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Reporting the Nuclear Industry: Sorcery versus Common Sense

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For many of us, the entire nuclear industry might as well be an exercise in sorcery. A former British Environment Secretary, Chris Patten, once memorably described popular attitudes to the industry: “Nuclear power? To most people, it’s witchcraft”. So a starting-point for any discussion of how the industry is reported is acceptance that many lay people regard it irrationally.

Part of their (or our) irrationality derives from irrational perception of risk, with which the industry is all too familiar: the belief that risks incurred which are involuntary, unnatural, potentially catastrophic, unfamiliar, or outside our control are more to be feared than their opposites. So we will fear the risk of a nuclear accident more than that of dying of smoking-related cancer, or in a road accident. And we will fear any exposure to radiation more, perhaps, than any exposure to particulates given off in diesel exhausts, or any exposure to radon in our own homes, or to natural radiation anywhere — or to emissions from thermal power stations. Risk perception is profoundly irrational: at the height of the BSE crisis in 1996, I heard of a woman in Germany who telephoned an official to say: “I am sitting on a leather sofa. Am I likely to catch mad cow disease?”

Part of our irrationality stems from the persistent scientific illiteracy of many of us. The United Kingdom was described recently as the only country where it is an insult to call somebody an intellectual. It is almost as bad to call someone a scientist: the *Financial Times* (20 February 1999) wrote of one Cambridge college where “science dons are still affectionately known as ‘the plumbers’”. And even if we do not look down on scientists, we are hardly likely to understand them, or even to think there is much reason why we ought to try.

CP Snow wrote in 1959: “The intellectual life of the whole of western society is increasingly being split into two polar groups... Literary intellectuals at one pole — at the other scientists, and as the most representative, the physical scientists. Between the two a gulf of mutual incomprehension”. Forty years on, see how — much or how little — thoughtful and sustained coverage of science there is in most newspapers, on radio and television. The present debate on genetically modified organisms, whatever else it is, is informed only partly by science. And if the culturally aware look down on scientists, they try very hard not to look at engineers at all.

So where does common sense come in to the equation? It comes in because of our increasing need to generate energy without adding to emissions of climate-changing gases. The British environmental biologist Sir Frederick Holliday has written (*Nuclear Europe Worldscan*, 5-6, 1999): “The world has still to consider the detailed consequences of two scenarios: firstly, that global warming, whatever its cause, will proceed to an extent that will significantly raise sea levels and alter weather patterns; secondly, that fossil fuel burning and nuclear

power generation will, for different reasons, be phased out by the middle of the next century... My belief is that all the people of the world need abundant energy at reasonable costs. My science tells me that without nuclear power the long-term future of global ecosystems is at risk”.

Sir Fred acknowledges that you can have endless debates about just what constitutes the long term. So perhaps it is safer to express the common sense case in the terms I once heard from an eminent climatologist: that nuclear power stations exist, and that it is worth using them until they reach the end of their working lives in order to give us the breathing space we need to get from where we are, producing most of our energy unsustainably, to where we want to be, producing it in a way which we can continue indefinitely. That may not be a very exciting prospect for the nuclear industry, but it may be a basis for discussion with some of its opponents, especially if you remember Sir Fred’s second scenario, which foresees only about another fifty years of life for the nuclear industry in any case.

I have tried to spell out what I mean by two of the terms I used at the start, “sorcery” and “common sense”. So I ought to attempt a definition of the third term, “the nuclear industry” — because this has never been a single, unitary industry, although politicians have wanted to make us think that was what it was. The best hope for the future for the supporters of nuclear power is to clarify what it is the industry does do, and what it does not do. Then it will be judged on its own merits and faults, not on other people’s.

When Queen Elizabeth II opened the United Kingdom’s first reactor at Calder Hall in 1956, she said it was there to produce electricity. But electricity was a by-product: the purpose of the reactor was to produce weapons-grade material for Britain’s nuclear bombs. And civil nuclear power is irrevocably linked, in the minds of most people, with military power — not just linked to it, but spawned by it.

Fear of the civil uses of nuclear energy may perhaps be irrational. But fear of its military uses seems — even with the Cold War apparently left behind — the only possible rational response. The whole edifice is in fact based on the assumption that we will always react rationally in moments of terror. The fact that rationality and terror have tended over the last half-century to coincide leaves some of us unconvinced that it is a clear case of cause and effect. That is the legacy the nuclear industry is saddled with.

It may seem obsessional to argue that what happened in the industry’s infancy more than forty years ago can influence attitudes to it today. But it has not yet emerged from the shadow. And it will never emerge while part of the industry continues to reprocess fuel, flying in the face of every economic and strategic argument that the world already has more plutonium than it knows what to do with. A nuclear scientist said to me recently: “Reprocessing makes no sense at all — unless you want to make bombs”.

So while the nuclear industry continues to run reactors which are essentially little different from boiling kettles, producing electricity safely day in and day out, it cannot escape being identified with the people who believe that deterrents unflinchingly deter, and that the threat of mutually assured destruction is all that stands between us and it. Until the nuclear industry manages to sever the link, it will face more fear and distrust than it needs to.

Many people in the nuclear industry who feel it is misunderstood and unloved wonder who to blame. Some of them think journalists are largely responsible for

their problems, and sometimes, to a degree, we are. I know there have been times when I was. So let me quote a correspondent to a recent issue of *Nuclear Europe Worldscan* (9-10, 1998), with more than thirty years' experience in the nuclear industry.

He wrote: "I am an enthusiastic supporter of nuclear as a major long-term contributor to energy supply. However, what the industry needs to regain the support of the British public is... something akin to a Truth and Reconciliation Commission. It needs to be admitted that governments and industry lied to the public about the links with the military programme... Overlong attachment to the fast reactor... should be admitted. Of course, once the fast reactor was abandoned the *raison d'être* for the Thorp reprocessing plant disappeared, and no amount of selective 'facts' will make it otherwise..."

To accuse an industry of lying is serious. But the word is pretty accurate for describing not just the industry's origins, but its continuing way of operating, if not until today then certainly until very recently. If it is too offensive, then a phrase which has now passed into common English usage will do just as well. The nuclear industry, for most of its life, has been, to put it at its mildest, economical with the truth — about its military links, its environmental impact (Sellafield, as we have now been taught to call Calder Hall, is home to radioactive pigeons; more seriously, it has contaminated the northern seas), its economic promise (we are still waiting for the "electricity too cheap to meter" we were told the industry would produce), its safety record (Windscale 1957, Three Mile Island 1979 and Chernobyl 1986, apart from anything else), and the still unsolved problem of waste disposal.

With this apparently instinctive habit of lying has gone a willingness to bully opponents. In my own field, I could introduce you to several journalists who are convinced that senior figures in the industry have sought to interfere in and damage their careers after they have written critical articles.

It does not have to be like this. Lying, bullying, defensiveness, distrust of those outside the nuclear circle, the mentality of the laager or the ghetto, are marks of a profoundly insecure industry. A large part of the solution lies within its own hands. If it wants more accurate and thoughtful reporting as a means to gaining wider public acceptance, there are things it can do to help itself.

As the London *Evening Standard* put it (5 November 1998): "Nuclear power is vital for the nation's energy needs; but the people responsible for running the industry are their own worst enemies in promoting its cause".

In my experience of reporting on nuclear affairs, I have found it a more polarised subject than almost any other I can think of. People are almost invariably categorised by the industry, and by its opponents, as either pro - or anti-nuclear. There is hardly any middle ground. That means it is very hard to have a debate, but very easy to have a confrontation. That may conceivably make lively radio or TV, though it probably will not. It will do little to enlighten listeners, viewers or readers. It will do nothing to win understanding for the industry, and will probably leave the existing anti-nuclear balance intact.

To refer yet again to *Nuclear Europe Worldscan*, an editorial in the January - February 1999 issue was instructive. It was written by Dr Vincent Covello, director of the Center for Risk Communication, New York City. He wrote, among other things, of "the continuing failure by risk managers in the nuclear energy industry to apply science-based knowledge that addresses the requirements for effective risk communication, dialogue and public participation. For example, many risk managers in the nuclear energy industry

continue to use the DAD model: decide, announce, defend. No room is left for meaningful public involvement and participation in the process...” Does that sound familiar? It certainly does to me. The very notion of any public participation in nuclear decision-making has been enough to make strong men and women blanch.

Since its beginnings, the nuclear industry has been the preserve of a peculiar priesthood, a fellowship of initiates too rarefied, too important, too secretive to do anything but tell the rest of us what they are doing in our name... once they have done it. Again, much of the responsibility for that lies with the industry’s military upbringing. But it is time it outgrew it. And it is not only necessary but also possible that it should.

What might that mean in practice? It might start by meaning that the industry talk to ordinary people (and I include journalists under that heading: we have no special status or privileges, no extra protection in the eyes of the law) before you decide to do something, not afterwards. Ask us what we think. Find out what our concerns and fears are. If the industry is ready to acknowledge that we are afraid, even though it thinks there is no conceivable reason for us to be so, then it has gone halfway to being able to have a debate, or even a discussion, in place of a confrontation. An ability to put itself in our shoes, with all our irrationality, anxiety and ignorance, would let the industry see itself as others see it: as sorcery. And once it has done that, the industry will be better placed to begin to change. Remember Vincent Covello’s warning: “When people are worried and upset, they do not care what you know until they know that you care”.

I know that some people in the industry are well aware of the need to care, and to be seen to be caring. I know that some have recognised for long enough the need to change from secrecy to openness, and that they work for that as well as they can. So please do not think we do not appreciate what you are doing: we do. We just wish the leaders of the nuclear industry had the sense to realise that yours is the only way that will lead to the industry being accepted as something that can work in everyone’s interests, and not just for a tiny minority that purports to act for us all.

The spirit of the age encourages the industry to change. Not so long ago, scientists were figures of authority, people who might not be trusted but certainly were not to be questioned. They commanded, if not obedience, then at least a reluctant acceptance and respect.

But authority figures are few today. And whoever they are, they are very unlikely to be scientists (let alone most journalists). The ground has shifted from beneath your feet. Where a few years ago the industry could have pronounced, today it has to try to persuade. Where previously it could have simply told us that something had to be, today the industry has to tell us that what it can offer will be the least bad part-solution of several unpleasant choices. Yesterday the industry could take its decisions in private, acting as its own arbiter. Today we say that transparency and accountability matter, and matter a lot, because they are what we need so that we can make informed decisions ourselves.

Sir Crispin Tickell used to be the British ambassador to the United Nations, and later was warden of Green College, Oxford. Sir Crispin is credited with having succeeded in persuading Margaret Thatcher that climate change was a reality, and a threat. I once heard him say that, when it comes to the environment, one of the hardest things we have to do is to find new ways of thinking. Nuclear opponents are having to do that — thinking of solutions as well as problems, thinking of how we reconcile the sort of world we want for ourselves with the

sort of world we shall have to share with seven or eight or nine billion other people.

The nuclear industry has to find new ways of thinking — ways which expose it to the uncertainty of accepting that, perhaps, nuclear energy will never be more than a partial and temporary answer to humanity's needs; ways which remind it constantly that it has not yet found how to get rid of its waste; ways which unsettle it by insisting that it will have to share its arcane secrets with the rest of us if we are to let it go on practising them; ways which say we are mature enough to decide our own fate.

To sum up, some basic elements of those new ways of thinking are: putting as much distance as possible between civil and military uses of nuclear power; accepting that the people the industry exists to serve are frequently irrational enough to need reassurance; accepting the limitations imposed by the persistent conundrum of waste disposal; acknowledging that, for many of us, life is often a messy business of settling for partial and temporary solutions to problems which are themselves always changing. Nothing is certain. Everything is possible.

Arguing like that is probably easier overseas than it is in the United Kingdom. Here we are still enmeshed in a culture of secrecy. The assumption is almost invariably that the official right to secrecy overrides the public right to know. Secrecy is an essential condition of sorcery. Once something is out in the open, it becomes much easier to judge it by the standards of common sense. And I think that is how the nuclear industry would want to be judged.