

CAMPAIGN AGAINST NUCLEAR POWER NEWSLETTER



P.O. BOX 238, NORTH QUAY, BRISBANE. Q. 4000.

PHONE: 229.7143 No. 73

SEPTEMBER 1981

Registered for posting as a publication, Category B.

NABARLEK LEAKS

Serious leaks of radioactive waste have been occurring this year at the Nabarlek uranium mine in the Northern Territory. This fact had been kept secret until the 'leaking' of confidential reports last month.

An internal minute of the Water Resources Division, written in April, showed that levels of radium in a safety holding pond had been as high as 2500 picocuries per litre. This is more than 40 times the standard promised by Queensland Mines in their Environmental Impact Statement.

It appears that following Cyclone Max last March, this pond overflowed during heavy rain, and the contaminated water ran into Cooper's Creek. The pond was designed to catch run off from the plant area of the minesite.

The worst aspect of this incident is that it was not reported at the time. Any water releases must be reported to the NT Supervising Scientist, a Federal official. However, this was not done, and it appears that while some government officials knew of the accident, it was not publicised until the report was leaked to the media.

What is clear is that Queensland Mines have breached environmental regulations, and there



is apparently no mechanism in the vague legislation to reprimand the company or to insist on improved safety practices.

The monitoring system at Nabarlek has also been criticised. Only two shallow bores have been drilled to monitor seepage of radioactive water from the plant safety pond.

Both bores were to the east of the pond. There were none to the north or north-east. Thus seepage of contaminated water towards nearby Cooper's Creek would not be detected.

Friends of the Earth in Darwin has asked for the release of all monitoring reports collected over the duration of Queensland Mine's operations.

FOE also believes the government has a duty to state clearly what are the precise arrangements for future monitoring of the uranium industry in the NT, and what effect the "razor gang" decision to transfer responsibility for overseeing the uranium industry to the NT government will have for future mining projects.

Stewart West, Labor spokesperson for Environment, "shudders to think of the accidents which could occur from the huge Ranger and Jabiluka mines, as well as Koongarra, in the centre of Kakadu National Park."

Queensland Mines last year made a profit of \$44.2 million.

FOE Darwin

Campaign Against Nuclear Power

ANNUAL GENERAL MEETING

Saturday 7 November, 1pm

FRIENDS MEETING HOUSE
10 Hampston Street,
Kelvin Grove

RANGER STRIKE

One hundred and eighty workers at Ranger uranium mine have recently been on strike for over two weeks. The workers who include all process workers involved in the mining and milling of the uranium are striking for improved pay and, also more importantly, over issues of safety at the mine.

Some of the practices which are in CONTRAVENTION OF THE MINES SAFETY CONTROL REGULATIONS:

- no give-way stop or speed signs or illuminated posts on the haul road.
- absence of a machinery record book.
- lack of proper control of radiation monitoring
- access to the mine by unauthorised tourists, friends of employees etc.
- insufficient lighting plants on stockpiles on mine working benches creating hazardous situations at night.
- machinery working in the mine without an air conditioned cabin. (air conditioned cabins are compulsory unless exempted in writing by an inspector.)
- lack of one control point and one access road into the mine area.

- contravention of regulations in respect of posting of notices by the manager.

Concern is felt also about heavy mobile plant working below loaded blast holes and some staff and workers abusing an exemption clause with respect to showering, changing and general radiation safety regulations.

These breaches have, over a period of time, been brought to the notice of Ranger and to the Mines and Energy Dept. in Darwin, apparently without success. The indifference of Ranger and the DME to these issues has grave implications for not only the workers involved, but also the broader environmental issues in the Arnhem land region.

FOE Darwin



"BLEAK"

The sixth annual symposium of the Uranium Institute has been told that uranium mining faces a bleak future, with continuing low prices.

Australian companies were represented at the conference, including Pancontinental, Queensland Mines, BP, CSR, ERA, Western Mining and Minatome.

The mood of the conference was one of deep gloom. The current huge uranium over-

supply would continue, it was said, as more reactors were cancelled. 50 of the 240 uranium mines in the US had closed.

An American producer described the situation from his point of view as just plain "horrible".

Economic factors are continuing to hurt the nuclear industry, and a lot of the credit is due to the work of people around the world who have fought successfully against nuclear power.

Telegraph 4 September 1981

BANS HURT MKU

As Australian seamen continue to ban the export of yellowcake, Mary Kathleen Uranium has suffered a 71% drop in profits for the half year to June.

Directors said that the bans had cost the company \$600,000, a loss which was increasing all the time as stocks accumulated.

The company is also yet to feel the impact of the continuing fall in spot prices for uranium which will show up this year. MKU is still also in debt to the Australian Government and to its parent company CRA.

Operations are due to cease in 1983, as the ore body will have been worked out, and no more has been found.

CRA BOOM BURSTS

The MKU result was the latest dismal effort by CRA subsidiaries, which has resulted overall in an 84% slump in earnings by the giant mining group.

CRA chairperson, Roderick Carnegie later described the resources boom as "a mirage", and used the opportunity to call for further government incentives to resource development.

The faltering uranium industry is part of this boom and bust cycle.

Courier Mail 25 August
Australian 2 September, 1981

NO MINATOME DECISION

It is now almost six months since the Charters Towers Mining Warden recommended that the Ben Lomond uranium lease be rejected. Mines Minister Ivan Gibbs, in a letter to CANP says he is still considering the matter.

In fact, he has not acted on the recommendation. The lease has not been rejected. However, it has not been granted either, thus the situation is in limbo.

Soon after the Court decision, the Premier said that the mine would probably go ahead after "more studies". But it is important that such studies be made public and the issue heard once more in the democratic surroundings of the Mining Warden's Court.

For this to happen, the current lease application must be rejected.



Collection Laka foundation

www.laka.org

Digitized 2018



RECYCLED N-WASTE FOR N-WEAPONS

A process called Laser Isotope Separation, using powerful lasers to separate bomb-quality plutonium from civilian nuclear wastes has been under research since 1975 in the United States. US Government research efforts to enrich uranium by lasers are well known, but the companion programme to "purify" plutonium has been kept tightly shrouded in secrecy.

The process is being studied as a possible method of generating the tons of plutonium needed to meet the soaring demands for "special nuclear materials" required by President Reagan's defence modernisation programme.

In testimony given before the Procurement and Nuclear Systems Sub-Committee of the House Armed Services Committee last March, the Acting Deputy Assistant Secretary for Nuclear Materials at the Department of Energy, Dr Charles Gilbert, said that "plutonium which could be obtained by reprocessing commercial reactor fuels" would become a major source of new weapons material because the laser process has the capability of isolating and concentrating plutonium-239, the isotope favoured by nuclear weapons designers.

Scientists who are backing the programme have argued that it may be the quickest and cheapest way to carry out the modernisation and expansion of the US nuclear weapons arsenal.

The laser process would also be used to convert into weapons material, some eight tonnes of plutonium currently in government storage that had been produced as fuel for breeder reactors.

A third potential use for the process would be to "clean up" the plutonium in the current US stock of nuclear weapons in an effort to reduce the level of radiation exposure to weapons factory workers and the servicemen who handle nuclear weapons.

Dr Thomas B. Cochran, staff scientist for the Natural Resources Defence Council, an environmental group which has specialised in issues related to the problem of nuclear proliferation says the process is "totally inconsistent with the fundamental objective of President Reagan's nuclear non-proliferation policy."

"American efforts to prevent the spread of nuclear explosives while promoting 'peaceful' nuclear co-operation will not be credible if, at the same time, the administration has a major programme under way designed to divert our own civilian nuclear material to the production of nuclear weapons."

According to Dr Cochran, a physicist, the plutonium in current stocks of spent nuclear fuel which are owned by various utilities, could be enough for as many as 10,000 nuclear weapons.

AFR 4 August 1981

COMPO FOR RAAF ATOM-TEST PILOT

A retired Australian air force officer who tracked radioactive clouds in South Australia during atomic bomb tests in the 1950s has won a compensation claim for a rare form of cancer.

A former RAAF squadron leader contracted cancer in his thyroid gland after monitoring radioactivity in atomic clouds during the 1953 series of British tests. The man learned of his successful claim more than 20 years after the cancer was diagnosed. He is the first Australian "nuclear veteran" who contracted cancer to win such a case. The decision has been hailed as a landmark and is expected to result in many new claims.

The decision was handed down by the Commonwealth Employees Compensation Commission on 27 July after it heard evidence of the effects of the bombings at Hiroshima and Nagasaki in Japan during World War II.

The retired squadron commander, now 55, said that the Lincoln bomber used to monitor the atomic clouds had become as radioactive as the clouds themselves during the tests.

It happened in 1953 when he was stationed for six weeks at Woomera for a secret role in the testing. He said he piloted a Lincoln bomber with full crew to the site during October.

He said, "We had no protective clothing other than our normal flying suits. The fact that the aircraft became contaminated to the level of the cloud itself meant that the time spent in the radioactive environment was extended to

when we got back to base." During a second test later that month, he and crew were wearing protective clothing, but an instrument to measure radioactivity went "off the clock" as they entered an atomic cloud.

"I don't know what the level of radioactivity was, but it was too high for our instruments to measure," he said. Cancer was diagnosed in 1959 and was subsequently operated on. He was taken off flying duties in 1962 because of his health and was paid less for his new ground duties. He retired in 1975.

Although the level of compensation has not been determined, the Nuclear Veterans Association said the decision was a landmark. A spokesperson, Mr Pat Creevey, said many more veterans of the South Australian tests would lodge claims.

The Commissioner for Commonwealth Employees' Compensation, Mrs Margaret McDonald, found that the pilot had suffered from carcinoma of the thyroid gland, "due to the nature of the employment" within the meaning of the act. She determined that the disease had been suffered "in circumstances under which the Defence Department would have been liable to pay compensation...". The Defence Department was therefore "liable to pay compensation in respect of the said disease".

The level of compensation will not be determined until the man prepares a list of costs incurred as a result of his disease.

Age 7 August, 1981

NUCLEAR REACTORS TALLY OF DEFECTS

During 1980, United States nuclear reactors reported 3804 incidents involving mechanical equipment and human factors failing to function as required.

The number of incidents—a 20% increase over 1979—shows that nuclear power plants "rely on a system fraught with frequent cases of human error and chronic defects in essential safety equipment," according to a report by an anti-nuclear group, "Critical Mass".

The report was compiled from a review of Licensee Event Reports (LERs) which the NRC requires a utility to file any time equipment or personnel do not meet operating specifications.

The Critical Mass report said that 57% of all incidents were caused by equipment failures, 16% by design problems, 20% by human errors and 7% by other factors.

Sequoyah in Tennessee had the highest number of incidents, 238, even though it was in operation for only 11% of the

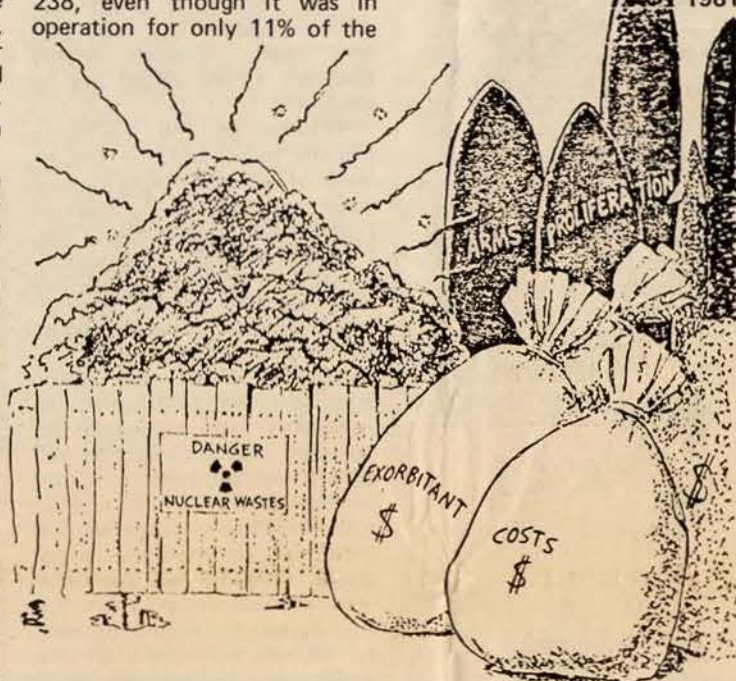
year. In all, nine plants in seven states each reported more than 100 incidents last year.

OFFICIALS DISAGREE

NRC and industry officials argue that the number of LERs tell little about the safety of a particular plant because the reports cover everything from very minor infractions to major incidents. But Richard Udell, author of the Critical Mass study, said no incident can be termed "insignificant" since even seemingly minor problems, if undetected, can lead to serious accidents.

The report charged that two of the most serious incidents last year—the failure of control rods at the Browns Ferry plant in Alabama and a spill of 43000 gallons of radioactive water at the Crystal River plant in Florida—might have been prevented if lessons learned from operating experiences had been acted on.

South China Post 28 July 1981



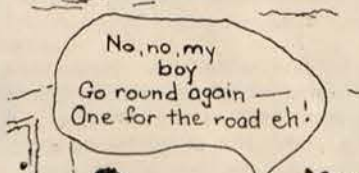
LETTER

Sir,

Three questions could or should be asked by the layman in regard to Reagan's Neutron Bomb.

1. Does it give a sense of greater security?
2. Will it make the world a safer and better place for his children and grandchildren?
3. How long will it be before the Russians have it also or something worse?

Yours,
W.D. Bryce, Lth. Dip Re.
Kingaroy



XINJIANG TESTS AFFECT FRUIT

Disturbing reports are circulating in China's far west region of Xinjiang of nuclear contamination caused by bomb tests at Lop Nor, the Chinese test site in the Gobi Desert.

A senior local official has told of fruit in the fringe areas of Lop Nor developing rubber-like patches and of the fruit itself tending to wither away. Local people believe this may have something to do with the nuclear test programme.

The official said also that there had been an apparent increase in the incidence of liver, lung and skin cancer in Xinjiang. This was causing concern and some cases were being sent to Peking for treatment.

Another official was sceptical of the reports. He claims a high incidence of throat cancer among nomads in Xinjiang, for example, is caused by their diet.

CONSTANT TESTS

The Lop Nor test site, about 800km south-east of Urumqi, has been in constant use for the atmospheric detonation of nuclear devices over the last 20 years. China is one of the few countries still testing nuclear weapons in the atmosphere. Chinese nuclear detonations are described as "dirty" because they produce a high level of radio-active fallout.

Courier Mail 26 August 1981

US BUYS SOVIET

The US Department of Commerce has disclosed that during 1980, \$US43.8 million worth of enriched uranium entered the United States from the Soviet Union. The trade was disclosed without any elaboration, in a trade review. It was the first time that a sizable amount of the strategic commodity has figured in direct trade between the two countries.

Further inquiries have revealed that a West German electric utility, Rheinisch-Westfälisches Elektrizitätswerk bought the uranium in Canada and sent it to the Soviet Union for enrichment.

It was then shipped to the Exxon Nuclear Co. of Bellevue, Washington for fuel fabrication. It was later re-exported to the plant in West Germany.

In an unrelated transaction, Soviet enriched uranium originally intended for an Austrian utility, was imported from West Germany for use as fuel in the Ginna nuclear station belonging to the Rochester Gas and Electric Corporation in New York State.

The transfers add a new twist to the already complex patterns of the uranium trade. Some industry sources suggested that it could be the beginning of a trend.

AFR 20 August 1981

N-DAMAGE \$25 M

A Federal judge in Pennsylvania has awarded \$25 million for health testing and economic costs arising from the 1979 nuclear reactor accident at Three Mile Island.

Under the settlement, \$5 million will go to a new public health fund which will pay for radiation monitoring and cancer detection programmes in the Three Mile Island area. The remaining \$20 million will go toward satisfying economic loss claims.

The class action lawsuit was filed by individuals and businesses against the owners of the nuclear plant which was damaged in 1979 in the US' worst commercial nuclear accident.

COMMENT

Damages may well have been 9-10 times greater had all the 200,000 people and businesses eligible decided to sue.

In fact, only 20,000 joined the successful lawsuit just concluded.

Courier Mail 12 August 1981



MONEY TALKS

Recently, a commissioner with the US Nuclear Regulatory Commission said, "One interesting development since the Pennsylvania accident is that Wall Street, which has a large say about utility financing, has started to think for itself about nuclear risks."

"This new awareness may shape the industry's future more than anything else that has happened."

All of a sudden, the money providers are faced with the shocking idea that a billion dollar reactor may have to be written off, a clean up bill of the same order and "a landscape littered with legal claims."

New Scientist 28 May 1981



BOMB FALLOUT

Despite the apparent sanctity attached to so-called maximum safe dose of radiation, it is widely accepted that there is NO SAFE DOSE of radiation.

The risk of cancer of genetic damage from radiation exposure falls steadily with the decrease in dosage, but does not suddenly and magically level out at zero when the legal limit is reached. By implication, then, it must also be generally accepted by the scientific community, that pre 1963 atmospheric testing must have cost lives. Estimates of the extent of such casualties inevitably vary. Even the UN scientific committee estimated "2,500-100,000 birth defects" as a result of fallout worldwide from the first few years of testing up to 1958. However, American physicist, John Gofman has declared that he would be prepared to defend, under oath, his estimate

that "1,000,000 people . . . in the Northern hemisphere have been irreversibly condemned to die of lung cancer (as a result of the five tons of plutonium distributed over the globe from weapons testing fallout)".

The failure of nuclear scientists to anticipate the deadly effect of atmospheric bomb testing has serious implications for the nuclear energy industry. The crucial point is that levels of radiation which were thought to be harmless were later shown to be lethally dangerous. Understanding of the long-term effects of low-level radiation is far too sketchy to say that the fallout miscalculation could not be repeated. This is the essence of John Gofman's argument that 'nukes are a public health disaster even if no accidents occur'.

Hal Pawson



INDIAN INDEPENDENCE

Indian scientists have discovered a method of producing fuel to run a US-built nuclear reactor, the Indian Prime Minister, Mrs Gandhi has told the Indian Parliament.

Development work on indigenous mixed oxide fuel for the Tarapur plant had been carried out and found feasible, thus ending dependence on enriched uranium from the United States.

Under an agreement signed in 1963, the United States had supplied enriched uranium to run the Tarapur reactor, 95km north of Bombay.

Deliveries were delayed last year by the US government because India has refused to sign the non-proliferation treaty or to allow international inspection of its two nuclear power plants.

Australian 21 August 1981

FAST BREEDER RESEARCH

It was discovered earlier this year that research into cooling technology for fast breeder reactors is being carried out in the Department of Mechanical Engineering at Queensland University.

Dr. Klaus Bremhorst, the principal researcher, recently returned from Karlsruhe in West Germany where he studied heat exchange in liquid sodium flows, the coolant for fast breeder reactors, which are powered by plutonium.

The Campus Movement Against Uranium Mining has contacted people in Karlsruhe to ascertain the exact nature of the breeder plans.

Meanwhile the University's solar research programme has continued, despite a shortage of funds. CMAUM will be asking that the money and talent being wasted on nuclear research be channelled into the solar programme, which will be of permanent benefit.

University News 25 March 1981
C.M.A.U.M.

PAKISTANI N-PLANT NEARS COMPLETION

Pakistan's uranium enrichment plant, capable of producing weapons grade fissionable fuel, is expected to be operating by the end of this year. The plant is situated about 48km south-east of Islamabad. The gas centrifuge technology it will use was allegedly stolen from Dutch sources by Dr A.Q. Khan who now heads the Pakistani nuclear programme. The Dutch Government intends to institute criminal proceedings against Dr Khan.

Refusal to sign the Nuclear Non-proliferation Treaty and the surreptitious methods used to acquire the Kahuta plant tend to undermine official Pakistani protestations that their nuclear programme is for domestic purposes only.

Nevertheless, enriched uranium from Kahuta is expected to fuel nuclear reactors which are now in the planning stage.

PLUTONIUM

Pakistan also plans to build a facility to reprocess plutonium which has no place in fuelling ordinary reactors.

Apart from the manufacture of bombs, the only use for plutonium is in fastbreeder reactors, for which Pakistan does not yet have a programme. A laboratory scale reprocessing plant now being constructed at the Institute of Nuclear Science and Technology, only 16km from Islamabad can handle only a small amount of nuclear fuel but will be able to produce enough plutonium to make a bomb.

Australian 29 August 1981

NUCLEAR RESEARCH

Nuclear energy research is still receiving by far the largest allocation of government research funds for energy.

In 1979-80, the government spent \$15.9 million on nuclear research, despite the fact that nuclear power provides not a watt of energy in Australia.

Only \$5.4 million was spent on the vast field of energy conservation and research of renewable energy sources. If the funds for present nuclear research could be made available for conservation and solar power, Australia could lead the world in developing a safe, sane energy future.

AFR 1 September 1981

B52's IN DARWIN

The surveillance missions based in Darwin are expected to take place once each month over a period of four to seven days. During that time 34 take-offs and landings will take place. Three B52's and four KC 135 refuelling Boeings plus 160 USAF personnel will be in Darwin each time.

One B52 will remain at Darwin airport in reserve while two fly continuous 26 hour surveillance and training missions supported by the Darwin based KC135s and others from Diego Garcia.

The US says it is "against policy" to explain why the surveillance role could not be fulfilled by satellites.

N.T. News 5 May 1981



NEUTRON BOMB

In his National Times article (August 16-22), Phillip Brooks writes: "The USSR is now said to have a four to one advantage over Western Europe in tanks. Experts again say the figures are fairly meaningless since the Russians keep tanks that the West would long ago have thrown on the scrap heap."

In any case, even if measures are needed to match Soviet conventional superiority in Europe, there is no demonstrable reason why this should necessitate the deployment of the neutron bomb.

It may be agreed that there must be a capability for "low level retaliatory action" in the event of a non-nuclear Soviet incursion into Western Europe, without necessitating a major nuclear reprisal against the Warsaw pact.

But no plausible reason has been advanced why conventional tanks and ground forces cannot be used for this purpose, rather than deploying the neutron bomb which simply ups the stakes, and fans the flames of the insane race for destruction.

Hal Pawson

"My heart is moved by all I cannot save: so much has been destroyed I have to cast my lot with those who age after age, perversely with no extraordinary power, reconstitute the world."

— Adrienne Rich

WASTE STRIKE

Australia's biggest nickel mine at Kambalda in Western Australia came to a standstill this month because of a plan to store radioactive waste less than 100 metres from the town.

Miners struck for a week until the company agreed to store the waste in a giant underground bunker, 40Km from the town.

The waste was generated when a radiological device used in metal processing was accidentally melted along with scrap metal in a Singapore furnace.

Australian 12 September 1981
Australian 15 September 1981

EXPOSED

In a letter to the Editor of the National Times, a former US aerospace engineer working on terminal guidance systems for ICBMs, has warned of danger to Sydney and Melbourne in case of nuclear war between the superpowers.

In the text of his letter, Dr. Norm Sanders said that "Sydney becomes a target area every time a major component of the US fleet is in port. Melbourne will be at continual risk when the Omega base is finished in Gippsland."

The Omega system is billed by Australian leaders as a peaceful navigational aid. Military observers know that Omega's prime function is to supply precise locational information to warships, bombers, submarines and ICBMs.

During the now forgotten Omega debate, US experts openly stated that Omega was a military target. They felt the debate should be over whether or not Australia wanted America's support in time of war, rather than the obvious strategic nature of the Omega base itself. They saw the issue clearly as one of Australia taking the risk of the Omega base as a trade-off for America's nuclear umbrella.

He urged people to recognise that Australia is under grave threat.

National Times 15 Aug., 1981

ARMS SALES



WORKERS BAN SHELTERS

The New South Wales Building Workers Industrial Union has black banned the construction of nuclear shelters.

Union Secretary, Stan Sharky called the marketing of shelters (some costing up to \$12,000) a "blatant confidence trick which specifically seeks to exploit for profit, the current nuclear arms race."

He said the only real protection for people was the application of the United Nation's policy of outlawing nuclear weapons.

This is an extremely constructive move by the Building Union. Recently, shelters have been advertised in newspapers, and their building makes people accept that nuclear war is inevitable, rather than avoidable forever if people unite against the arms race.

Any shelters are completely worthless against the phenomenal blast and heat of a nuclear bomb. And what sort of city would one emerge to confront anyway?

Courier Mail 20 Aug 1981

RTZ MEETING DISRUPTED

About 50 dissident shareholders attended the recent Annual General Meeting of Rio Tinto Zinc (RTZ) the world's largest uranium producer, and reduced it to chaos.

One was Les Russell from the Aboriginal Mining Information Centre, who claimed RTZ in Australia (CRA) showed contempt for land rights. (CRA has significant interest in Australian uranium.) Company executives remained silent, and Les Russell stomped out of the meeting.

Now others moved around the hall delivering impromptu speeches and trying to discuss the issue with shareholders. The chairperson forced through company business in record time as arguments broke out all around the hall.

The day was counted a success, and more and more public bodies are getting rid of their RTZ shares in protest at the company's aggressive policies.

WISE Communiqué May 81



APPROPRIATE ENERGY

DIARY —

SEPTEMBER

Saturday 26 1p.m.
DISCUSSION and COFFEE
On Uranium and Aboriginal
Land Rights.
Environment Centre,
147 Ann Street

OCTOBER

Thursday 1 1pm & 5.30pm
"Backs to the Blast"
Shown free at the Schonell
Theatre, University of Qld.

Friday 9 5.30pm
EXECUTIVE MEETING
147 Ann Street
All welcome

Friday 16 7.30pm
BUSH DANCE
Bale em up Bush Band
St. Andrew's Hall
160 Vulture Street,
South Brisbane

Tuesday 20 7.30pm
GENERAL MEETING
AWD Office,
9th Floor, Canberra Hotel
All welcome.

Sun 18 - Sun 25th
PEACE WEEK
(World Disarmament Week)
Activities will include films,
forums and protests.

PUBLIC MEETING

John Holdren
US Energy Expert

GRIFFITH UNI

Tuesday 13 Oct.

7.30

WINDY INLAND

Inland NSW may be windier — and so more suited to wind-power generation — then generally believed according to a Canberra scientist.

Dr Ken Inall, of the Research School of Physical Sciences at the Australian National University, said yesterday that available data gave a poor idea of how windy inland areas were because the wind was usually measured at low or sheltered sites.

Dr Inall monitored the wind at White Cliffs in far western NSW, where the ANU has built a solarpower system for the NSW Government, and found it surprisingly strong, especially in summer.

The wind energy on a small hill less than a kilometre from the solar site was 7.5 times greater than at the site, he said.

The differences were mainly due to temperature inversions at night which caused low-level winds to drop. Above the inversion, the wind still blew, he said.

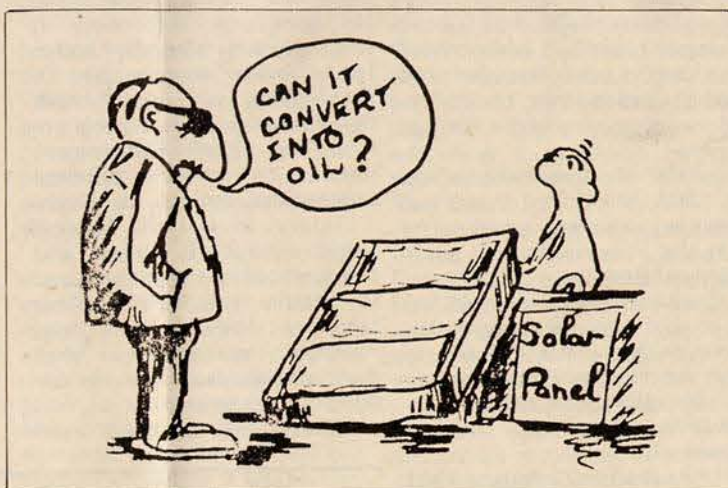
Dr Inall said the same could be true for many other areas of inland Australia, making wind power a much better proposition.

Broken Hill, Wilcannia, Tibooburra, Menindee and possibly some more closely settled areas such as around Narrabri, could have similar wind patterns, he said.

These areas commonly use diesel generators. Besides being increasingly expensive, diesel fuel needs to be conserved for transport.

"Anywhere you've got diesel generators separate from a power system and a wind regime similar to White Cliffs, wind power would have a good economic prospect," Dr Inall said.

Mass production would bring the cost of wind power down to less than 2.5c a kilowatt hour, comparable to the price now charged by the NSW Electricity Commission.



DEAD SEA POWER

Solar pools will be able to produce 2000 Megawatts, 20% of Israel's energy needs by the year 2000. This is the belief of the engineers in charge of a solar pool project being developed on the Dead Sea.

An experimental pond which has been operating successfully in the area since 1978 produces 150 kilowatts from a pond covering 0.8 hectares. The intense sunlight and an ample supply of salt water make the area ideal for solar pools.

The present project is based on a shallow 0.06 sq. km pool with a dark bed and whose lower depths are heated by the sun. To prevent the heated water rising to the top, salt is pumped into the deeper waters to make them heavier than the water at the surface. Plastic baffles on the surface prevent

wind action from mixing the layers of water.

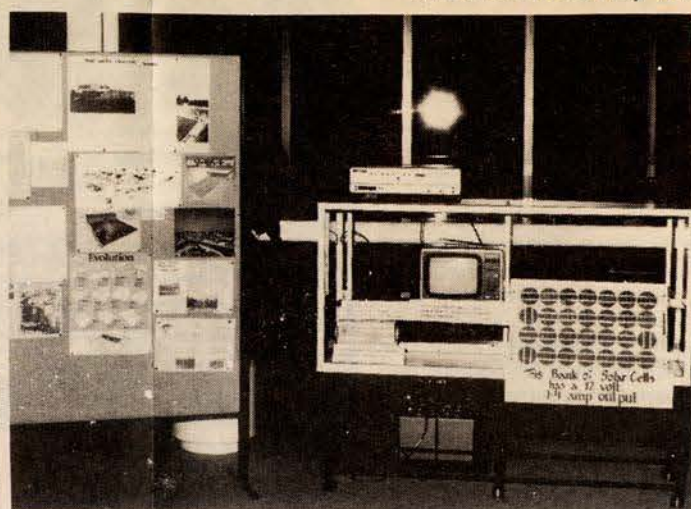
As temperatures build up in the depths to more than 80°C the water is carried off by pipes to low temperature turbines which can produce useful steam even at 70°C.

If the pool under construction proves successful when it is completed in 1983, the design will be used as a standard module which can be repeated to fill available space.

Plans are already afoot to link it to three more modules creating a 1 sq. km pool producing 20MW by 1985.

Initial costs were high, \$10,000 per kilowatt power for the pilot plant and \$4,000 for the first module. However, the cost of the next module will be \$3,000, the same as conventional oil-fired plants.

New Scientist 28 May 1981



A solar energy display mounted by the Friends of the Environment in Mackay recently.

SHARING SOLAR KNOW-HOW

The EEC (European Economic Community) and Italy's state electricity company ENEL have combined to open the world's first solar power station to be connected to a national grid. The Eurelios plant, producing 1MW of peak power, has been built by Italian, French and German firms.

Eurelios is a "tower power" station. Banks of remotely controlled heliostats (focussed mirrors) reflect the sun's rays into a receiver on top of a tower. The receiver will produce steam to drive a conventional steam turbine and generator. A heat store will keep things ticking when the sun is not shining.

The inauguration of the plant marks the start of a two-year trial during which engineers will learn how to run a solar power station. Their knowledge will be shared with the operators of five similar power stations due to come into operation this year — two in Spain and one each in France, the US and Japan.

New Scientist 29 May 1981

ANTI NUCLEAR ACTION

Joan Shears leaves on October 2 for a month long tour of Queensland and northern NSW, showing the film "Backs to the Blast" and seeking media coverage at each stop. This follows the success of the film tour in July.



The organisers spent a profitable day at the Church of England Grammar School, discussing the arms race and arguing about uranium export. In all we spoke to 12 classes and were often tested by the largely pro-nuclear students.

The Rally for Peace Committee has fixed the next Peace Rally for April 7 next year, and this will be a national day of rallies. CANP members are very active on this committee.

Joan attended the first meeting of the National Task Force, a new group of unionists and citizens against uranium. This was in Sydney last month. The major decision was to further research which companies are supplying uranium mines.

IF THERE IS A CROSS HERE, AND YOU WISH TO CONTINUE RECEIVING THIS NEWSLETTER REGULARLY, PLEASE COMPLETE THE FORM AND SEND IT WITH YOUR MEMBERSHIP FEE SOON.

MEMBERSHIP & DONATION FORM

To: CANP,
P.O. Box 238,
NORTH QUAY. 4000

Name.....

Address.....

Postcode.....

Ph: (H) (W)

Herewith:

| | \$3.50 student/pensioner/unemployed
| | \$7 individual
| | \$25 organisational

\$..... donation

YOUR GROUP

BAYSIDE ANTI-NUCLEAR GROUP

BANG meets every fortnight at Manly. All welcome. For further details ring Gloria 396 1269 or Miriam 396 0753.

BUNDABERG

Bundaberg Nuclear Concern Group c/- Harry Akers.
"Electra Court", Electra Street, Bundaberg, 4670.

CABOOLTURE

CANP (Caboolture) c/- Pat Moran, P.O. Box 109, Caboolture, 4510.

KINGAROOY

S.S.A.N.E. Society for Safe alternatives to Nuclear Energy. P.O. Box 16, Kingaroy.

MACKAY

Mackay Nuclear Awareness Group P.O. Box 458 Mackay, 4741.

MT ISA

CANP (Mt. Isa), P.O. Box 1473 Mt. Isa

NORTHWEST SUBURBS ACTION GROUP

c/- Scott O'Keefe, 9 Musgrave Tce Alderley, 4051.

PADDINGTON

Joan Shears 356 1492.

PINE RIVERS

CANP (Pine Rivers) Grace Duffield 285 3381.

ROCKHAMPTON

C.A.N.P. (Central Qld), P.O. Box 1532, Rockhampton, 4700.

SALISBURY

Phone Barbara Robson 277 6597.

SUNSHINE COAST

CANP (Sunshine Coast) P.O. Box 520, Nambour, 4560.

TOOWOOMBA

CANE (Toowoomba) P.O. Box 1167 Toowoomba, 4350 Ph. 076 343 983

TOWNSVILLE

MAUM (Townsville) P.O. Box 364, Townsville, 4810. Phone 71 6226.

TRADE UNION ANTI-NUCLEAR LOBBY

P.O. Box 196, Broadway, 4000. Phone Ken McGrath 221 2350.

UNIVERSITY OF QLD

Meetings or activities of the Campus Movement Against Uranium Mining every week during semester. Ring the Union 371 1611 or Bruce Doyle 378 1514 for details.

WEST END

Ring Kathy Moran 44 3896.

WINDSOR/CLAYFIELD

Ring Chris Tooley 57 2704.

WORKERS AGAINST URANIUM MINING

Telephone 391 5966.

Our street address is: C/- QCC
Environment Centre, 147 Ann
St., BRISBANE.

Workingbee
Every Sat. 1-5

Please send
DONATIONS
and
MEMBERSHIP

RENEWALS
Collection Lanka Foundation

www.lanka.org
Digitized 2018

membership