the next generation of fast-breeders. The Jülich research team consider the sodium-cooled fast breeder an out-of-date concept.

## Reprocessing

#### French connection

The Federal German nuclear authorities, under heavy pressure from opinion about waste disposal, have passed the problem next door - to France. Within days of the Europeans' agreement to negotiate with the USA about conditions on uranium supplies. the Federal German «Fuel Element Reprocessing Company» in Hannover signed a 2.5 bi. DM contract with the French state-run company Cogema. Under it the planned UP3 block at the La Hague plant, the pilot scheme for which has never worked, would handle the 1700 tons of burned uranium oxide fuel from Germany's light-water reactors in the period 1980-84. But Cogema has given no guarantees of being able to carry through the contract. It looks like being a phoney, to be used by the French authorities to justify going on with La Hague, and the German in order to say they have a «solution» to the waste problem, so that the building of new reactors can be authorised.

A Swedish-French deal parallel to the German one was signed a few weeks earlier. Cogema will handle during the 1980's 620 tonnes of uranium, for a cost said to be around \$ 217 mi. The Swedish government has still to approve the deal. The contract provides for France to send back radioactive wastes from the re-processing.

Belgium has decided to go into the reprocessing business. The government will take over the Eurochemic plant at Mol. near the Dutch border, and enlarge it to handle 350 tons of waste fuel per year instead of its original 70 t. The plant was built by Eurochemic, a joint operation of 12 OECD countries, to reprocess fuel from experimental reactors. It opened in 1966, but was closed in 1974 after France, the UK, Federal Germany and the Netherlands withdrew. The Mol heritage is 650 kgs. of plutonium, 800 cubic meter of highly radio-active waste, 4000 cubic meter of medium-active and 4000 cubic meter of low-active waste, still stored «temporarily» on the site...

## Waste

#### California: no solution

A new atomic power plant in California should not be built, because there is no satisfactory way of disposing of the waste. This is important news, because of the growing public awareness everywhere of the waste problem, and the tendency for other governments (such as the German Federal Republic) to make safe waste disposal a condition for new plants. The Commission's advice may be turned down by the California state parliament, but state governor Gerry Brown has said he will

block the plant.

The California State Energy Commission had to advise on the licence application for a \$ 3 billion project for two 950 MW nuclear power units at Sundesert on the Colorado River. Back in 1976, to head off pressure for a referendum that would have suspended all nuclear development, the atomic lobby accepted legislation which it saw at that time as quite mild. Licences for any new atomic plant were made subject to two conditions:

 the existence of an approved technology for the construction and operation of nuclear fuel reprocessing plants; - a demonstrated technology for the disposal of high-level atomic waste.

On reprocessing, the Energy Commission says that it is not in any case required as part of the fuel cycle for lightwater reactors; but that if it were, the «complete technology for the successful operation of a commercial re-processing plant meeting all regulatory requirements does not exist». For the moment all activities on reprocessing technology in the US have been halted at the President's request. On highlevel waste disposal, the Energy Commission finds that «even the initial steps necessary for federal approval of a waste disposal technology have not been completed».

The message could not be clearer: no more nuclear power stations for California in the foreseeable future.

Photocopies of the 5-page Energy Commission decision are available from OOA, Skindergage 26-1. Kobenhavn-K in return for copy and postage costs.

The earliest date for an operating permanent waste repository in the U.S. has been pushed back from 1980 to 1985. A report to the American Department of the Environment from a nuclear management task force. released on March 15, gives this news. It even says it is reasonably certain that a dump can be ready only by 1988-93. The report firmly concludes that reprocessing is not necessary for the «safe disposal» of spent fuel. It says geological storage is practicable, and urges a rapid demonstration of disposal in salt. As for waste dumped, it should not be made retrievable.

## **Dangerous games**

Advanced technology has always served military purposes. Nuclear power has been used for over 20 years to power satellites and electronic remote surveillance stations. Millions of people have to be exposed to serious risks in the name of US national security. When China exploded its first atomic bomb in 1964, US intelligence services were desperate for information on the device. Plans were developped to instal a sophisticated monitoring device on the top of the Nanda Devi to overlook the secret nuclear testing ground of Lop Nor in the Chinese province Sinkiang. A group of American and Indian intelligence people and mountaineers started climbing the 25,645 ft. peak in the province of Uttar Pradesh. One of the packs they carried contained about 4,5 K of plutonium. Due to weather the expedition had to be interrupted and the expedition's equipment - including the container with the plutonium unit -

were stored in a crevice. Some time later it was all buried under an avalanche. Sofar, all efforts to recover the container have failed. A radioactive and toxic timebomb is ticking away in India... In between 10 and 30 years time, the steel container will be destroyed by erosion and set free the 4,5 kg plutonium. Via the melting snow it will reach the Himalay mountain streams that flow into the Ganges. The Ganges is the only source of drinking water for millions of people in India...

A lot of monitoring is done today by the over 1400 military satellites in space. Some of them carry nuclear material on board. If these re-enter the atmosphere harmful radioactivity is spread worldwide. The first known accident was in April 1964 when a US satellite burned up over the Indian Ocean. The latest occured on 24 January this year. A nuclear satellite of the Type «Cosmos 954» (USSR) burned up over North-west Canada and scattered radioactive material over the region. According to official statements this region is not inha-

bited - which is untrue as it is inhabited about 20000 people from the Dene Nation. The Dene are one of the last Indian cultures surviving unchanged and committed to traditional lifestyles. Since the early '70ies they have been fighting the Canadian government to get their national independance. So far they have successfully resisted an American-Canadian project to build a gaspipeline, linking Alaska and West-Canada, across their territory. The radioactive contamination of their land will lead to an evacuation of the Indians from their native land. In the framework of the cleanup efforts the Canadian government will try to acomplish the construction of the pipeline. In this event one of the last Indian cultures will doomed.

The Dene are insisting that they themselves organize the examinations and clean-up of their radioactively polluted territory – and that the US-Canadian project be ceased. The Dene need our help and solidarity.

Contact / Eva Wieschke. Josephstrasse 32 5000 Cologne 1 (tel. 39-221-32 76 87)

## Fall-out

The Political Ecology Research Group is an independent group of research workers in social, political and earth sciences. It is also actively involved in policy-making and public participation. E.g. it helped prepare the anti case for the Windscale enquiry. PERG reports have covered: «the worst possible accidents in the nuclear industry» (n°3); «use and abuse of information in the nuclear debate; a German case study» (n°2).

Contact / Peter Taylor, The Red House, Hinksey Hill, Oxford, United Kingdom (44-865-739086)

"Worldwatch Paper" N° 15. The third world countries have other energy problems and possibilities than the industrial countries. Denis Hayes looks at technical progress, possible priorities, and how political attitudes are changing.

Several of the first 14 Worldwatch papers were on energy issues. N°1 Firewood – n°4 Conservation – n°6 Nuclear Power and Proliferation – n°11 The Solar Prospect.

This material is also gathered in a book by Denis Hayes: «Rays of hope. The post-petroleum era»

Worldwatch Institute. 1776 Massachusetts Ave. N.W. Washington D.C. – 20036 USA.

«NUX. Country-to-country link for an unsplit atom» is a monthly publication run by Konradin Kreuzer. It is one of several initiatives more or less similar to WISE, seeking to respond to the need for more effective transnational communication. The 2nd. number contains a.o. articles on high level radio active waste disposal, the problem in Austria of how and where to get rid of radio active waste. It contains mainly news from the German language area (Germany, Switzerland and Austria) and from France, with contact addresses, coming events, book reviews, etc. Appears in German, French and English. Price: DM 40 a year (8 pages A 4).

Contact / NUX, CH-4113 Flueh, Switzerland.



EARS (Environmental Action Reprint Service). Publishes regular Energy Catalogues giving recent publications on the full range of soft energy developments with brief comments, prices, etc. EARS runs a Mail-Order Bookstore for Solar and Alternative Energy Information.

EARS – 2239 East Colfax, Denver, Colorado 80206

A German documentary film team, making a full-scale colour film about atomic energy and alternatives to it, is seeking support. They particularly need photo and film material about nuclear and anti-nuclear events they have not been (or will not be) able to film for themselves e.g. Malville, Almelo, and the forthcoming Rocky Flats, Windscale, Torness demos. They also need funds, as many sources have dried up because the theme is too controversial.

Contact Suzanne Beyeler, Rönnestr. 6 – 1 Berlin 19 (phone 49-30-3241181)

Expertise for citizen action groups, practical and theoretical training for anti-nuclear movement members, and research at the service of the movement are the activities proposed for an Environmental Protection Centre, which Klaus Bätjer is seeking to set up with Bremen University. Contact Klaus Bätjer, Universität Bremen, 288 Bremen 49. Phone 49-421-232484.

## Membership

is open to individuals who share the goals of WISE.

Active members pay an initial fee of six dollars or four pounds, and help in practical ways (information, translation, distribution, etc.); where possible they pay of monthly dues; they have the vote in WISE meetings.

**Supporter members** pay dues equivalent to at least seven dollars or four pounds/month. They can attend and speak at WISE meetings, but not vote. For practical reasons, dues should be paid for at least 3 months at a time.

## **Subscriptions**

The paper is sold inside the movement at cost price (printing and postage). Rate for the first 6 issues: 5 dollars ou 3 pounds Libraries and institutions pay triple rate.

## **Smiling Sun**

Sales of the Smiling Sun emblem benefit WISE – and can help finance your group. The OOA is looking for people to sell it. Or write and ask where you can get it in your country (see p.8-9).

All sums should for the moment be sent by cheque (to minimise bank charges) to the WISE office in Amsterdam. Prices are given here in dollars and sterling; payment of the equivalent in any other currency is of course acceptable.

#### Action!

## Help!

Critical experts' conference on nuclear waste. Stockholm, June 1-3

The Swedish anti-nuclear movement needs immediate practical support. A decision of vital importance for the movement worldwide is about to be taken in Stockholm.

The Swedish coalition government (the anti-nuke Centre, plus Conservatives and Liberals) has made further nuclear development contingent upon a satisfactory solution to waste management and storage. Now two applications have been put in for licences to run nuclear power stations. The government must decide.

The nuclear industry has commissioned an \$11 mi. «Nuclear Fuel Safety Project». This may not be tested in public hearings. The governments of Finland and Denmark will take the decision of Sweden's anti-nuke prime minister as a precedent – one way or the other.

So the Swedish anti-nuke movement is holding:

- its own Critical Experts' Conference. It needs your help to contact critical experts on waste reprocessing, glassification, plutonium control, intermediate storage, and storage in bedrock and to pay their fares.
- 2. a Stockholm Anti-Nuclear Parade, on June 3. Send delegations from local groups and/or national anti-nuke organisations.
- 3. a camp for activists, after the parade. Say who is coming, and their fields of interest.

Reply now to: Folkkampanjen mot Atomkraft. c/o Ekoteket, Tjärhovsgatan 44 S-116 29 Stockholm

## to WISE, 2e Weteringplantsoen 9, Amsterdam, Nederland

I wish to become:

- O an active member
- O an active member paying dues of ...../month
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- O Please send a free trial issue to .....

#### to OOA - Skindergade 27 - Kobenhavn

- O I wish to know the name and address of the Smiling Sun agent in ......
- O I am interested in becoming the Smiling Sun agent in ......

## WISE - World Information Service on Energy

2e Weteringplantsoen 9 - Amsterdam - Nederland tel. 3120221369 - telex via 62913 agenor b (Belgium)

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