



Strategy Against Nuclear Power

Friends of the Earth (Canberra)

Since 1977 and until recently the Australian anti-uranium movement pinned many hopes on the election of a national Labor Government as a basis for stopping uranium mining. But when Labor was finally elected in 1983, the government failed to implement the Labor Party platform against uranium mining. As a result the anti-uranium movement has lost direction and many activists have instead channelled their efforts into nuclear disarmament and peace issues. This article examines various strategies for opposing uranium mining and nuclear power, for example working through the parliamentary process and working at a community level. The assessment we make grows out of an historical and structural analysis of nuclear power.

We begin by presenting a brief account of the role played by several key structures - the state, capitalism, patriarchy and the intellectual division of labour - in the development of nuclear power. After a brief outline of the historical background to uranium mining in Australia, we analyse the various strategies which have been used to oppose uranium mining, assessing their effectiveness in challenging the structures which underlie nuclear power. We argue that those strategies which involve grassroots mobilisation are more effective at intervening at weak points in the structures than are those strategies which concentrate on pressuring elites to institute changes from the top. Finally we develop this argument further by showing how it is necessary to build alternative structures at

the same time that one challenges existing structures.

The Structures Behind Nuclear Power

Nuclear power is not an automatic or inevitable development. Technology is not neutral but develops in ways which are partly determined by social structures. The social structures which favour, and in turn are favoured by nuclear power include capitalism, patriarchy, the intellectual division of labour and the state. The connections and reinforcements between these entrenched social structures are the reasons why nuclear power is so hard to dislodge.

In the early 1950's, nuclear power had not yet been shown to be technologically feasible, much less economically viable.

In 1952 the Paley Commission in the U.S. favoured heavy investment in solar technology as the energy option of the future. Despite such options, nuclear power was promoted over solar power.

Nuclear power was originally promoted by states rather than corporations or workers. It was attractive to governments and state bureaucracies for several reasons.

* Nuclear power, by virtue of its large size, centralised production of electricity and dependence on experts, was suitable for control by state bureaucracies. Solar home heating, by comparison, did not lend itself to such control.

* Nuclear power fitted neatly into the existing electricity generation and distribution system. Like coal or oil, it was a way of producing electricity at a central location for distribution through the established grid. Unlike oil, where there are several commercial outlets to choose from, we can only have one distributor's power points in our houses. When that distributor is the state - and most electricity grids are either state-owned or state regulated - the consequence for com-

This article is condensed from a larger version written collectively and published by members of Friends of the Earth (Canberra). The main authors are Jill Bowling, Brian Martin and Val Plumwood, with important contributions from Ray Kent, Basil Schur and Rosemary Waiters.

munities is a reduction of local control over their energy planning.

* The potential risks of nuclear power - for example from meltdown accidents at nuclear power plants - were too large to be taken by even the largest corporations. U.S. companies only joined nuclear power projects after many subsidies and incentives were offered by the U.S. state, including the Price-Anderson Act in 1957 which limited corporate liability in the event of reactor accidents.

For these reasons, nuclear power has been largely state-developed, owned and promoted. Only in the U.S. do corporations have much of an independent role, and even there the industry is heavily regulated by the state. Most of those countries with the greatest stake in nuclear power - United States, Japan, Soviet Union, France, West Germany, Britain - are the most powerful economically.

The state is not a unified entity. It incorporates the elected government, the military, the police, the legal system, state bureaucracies for regulating the economy and providing welfare services, and many other functions. Only some of these parts of the state have been active in promoting nuclear power, notably the energy bureaucracies, parts of the military and some politicians.

An important pressure within these areas has come from politically active nuclear scientists and engineers. Nuclear weapons and nuclear power would not have been possible without the mobilisation of scientific expertise for the purposes of the state. Especially since World War Two, an ever increasing fraction of research and development finance has come from the state, and the orientation of science and technology has been increasingly turned to the requirements of large corporations and the state. This science-state interaction has given rise to the technocrats, among whom the nuclear elites are prominent. Nuclear power simultaneously provides a power base for the nuclear elites while increasing state power.

In capitalist societies, the state is structurally tied to corporate expansion and profit making. A key role of governments in capitalist countries is maintaining the conditions necessary for corporate profit-making. Indeed the state has intervened in education and health, among other things, in order to ensure that capitalism is provided with a continuing workforce, that is, healthy workers with the right skills and attitudes. Similarly, the state takes care of many of the other needs of capitalism, particularly subsidising the infrastructure (such as ports

and rail lines) of large projects. In a way, large scale 'development' projects, such as nuclear power, can be seen as a test of the state's commitment to key corporations and to securing the conditions necessary for capitalist profitability.

Despite the intimate connections between the state and the corporate sector, there is also a particular logic to capitalist investment. Projects which are capital intensive, large scale, centralised and suitable for monopolisation are favoured areas of corporate investment. Thus promotion of energy efficiency, or of decentralised and locally controlled energy sources, would do little for profits and are thus ignored (or undermined) by corporate management.

Ultimately, investment decisions in a capitalist society reflect this pre-occupation with profitability at the expense of social usefulness and environmental harmony. When corporations are confronted with the environmental pollution, concern for profitability dictates that efforts will be made to merely clean up the mess, rather than change the structures responsible for the pollution.

Underlying the immediate role of the state and nuclear elites in promoting nuclear power are several deeper factors. One is the hierarchy and division of labour characteristic of modern corporations and state bureaucracies. Workers are kept under control by work organisation - such as the manufacturing division of labour - in which key decisions are made by elites and in which shopfloor participation is minimised. Technologies are often chosen or designed to enforce hierarchical control in the workplace. Nuclear power fits this pattern well.

An emphasis on nuclear power must not obscure the fact that other technologies can also fulfil the same socially destructive role that nuclear power plays. Even the much heralded solar energy has the potential to be incorporated into these structures if it develops in certain ways. For example, one U.S. corporation has proposed a satellite solar power station which would orbit the earth and beam down massive amounts of microwave radiation to be collected by a seven kilometre wide receiver on the earth's surface. Clearly a campaign which effectively does away with nuclear power does not automatically do away with centralised systems of political and economic control. The key distinction between technologies is not whether they are solar, fossil or nuclear, but whether they lend themselves to control by political and economic elites or to control by individuals and local communities.

Scientific research on nuclear power also illustrates the effects of this division of labour. The isolation of social control and responsibility and concern in the hands of political elites, together with the structure of the scientific com-

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munity, act together to produce a system which keeps scientists locked into socially destructive research.

It is perhaps no coincidence that most nuclear scientists are men. Science is not value-free and the men that practise science bring their own preoccupations into the science they practise. Nuclear weapons for example are a product of aggression and dominance relations as opposed to the more feminine values of nurturing and caring. Indeed it would be difficult to imagine the development of nuclear weapons in a society where feminine values predominated.

The state and corporations also mobilise patriarchal relations to serve their own domination, for example to split the workforce and impose hierarchical relations between men as well as between women. On the other hand, groups of men mobilise state and capitalist interests to maintain their domination over women, for example using job seniority rules and the legal system to keep women in lesser occupations or the home.

The intellectual division of labour, and the concept of professionalism which is used to justify it, also are associated with deeply rooted masculine values. For example, the way in which the scientific community is structured promotes intellectual aggressiveness and competitiveness. In addition many of the characteristics of modern science can be grouped under the heading of 'masculine rationality'. This rationality sets up a dualism between humanity and nature, production and reproduction, the intellect and the emotions, and the technical and the political.

1. Nature, which in the traditional metaphor is seen as feminine, is regarded by masculine rationality as merely a resource to be exploited or an enemy to be subjugated by humanity.

2. Masculine elevation of the realm of production as the most worthwhile area of life reflects the dominant presence men

have in this realm. At the same time the realm of reproduction is denigrated and so this area, which women have traditionally dominated, is denied status. Yet production and reproduction are both essential for a humanity's survival. The failure of masculine rationality to recognise the value of both production and reproduction rules out the possibility of a harmonious balance between current needs and long-term survival. Not surprisingly, this is the same balance which the existence of nuclear weapons undermines.

3. Masculine rationality also endorses the separation of the intellect and the emotions - the intellect being seen as superior - and the idea of emotional neutrality towards objects of study. When ordinary people become actively concerned about nuclear power, this style of rationality characterises them as emotional and ill-informed in contrast to the experts who it depicts as involved in 'responsible, objective scientific endeavour'. Thus too scientists are encouraged to remain detached from the social consequences of their work.

4. Masculine rationality also connects with the sharp division between the realm of ends and that of means. This is reflected in turn in the separation of the technical and the political, and of the technical dimensions of a problem from its political ramifications. The separation is visible in the current division of labour. For example, it is necessary to have nuclear physicists, nuclear engineers, plant technicians and construction workers in order to conceive, design and build a nuclear power plant. However, these people are not required to consider the social and political consequences of their work; these 'goal' aspects are 'taken care of' by politicians. The dominant political system makes social responsibility and the determination of ends, which should be everyone's concern, the concern of a specialised few. This type of separation between the technical and the political is especially evident in dominant ways of organising work such as in bureaucracies.

Domination of nature is another fundamental factor underlying state promotion of nuclear power. Modern industrialisation, science and technology are based on subjugating the environment, on extracting resources for human requirements. The orientation is one of exploitation for short-term use rather than harmony and understanding. Domination of nature, of women and of workers are all aspects of modern structures which maintain hierarchy and inequality and

which serve the interests of elites. Nuclear power is one component of this system. To oppose nuclear power effectively requires addressing the structures in which it is embedded.

Uranium Mining In Australia

The earliest uranium mines in Australia were developed in the 1950s to supply British nuclear weapons. During the 1950s the British tested nuclear weapons in Australia at Monte Bello, Emu Field and Maralinga. Rum Jungle, in the Northern Territory, was the main supplier of Australian uranium.

During the 1960s there was little interest in developing Australian nuclear power because of abundant supplies of cheap coal. However, influence from the Australian Atomic Energy Commission led to consideration in the late 1960s of a nuclear power plant for Jervis Bay. There was strong lobbying by influential nuclear scientists, notably Professor Ernest Titterton and Sir Philip Baxter, who at that stage clearly spelled out how an Australian nuclear power plant could be a step towards acquiring Australian nuclear weapons. The Jervis Bay plan eventually was dropped mainly due to economic considerations. Generally, the 1960s were characterised by uranium mines closing down because of decline in the West's nuclear weapons testing programme.

With the 1970s, the situation began to change. Rich deposits of uranium were discovered in the Northern Territory, mainly at Jabiluka and Ranger. The planned growth of civilian nuclear power programmes led to increased interest in large scale mining. However, by 1974 sections of the Australian Labor Party (ALP) and the public generally were becoming concerned with the hazards of uranium mining and the impact of mining on traditional Aboriginal communities. As a consequence, the Ranger Inquiry was set up in July 1975 to investigate the environmental

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impact of the proposed Ranger mine. Though the Labour Government lost office soon afterwards, the new pro-uranium Liberal-National Government felt obliged to at least wait for the Ranger reports. These were published in October

1976 and May 1977. In August 1977, the Liberal-National Government gave the go-ahead for uranium mining. Grassroots responses to these developments began slowly but steadily intensified as the 1970s progressed.

In 1974 and 1975 a number of unions and environmental groups such as Friends of the Earth had begun to seriously question uranium mining. By 1976 uranium mining had become a major political issue. For example in that year the Australian Railways Union called a one-day strike over the issue. In 1977 major groups like Movement Against Uranium Mining and Campaign Against Nuclear Energy were formed to continue the struggle.

The promotion of uranium mining and nuclear power within Australia has been linked with overseas initiatives in several ways. For example, the Australian Atomic Energy Commission, a key organisation favouring uranium mining and nuclear power, has always had strong links with overseas nuclear programmes, especially in Britain. The surges and declines in the economic incentives for uranium mining have resulted primarily from overseas developments in the nuclear industry. As in the case of most of Australian energy industries, the uranium mining industry is partly controlled by foreign-based transnational corporations.

The opposition to uranium mining and nuclear power within Australia also has been linked with overseas activities. The original opposition to uranium mining was stimulated from activists familiar with overseas opposition. Many of the arguments, methods, and focusses of the Australian anti-uranium movement have been adapted from overseas movements to the Australian situation. The worldwide anti-nuclear power movement has provided enormous stimulation to the Australian movement, and the decline in nuclear power expansion since the late 1970s - due substantially to worldwide citizen opposition - has been a great setback for Australian uranium mining interests. Likewise, successes of the Australian movement, in particular the mobilisation of much of the labour movement against uranium mining, have been an inspiration to overseas movements.

Strategy

A strategy links the analysis of an issue with goals and objectives. Having chosen a strategy, it is implemented through appropriate actions. An action is a 'once-off' event such as a rally, march, blockade of lobbying a particular politician. A method, such as lobbying in general, refers to all actions of a certain type.

Actions are co-ordinated together into a campaign. The campaign gives direction to a series of events.

Given our analysis of the structural forces responsible for the nuclear fuel cycle, we now argue that the goal of stopping uranium mining must be closely linked to the goal of basic structural change in the state, capitalism, patriarchy and the division of labour. As such it must involve challenges to the structures which underlie nuclear concerns. The broader objectives for an anti-nuclear movement must include encouraging mass participation in decision-making rather than elite control, decentralising the distribution of political power into smaller, local groups, and bringing about self-reliance based on environmentally sound technologies.

These objectives involve fundamental changes to the way our society is organised at present. In effect, an anti-nuclear strategy must involve both actions aimed at stopping nuclear power and activities which challenge existing structures and help construct viable alternatives. In this context, the success or failure of an individual campaign must be viewed from the perspective of working towards these overall goals and objectives.

The actions used by the anti-uranium movement fall into two main categories. Firstly there are actions which aim at convincing or influencing elites, such as lobbying or writing letters to politicians. Secondly are the actions such as rallies and blockades which usually involve more participation from the community. While such actions may be aimed at elites they are also important in educating or giving support to those who are involved.

Lobbying. Lobbying is a direct attempt to convince or pressure elite decision makers. It does nothing to challenge the state, patriarchy or other structures underlying nuclear power, but rather hopes to oppose nuclear power by 'working through the proper channels'. This leaves elite structures unchallenged and intact. Indeed lobbying is a form of political action most suited to powerful interest groups such as corporations and professional bodies. The state is the forum of the powerful, so for these kinds of groups lobbying often is an effective strategy. For small activist groups lobbying is useful only if it appears to be backed up by politically visible mass concern or mass action.

In 1983, after the election of a Labor Government, the anti-uranium movement turned strongly to lobbying in an attempt to induce the Labor Caucus to implement the Labor Party platform.

This effort was unsuccessful.

Participating in environmental inquiries. In making submissions to the Ranger Inquiry, environmental groups made a concerted attempt to ensure that the issue of the Ranger mine was not divorced from the general issue of uranium mining and nuclear power, and that ultimate decisions were determined by the public rather than 'experts'. The Inquiry did in fact analyse the overall dangers of the nuclear industry and concluded that no decision on uranium mining should occur without public debate. These results helped fuel the ensuing widespread public debate on uranium mining in Australia.

One reason for involvement in environmental inquiries is to challenge the role of experts in service to vested interests. The Ranger Inquiry commented on the bias of distinguished scientists who testified in favour of uranium mining.

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ence. Many environmental inquiries have institutional constraints which can make it questionable whether activists should spend much energy in that area. Many government inquiries with severely limited terms of reference offer few opportunities for activists to intervene effectively. There is not only the danger of being 'co-opted' if activists take part, but also the prospect that any structural challenges may be deflected by superficial concessions. Often such inquiries are not genuine and are only set up as window-dressing. For example, the Australian Science and Technology Council inquiry set up in 1983 to investigate Australia's role in the nuclear fuel cycle had terms of reference which assumed the continuation of uranium mining.

Working through the trade union movement. In 1976 anti-uranium groups began a major effort to persuade trade unions and their Congress delegates to adopt and support anti-uranium policies. The Australian Council of Trade Unions (ACTU) Congress adopted an anti-uranium policy in mid 1977. Following the re-election of the Liberal-National Government in December 1977, anti-uranium groups focussed on persuading unions to

implement the ACTU policy. However, the members of a number of unions - including some with anti-uranium policies - continued to work in the uranium industry. Some union leaders chose not to attempt to convince members to avoid or leave the industry, while other leaders supportive of the policies could not persuade members working in the industry or transporting its products.

The efforts within the trade union movement have been strong to the extent that they have mobilised rank-and-file action. One of the most valiant efforts to stop uranium mining was by the Waterside Workers Federation - supported by the Seamen's Union and the Transport Workers Union - in refusing to load yellowcake for export from Darwin in late 1981. This direct action - an obvious challenge to the power of corporations and the state - was only called off when deregistration threats from the Liberal-National Government induced the ACTU to back down.

Efforts through the trade unions have been least effective when they have depended on action only by union elites. An ACTU policy against uranium mining is not enough: it does not in itself challenge any of the driving forces behind nuclear power. When Bob Hawke was President of the ACTU, the executive showed itself disinclined to mount even a strong publicity campaign against the uranium mining industry.

Working through the parliamentary system. Since 1976 a major focus of the anti-nuclear power movement has been the ALP. A massive campaign of publicising and discussing the issue at the party branch level resulted in an anti-uranium platform being adopted in mid-1977. Since that time there has been strong anti-uranium feeling within the party.

In late 1977 the focus of the anti-uranium movement became the federal election campaign. During this campaign the anti-uranium movement used the resources of local anti-uranium groups to help the ALP in marginal House of Representatives electorates and for the Australian Democrats in the Senate. Many anti-uranium activists pinned their hopes on a Labor victory. But the Liberal-National coalition won the election, and the anti-uranium campaign appeared to have little impact in marginal electorates. After this defeat, many activists left the movement while a number of local groups effectively ceased to exist.

The danger in relying too much on anti-uranium action by a Labor Government was demonstrated in mid-1982 when the Labor anti-uranium platform

was watered down on the initiative of party power-brokers in spite of continuing support for the platform at the party branch level. The danger was further demonstrated in November 1983 when Labor Caucus, at the initiative of Cabinet, gave the go-ahead for Roxby Downs, potentially the largest uranium mine in the world. In each case the impetus to maintain the anti-uranium policy came from the grassroots of the party, while it was labour elites who pushed pro-mining stances.

Any Australian government, whether Labor or not, is strongly tied to the established state apparatus and to the support of capitalism. It is futile to expect the government on its own - whatever its platform may be - to readily oppose aspects of the nuclear fuel cycle. This will occur only when there is strong and continual pressure from the grassroots of the party and from the community at large.

Grassroots mobilisation. The anti-uranium movement has used a wide variety of methods to inform and involve the community. Commonly used methods include leaflet distribution, articles, talks, discussions, films, petitions, rallies, marches, vigils and street theatre. Major anti-uranium rallies and marches were held each year in most large cities, especially in the peak years of the uranium debate, 1976-1979 and 1983-1984.

A typical grassroots activity has been the creation of nuclear-free zones, which is mainly a symbolic action which helps raise awareness and encourage local groups to openly oppose nuclear power. This activity has worked closely with the dissemination of information through the media, local groups, the alternative press and schools. In 1983 the people in the Bega Valley Shire voted to declare their area a nuclear-free zone. To counter this popular sentiment, the Shire Council called in nuclear experts in order to argue the case against the nuclear-free zone. In this case the nuclear-free zone campaign provided a channel for exposing and challenging the role of nuclear expertise and elites in promoting nuclear power.

Civil disobedience has also been used by the anti-nuclear movement. In the late 1970s, nonviolent direct action was used on several occasions at ports where uranium was being loaded for export. At the Roxby Downs blockades in 1983 and 1984, several hundred people gathered to express their opposition and hinder mining operations. Two distinctive features of these protests were the use of non-violent action and the way in which participants formed themselves into affinity groups. These are a form of political organ-

ising which is consciously anti-elitist and aims to democratise all group interactions.

Education, rallies, marches, petitions and civil disobedience sometimes do little to challenge the structures underlying nuclear power. For example, the rally outside Parliament House in October 1983 was primarily aimed at putting pressure on the Labor Party at a time when it was considering its uranium policy. Similarly, the 'tent embassy' located on Parliament House lawns aimed to prick the conscience of the ALP.

One of the aims of the Roxby Downs blockades was to mobilise pressure to influence the ALP. This was one of the difficulties: too much orientation to political decision-making by elites. In addition, there was a tremendous focus on Roxby which, especially at the second blockade, didn't always increase the possibilities for building a continuing movement.

In spite of many difficulties, grassroots mobilisation often provides a potent challenge to nuclear power and the forces behind it. All the lasting successes of Australian anti-uranium campaigns have depended ultimately on grassroots mobilisation, which provides a reservoir of commitment and concern which elite-oriented activities do not.

* In 1975, the virtue of mining uranium was largely unquestioned among the general public and the labour movement. It was simply unthinkable that a mineral

which could be profitably sold would be left in the ground. Yet by 1977 the anti-uranium view had become widely understood and strongly supported. This change in opinion happened largely through the educational and organising efforts of the local anti-uranium groups and of anti-uranium activists within organisations such as trade unions, schools and churches. The resurgence of anti-uranium activity in 1983 owed much to the framework established in the late 1970s.

* The anti-uranium platform adopted by the ALP in 1977 was the result of organising and education at the party branch level. ALP stands and action against uranium mining have come consistently from the party grassroots, and this in turn has depended on anti-uranium sentiment in the general community. Support for uranium mining within the ALP has always been strongest on the part of party elites.

* The anti-uranium stands and actions by Australian trade unions have been stronger than in any other country in the world. Building on a tradition of trade union action on social issues, this has come about from persistent grassroots education and organising at the shop floor level. It has been the rank-and-file unionists who have taken the strongest anti-uranium stands, and the trade union elites who have backed away from opposition. When in late 1981 the Seamen's Union refused to load yellowcake in Darwin, it was the rank-and-file workers who took a stand and made the sacrifices.



Does grassroots mobilisation then provide the most fruitful avenue for challenging the structures behind nuclear power?

We would suggest this is so, but the choice of methods is not straightforward or automatic. The problem with many grassroots methods used by the anti-uranium movement is that they have not been systematically organised and focused as part of an overall long-term strategy. Instead, individual groups - and indeed the national movement - has often just looked ahead to the next rally, the next signature drive, or the next ALP Conference. While this approach does have some merit, for example in saving an area from irreversible environmental destruction, it is inadequate as an approach to stopping mining or transforming the structures underlying nuclear power. For example the closing of Roxby mine would prevent the destruction of the surrounding ecosystem including mound springs inhabited by forms of aquatic life found nowhere else in the world. If the environment is altered, these unique creatures will be gone forever. However, the closing of Roxby in isolation would do nothing to prevent mining companies from setting up or increasing production in other places. If, on the other hand, existing power structures were challenged, and the closing of Roxby were carried out in conjunction with the closing of all uranium mines and a disbanding of uranium interests, then the safety of these ecosystems would be assured.

What needs to be done is to focus on vulnerable points within the structures promoting nuclear power, and to devote efforts in these areas.

What are the vulnerable points, then?

Before looking at specific vulnerable points, let's examine the nuclear power issue as a whole. Nuclear power is a vulnerable point in the structures of the state, capitalism and so forth. In promoting nuclear power, and thereby entrenching centralised political and economic power, other consequences result which mobilise people in opposition: environmental effects (especially radioactive waste), the connection with nuclear weapons, threats to Aboriginal land rights, threats to civil liberties, and many others. In organising to oppose these specific threats, people at the same time can chal-

lenge the driving forces behind nuclear power.

Here are a few of the specific vulnerable points which have been addressed by the anti-uranium movement.

* Threats to Aborigines. Nuclear power is alleged to be beneficial, but uranium mining is a severe cultural threat to Aborigines, who are already a strongly oppressed group in Australia. The anti-uranium movement and the Aboriginal land rights movements have been strengthened by joint actions, such as speaking tours.

* Centralised decision-making. Nuclear power has widespread social effects, but promoters of nuclear power claim the decisions must be taken by political and scientific elites. The credibility of scientific elites often has taken a battering in the nuclear debate. For example, the recent inquiry into events at Maralinga in the 1950s has exposed the inadequacy of some 'expert' advice on radiation safety at the time.

More importantly, the claim that elites must make the decisions runs counter to the rhetoric of Western democracies where ordinary people are meant to have a say

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in political decision-making. By moving in on this embarrassing contradiction, protests which demand a role for the public in decision-making about energy also challenge political elites and the political use of expertise.

* Capitalism and workers. Nuclear power is alleged to be good for the economy and for workers, but in practice massive state subsidies to the industry are the rule, and few jobs are produced for the capital invested. In challenging nuclear power as an inappropriate direction for economic investment, a challenge is made to the setting of economic priorities by corporations and the state.

Capitalism also directs investments only into profitable areas, irrespective of their social benefits. If activists can undermine the profitability of marginal enterprises by delaying tactics or by jeopardising state subsidies, then capitalist investment can be shunted away from socially destructive areas. For example, direct actions against Roxby Downs could in the long run undermine its profitability and cause its closure.

Grassroots mobilisation is usually the most effective way to intervene at vulnerable points such as these. A suitable combination of interventions then forms the basis for a strategy against uranium mining.

But how can uranium mining actually be stopped?

This is a good question. Grass roots mobilisation does not by itself stop uranium mining. The mobilisation must connect with major forces in society. There are several ways this can occur. Uranium mining could be stopped:

- (1) by direct decision of the government;
- (2) by the unions acting directly through strikes or bans to prevent uranium mining, export, or construction of nuclear plants;
- (3) through cost escalations, for example resulting from requirements to ensure safety of environmental protection;
- (4) by a referendum whose results were adhered to;
- (5) by legal action on the part of aborigines or anti-uranium forces;
- (6) by direct action to physically stop mining from proceeding.

A critical element necessary to the success of any of these methods is the mobilisation of a large section of the public against uranium mining. Thus for example government action to stop mining would be likely to take place only if there were mass mobilisation on the issue. Similarly 'direct action' could only succeed if popular support were so great that the government refused to use sufficient force to physically overcome the resisters.

To give an idea of how grassroots methods could be coordinated into a strategy to stop uranium mining, consider a hypothetical example. Suppose an analysis of the current political situation suggested that direct action by workers and unions gave the most immediate promise for directly stopping uranium mining, while government decision and cost escalations were also likely avenues for stopping mining. A grassroots strategy might include the following:

* Systematic community organising and education, to provide a basis in popular sympathy and support for direct action by workers. Points to be emphasised would include the right of workers to take direct action on conscience issues as well as work-related issues, and the importance of questioning decisions made solely on the basis of corporate profitability or state encouragement of large-scale economic investment.

* Development of alternative plans for investment and jobs based on input from workers and communities, and widespread dissemination of the ideas and rationale for the alternative plans.

* A series of rallies, marches, vigils and civil disobedience, aimed at both mobilising people and illustrating the strength of anti-uranium feeling. These actions would be coordinated towards major points for possible worker intervention, such as trade union conferences or the start of work for new mines.

* Through consultation with unions, workers and working-class families, the establishment of support groups and funds for workers and unions penalised for direct action against uranium mining.

* Plans to make parallel challenges to those by workers, such as simultaneous defiance of the Atomic Energy Act by trade unionists and community activists. Black bans of corporations or state instrumentalities by unionists could be coordinated with boycotts organised by community groups.

* With such a strategy, it is likely that the workers taking action would come under strong attacks from both corporations and the government. Preparation to oppose such attacks would depend on community mobilisation to demonstrate support for the workers in the media, in the streets, through informal communication channels and to the workers themselves.

* If direct action by workers began to be sustained through community support, it is quite possible that other channels for stopping uranium mining could come into play: the government - especially a Labor government - might back away from confrontation with unions supported by the community, or corporations might decide investment in this controversial area was too risky. Plans would be required to continue the campaign towards these or other avenues for stopping uranium mining.

Building Alternatives

While it is important to bring direct pressure to bear against institutions with pro-nuclear policies and practices, it is also necessary at the same time to provide alternatives to replace these institutions. Building these alternative institutions can take place at all levels of society, from small groups to large organisations.

Local groups. The obvious place to begin constructing a politics which is decentralised, participative and self-reliant is in small local groups, such as

anti-uranium groups themselves. Instead of replicating the hierarchy, dominance relations and sexism found in state bureaucracies and corporations, small local groups can organise themselves in a non-hierarchical, participatory fashion. For example, it is important to give everyone a chance to contribute, to encourage the sharing of skills, and to ensure full participation in both the boring tasks and the exciting opportunities. This helps make each person's contribution important.

Activist groups constantly face problems arising from the intellectual division of labour. Different levels of expertise within a group can lead to 'power games' as different people cash in on the status which attaches to greater knowledge. Often strategies may be fragmented when irritation arises between those who want to 'talk about' issues and those who want to 'do things'. When an activist group deals with government bureaucracies, it faces officials who habitually use a monopoly on expertise or information to evade their accountability to the community.

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Patriarchal structures usually reinforce the intellectual division of labour. For example, masculine rationality is often used by bureaucrats to discredit humanitarian considerations by defining them as 'idealistic' and not in touch with 'practical realities'. Similarly, bureaucrats may refuse to deal with egalitarian organisational frameworks and insist on dealing with hierarchical office bearers because of the 'need' for 'administrative efficiency'.

Activist groups can consciously undermine both the intellectual division of labour and patriarchal structures in their daily practices. For example, in organising community education projects (such as speaking engagements and workshops) activists can simultaneously engage in self-education. People with more expertise in the group can form partnerships with those who have less expertise and together engage in letter-writing, leaflet production, speaking engagements and so forth. In spreading

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the expertise around like this, activist groups are not only fostering egalitarian practices and harmonious group dynamics, but they also are constantly challenging the legitimacy of the intellectual division of labour.

Similarly, activists need to continually challenge conventional rationality. In submissions to inquiries and in simple day-to-day dealings with government bureaucracies, activist groups should question narrow terms of reference and narrow criteria of efficiency and economy. Activists should pose the issues of long term outcomes and the desirability of the social goals which bureaucracies implicitly aim for.

Participatory, non-hierarchical local groups provide an alternative to the institutions promoting nuclear power. By promoting local initiative and non-violent direct action, local groups provide an alternative to the state where power is based on centralised administration and on violence. By consciously confronting interpersonal dominance relations, local groups can empower women and help to undermine patriarchy.

Local communities. Local groups, however democratic and participatory, do not by themselves challenge large-scale patterns of social organisation or energy use. The next level beyond local groups is local communities: neighbourhoods, councils, towns or other groupings of people with shared physical surroundings and social interactions. Local communities are a logical place to promote energy efficiency, planning to reduce energy use and intermediate-scale renewable energy technologies. Possibilities include planning to reduce dependence on cars by fostering walking and bicycling, local production of food, solar hot water heating for groups of houses and intermediate-scale wind generators.

Some of the rural communes and 'alternative lifestyle' communities, such as Nimbin and some religious retreats, have begun taking steps in these directions. When assessing the role of such groups, it is important to distinguish between alternative and oppositional. There is an important political difference between someone who simply finds a different

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way of life and wishes to be left alone with it, and someone who finds a different way to live and wants to change the society in its light. For example, rural communes which aim at self-sufficiency as an end in itself do not fundamentally challenge the structures which trap most people into alienating and destructive lifestyles. However, things like food co-ops, learning networks and, more specifically, projects like the proposed development of community-controlled, intermediate-scale wind power in northwest Tasmania are oppositional actions. In challenging corporate structures, schools and the Tasmanian Hydroelectric Commission, these actions hold out the promise of intervening in the lives of many more people in the community than simply those involved in the action. They can be part of a restructuring of lifestyle in general.

Just as important as the alternative planning and technologies is the social organisation and decision-making processes which go along with them. Participation could be encouraged by general meetings, or by meetings of representatives of street committees. One way to encourage participation but avoid the creation of a new elite of planners would

be to choose community-level coordinators by lot. People each year could be chosen randomly, as they are for a jury, to fill perhaps one-quarter of the positions on a community-level planning committee. As each person would serve four years, this would ensure continuity of participants while involving a cross-section of people with no special vested interest.

Bureaucracies. One of the obstacles faced by environmentalists is bureaucracy, which is a form or organisation built around hierarchy and the division of labour. Alternatives to bureaucracy exist, such as autonomous work groups and coordination by committees of representatives chosen by work groups or by lot. Large powerful bureaucracies will not wither away on their own. To democratise them will require lots of patient effort to foster the alternatives by activists inside and outside established bureaucracies. Environmentalists have usually tried to work through bureaucracies by lobbying in the right places or working on the inside. There is a need to also democratise bureaucratic structures: state bureaucracies, corporate bureaucracies, and political party and trade union bureaucracies.

There are several ways to go about democratising bureaucracy.

* Spreading information. Since bureaucracies are based on monopolising key information at the top, democratising knowledge is an important tool in challenging bureaucracies and building alternatives. The efforts by the anti-nuclear movement to spread knowledge about nuclear power and to expose the values underlying nuclear expertise have played a large role in reducing the public legitimacy of the state bureaucracies promoting nuclear power.

* Working with activists inside bureaucracies. Inside critics have played a crucial role in campaigns against nuclear power by providing information about political developments and occasionally speaking out in public against them. Insiders will also play a vital role in efforts to democratise bureaucratic structures.

* Pushing for freedom of information and other constraints on bureaucratic autonomy. Secrecy and centralised control of information have been important tools in the promotion of nuclear weapons and nuclear power by states. Any means for breaking information monopolies will be helpful to the opposition.

* Pushing for changes in bureaucratic structure. Rather than just pushing for equal opportunity for women and other groups within the existing structures,

these struggles can be linked with pressure to redefine the direction and organisation of bureaucracies, for example by reducing the number of levels in the hierarchy, sharing of tasks and allowing freedom for groups to organise their work collectively.

Efforts to democratise bureaucracies can be linked with more overtly environmental goals. For example, pushing for more community participation in energy planning can be linked with arguments for allowing government bureaucrats more freedom and initiative. Campaigns for trade union action on environmental issues can be linked with campaigns for more rank and file participation in formulation of trade union policies.

Since the state is bureaucratic in form, efforts to democratise bureaucracies help to weaken and provide an alternative to state power. Bureaucracies also thrive on and foster inequalities in knowledge, and foster typically masculine values such as the separation of intellect and emotion. Building alternatives to bureaucracy thus strikes at the roots of the institutions underlying nuclear technology.

Conclusion

Our analysis suggests that opposing nuclear power can be done at different levels: education, community activities, rallies and civil disobedience to apply pressure within existing institutions, and at the same time efforts for long-term institutional change towards equality, participation and democracy. These efforts reinforce each other. While direct pressure to stop nuclear power helps restrain the expansion of the power of the state, technocracy and other institutions behind nuclear power, long-term programmes to build alternatives help lay the basis for future anti-nuclear campaigns.

Further reading.

Virginia Coover et al., **Resource Manual for a Living Revolution** (Philadelphia: New Society Publishers, 1981): the basic reference for non-violent action training.

Johan Galtung, **The True Worlds** (New York: Free Press, 1980): a wide-ranging structural analysis with a grassroots perspective.

Andre Gorz, **Ecology as Politics** (Boston: South End Press, 1980): critique of nuclear power and related structures.

George Lakey, **Strategy for a Living Revolution** (New York: Grossman, 1973): grassroots strategy for nonviolent social change.

Alan Roberts, 'The politics of nuclear power', **Arena**, number 41, 1976, pages 22-47: a structural analysis of nuclear power, focussing on capitalism.