

*BRITISH BROADCASTING CORPORATION*

*RADIO 4*

*TRANSCRIPT OF "FILE ON 4"- 'NUCLEAR BRITISH ENERGY'*

*CURRENT AFFAIRS GROUP*

*TRANSMISSION: Tuesday 5<sup>th</sup> December 2006 2000 - 2040*

*REPEAT: Sunday 10<sup>th</sup> December 2006 1700 - 1740*

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*PROGRAMME NUMBER: 06VQ3630LHO*

THE ATTACHED TRANSCRIPT WAS TYPED FROM A RECORDING AND NOT COPIED FROM AN ORIGINAL SCRIPT. BECAUSE OF THE RISK OF MISHEARING AND THE DIFFICULTY IN SOME CASES OF IDENTIFYING INDIVIDUAL SPEAKERS, THE BBC CANNOT VOUCH FOR ITS COMPLETE ACCURACY.

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#### EXTRACT FROM NUCLEAR INDUSTRY VIDEO

PRESENTER: All power stations, whether nuclear or fossil fuelled, have one common purpose – to produce electricity.

O’HALLORAN: In its promotional films, the nuclear industry has always proclaimed the reliability and safety of nuclear power.

PRESENTER: All nuclear power stations are obliged to operate under strict guidelines imposed by the Government’s safety watchdog, the Nuclear Installations Inspectorate.

O’HALLORAN: But Britain’s biggest power generator, British Energy, has hit serious problems with its nuclear reactors. The discovery of cracks has caused four of them to be shut down. And we hear of a catalogue of blunders at another of the company’s plants. Mistakes only uncovered long after the event by a freedom of information request. We investigate the safety implications of British Energy’s reactor faults and ask, could there be a threat to our chances of getting through the winter without power cuts?

HELM: For any modern economy, let alone one that claims to be the fourth largest in the world, to be in a position where the lights might actually go out, this is a really rather ridiculous economic position to have got to.

## SIGNATURE TUNE

### ACTUALITY ON WALK BY SEA

DUFFY: Well, just to the left here we've got the sea wall, big boulders keeping the sea from the low-lying land to the south of the power station.

O'HALLORAN: Jim Duffy has long had the nuclear power station at Hinkley Point in Somerset in his sights.

DUFFY: In front of us, we have got the power station itself, Hinkley B. A greying, ageing-looking power station, with rusty little bits on it.

O'HALLORAN: A campaign group he runs called 'Stop Hinkley' is trying to get the two ageing nuclear reactors there shut down. Last year he began to learn of cracks in the graphite cores of the old reactors, which are run by British Energy. The graphite core is a huge structure in the heart of the plant, and its integrity is vital to nuclear safety. Jim Duffy has seen documents from nuclear inspectors, questioning how much the company knows about the cracks and their effects on safety.

DUFFY: What they were saying was that British Energy didn't know how many cracks there were in Hinkley Point, they had no method for detecting sub-surface cracks - in other words, cracks that couldn't be seen by video cameras that can be sent down the fuel channels, cracks which were developing deep in the areas between these graphite bricks. The inspectors were using words like 'defective and damaged' in relation to the reactors themselves, which inspired dread in me.

O'HALLORAN: But Jim Duffy says his group would have been in the dark about the cracks had it not demanded and obtained documents under Freedom of Information. It was prompted to do so by a magazine report and a company bulletin about another nuclear plant.

DUFFY: Well, we noticed British Energy announced in December 2004 that there were cracks in another, newer reactor at Hartlepool in the north east of England, and so that gave rise to concerns to us. We were saying at the time that if these cracks exist in a much newer reactor, surely they might exist in the first AGR that was built in the country. The age-related corrosion would apply to that probably more than to a newer reactor. In March 2005, the New Scientist published information that they had received through the Freedom of Information Act from the regulators to say that cracks had existed at Hinkley Point and Hartlepool Power Stations.

O'HALLORAN: What was your reaction to that?

DUFFY: Well, we were shocked, not entirely surprised because we were already speculating that those cracks existed, but that confirmed our fears.

O'HALLORAN: What did you and your campaign do in the wake of the New Scientist article?

DUFFY: We made our own Freedom of Information Act application for these papers from the Nuclear Installations Inspectorate, which took some time. But what they showed us was that the Nuclear Installations Inspectorate were very worried about British Energy's approach to the whole problem of these cracks, and my spine tingled with fear just at the whole idea that all this time we've been living next to a nuclear reactor that the regulators were very concerned about and we had heard nothing about it.

O'HALLORAN: The two reactors at Hinkley Point began to generate power in 1976. They're among fourteen advanced gas-cooled reactors - or AGRs - operated by British Energy. The deputy chief inspector of Nuclear Installations, Len Creswell, says the deterioration of the graphite core is an unavoidable part of the nuclear process, but one which must be fully understood and monitored.

CRESWELL: The change in the material properties, change in their strength is an inevitability of the reactors operating at temperature and in the environment in which they operate.

O'HALLORAN: There's nothing you can do to stop that at all?

CRESWELL: The temperature and the radiation atmosphere they operate in is something which causes this effect. The weight-loss is something of the order of the late twenty percents, so 25%, 26%, 27%. They have data out to about 40%, so there is a considerable margin which they will be able to use as part of their safety case.

O'HALLORAN: And is it right that this is, in a way, a bit like osteoporosis, you know, the bone disease – the bones are getting weaker in some people with old age. Is it a bit like that in these graphite cores?

CRESWELL: That's not a bad analogy. And, just like the osteoporosis you describe, what we require of the operators is that they demonstrate to themselves that it's safe to operate. If they can't do that to themselves and they can't do that to us, we won't allow them to operate.

O'HALLORAN: That's a decision that independent nuclear engineer John Large would prefer to be taken sooner rather than later. He's examined the Freedom of Information documents. He argues that the cracks they discuss should be seen against the length of time - thirty years - that the oldest AGRs have been operating. He says that's as long as their designers expected, back in the 1970s.

LARGE: There's a great deal of uncertainty about the nuclear safety case of the graphite core being expressed by these Freedom of Information documents. So my own feeling is that if you was to move logically on with the investigation and the requirements set out by the Nuclear Installations Inspectorate, we would see either very strong operating restrictions being put on the AGRs or their closure within a few months.

O'HALLORAN: But the nuclear inspectors aren't hinting at anything like that at the moment. They're not suggesting this is going to be a serious problem that limits the life of those reactors for several years to come.

LARGE: The Freedom of Information documents clearly show a considerable concern being expressed by the Nuclear Installations Inspectorate. When the designers put together their final designs and the nuclear safety case for the advanced gas cooled reactor, they assumed and determined a safety margin. What's happening now, as these reactors get older, the operators are considering ways in which to reduce, narrow that safety margin. That's where the public should be concerned.

O'HALLORAN: Are you suggesting, alleging that what with each year of life that these reactors continue over, you know, twenty-five years or thirty years, there is an increased risk from these cracks in the graphite cores?

LARGE: Yes, of course. As the graphite core deteriorates, then of course there'll be an increase.

O'HALLORAN: British Energy refused us access to any of their nuclear plants, and they at first refused to be interviewed. But after several changes of mind at the company, its deputy chief nuclear officer, Dr Andy Spurr, agreed to speak. He insists that even the oldest AGRs have more years left in them, and that so far the graphite cracks present no danger.

SPURR: We have to demonstrate that under all circumstances we can shut down and cool down the reactors, and that's what we do. There's absolutely no question of us not being able to do that.

O'HALLORAN: Isn't it right that with all the equipment you have and all the means at your disposal, you cannot see all the cracks that exist in these graphite cores?

SPURR: Well, we can monitor them in a whole host of ways. During the periodic shutdowns ...

O'HALLORAN: But what's the answer to that question? Isn't it right that you can't see all of them?

SPURR: No, we can monitor every single channel, we send cameras down and we do routine tests to demonstrate that again there's no impediment to them entering the core.

O'HALLORAN: So are you saying that you can see every single crack in every graphite brick, wherever that crack is?

SPURR: No, what I'm saying is that if there are ...

O'HALLORAN: So there are some that you can't see?

SPURR: If they are microscopic in length then clearly we can't see them. What I'm saying is that we have other ways of detecting that for cracks of that type, then they're simply not affecting the channel by measuring using alternative means.

O'HALLORAN: Is it right that really with each year of further operation, the risk from these cracks in graphite bricks is growing?

SPURR: What is right is that each year the graphite does deteriorate a little, but that does not translate through to an increasing risk in the way that you've implied.

O'HALLORAN: So far, British Energy hasn't shut down any reactors because of graphite core damage. But in the last few months the company has found cracks of a different kind in some of its reactors, which have had a much more serious commercial impact.

#### ACTUALITY AT HUNTERSTON

O'HALLORAN: British Energy's new problem with cracks first became apparent here on the coast of Ayrshire, about an hour south west of Glasgow – at the Hunterston nuclear power station. It's a plant battered today by driving wind and rain. This time the cracks were in boiler tubes inside the safety containments which enclose the





O'HALLORAN: And it appeared the four reactors could be out of action for some time.

READER IN STUDIO: The company is not able to give guidance as to when both units at Hinkley Point and both units at Hunterston will return to service.

O'HALLORAN: Independent nuclear engineer, John Large, who worked on design features of the AGRS in the 1970s, says the number of cracks revealed so far - which is more than the company expected - raises questions about how rigorous previous inspections by British Energy had been.

LARGE: At Hunterston, I understand that over ninety out of five hundred tubes have been found to be defective. At Hinkley it's something in the order of fifty out of five hundred tubes. That's a 10% failure at Hinkley and a 20% failure at Hunterston. That is far too many to be acceptable. The point here is this: what is wrong with the British Energy inspection and quality assurance regimes that it's suddenly allowed these cracks, this number of cracks to be discovered?

O'HALLORAN: British Energy do suggest that they are surprised by the number of cracks. They hadn't expected them to be that many.

LARGE: British Energy have been compromised by the sudden appearance of so many cracks. But, you know, so have Nuclear Installations Inspectorate, because it's their task to make sure that the safety case is applicable when the reactors are operating. And to have a situation where four nuclear reactors are closed down very suddenly on the discovery of a defect reflects just as poorly on the Nuclear Inspectorate's supervision as it does on the operators. That's where the weakness is. Someone's taken their eye off the ball and that someone is the inspectorate.

O'HALLORAN: Although the Nuclear Inspectors oversee safety at the plants, the actual inspection of tubes is done largely by British Energy. Much of the inspectors' work involves analysing data and arguments supplied by the company. It appears British Energy inspected its tubes roughly every three years, but that often it only looked at a sample of the tubes, sometimes as few as 20% or even 8%. And the Deputy

O'HALLORAN cont: Chief Inspector of Nuclear Installations, Len Creswell, rejects the charge that the Inspectorate took its eye off the ball. If you had been insisting on a rigorous enough inspection regime, surely the level of these boiler tube cracks would not have come as such a surprise, would they?

CRESWELL: The important thing to me here is that the defects in the boiler tubes, it's an issue which has been carefully monitored. And it's that careful monitoring that actually by British Energy that revealed the increases in the level of defectiveness, which they then compared to their own criteria, and they made prudent decisions to shut their reactors down and carry out further inspections, so that they could reinforce their safety case and demonstrate to us future safe operation of the reactors.

O'HALLORAN: Because they got a nasty surprise?

CRESWELL: The defect, the level of defectiveness in the reactors that British Energy found, as they've said in some of their releases, was towards the high end of what they were expecting.

O'HALLORAN: But isn't it right that it's several years since a full 100% inspection of boiler tubes has been carried out, and that may lie at the heart of the reason why this has all come a bit out of the blue?

CRESWELL: The important thing to me is that British Energy have been carrying out inspections of the boiler tubes of each of their statutory shutdowns, the time when they take the reactor off so that they can get in and carry out inspections.

O'HALLORAN: The sudden emergence of the boiler tube problem and the extended closure of reactors has wiped a huge amount off the company's stock market value. And given that British Energy concedes the scale of the cracking was unexpected, does the deputy chief nuclear officer, Dr Andy Spurr, accept that the inspection regime may have been inadequate? So when was the last time one of these reactors got a full 100% inspection of its boiler tubes before this year?

SPURR: Well, very specifically, four years ago.

O'HALLORAN: Four years ago in the case of?

SPURR: Hunterston reactor 4.

O'HALLORAN: Right, and what about the other ones?

SPURR: I simply don't have that information off the top of my head.

O'HALLORAN: But if you had been carrying out more maintenance on these systems in the past, surely this huge problem would not have come up and really hit you and done such damage as it has done to British Energy in the last few months?

SPURR: No, that's not the case. The phenomenon is a function of operating these reactors at temperature. It's not a question of how much you've inspected over the previous years.

O'HALLORAN: In which case, shouldn't you have predicted this level of cracking?

SPURR: Well indeed, we have predicted that cracking does occur in these reactors and that's why we've been inspecting them since 1993.

O'HALLORAN: But it's been racing ahead, this cracking, faster than you predicted?

SPURR: Well, you've said racing ahead. It's certainly the case that we've seen more cracking than we'd anticipated, but not to the level where this is causing us what I would describe as an insurmountable problem. It's a question of executing the repairs that are required and we'll make a safety case and put the reactors back on load.

O'HALLORAN: British Energy predicts that two of the four reactors hit by the boiler tube cracks will be switched back on at the end of December, and two more at the end of January. But that can only happen if the company submits new safety cases for continued operation and the Nuclear Inspectors approve them. However, in addition to the boiler cracks, British Energy, in mid-October, outlined other serious technical problems, bringing more bad news for investors.

READER IN STUDIO: The company is currently investigating a significant leak in an underground cast iron pipe in the cooling water systems at Hartlepool.

READER 2 IN STUDIO: Dungeness B has encountered issues with the operation of its fuel route, affecting both units, which relate to the original construction of certain components of the fuel assembly.

READER IN STUDIO: One unit at Heysham 1 is operating at reduced load, pending investigations into operating temperature anomalies.

O'HALLORAN: Indeed, British Energy told us, in one recent week, only one of its fourteen AGRs was working normally. These reactors have been troubled by faults, snags and delays throughout their lives, recalls the leading energy economist, Dr Dieter Helm of New College, Oxford.

HELM: The advance gas-cooled reactors, which are the vast bulk of British Energy's generators, are prone to unexpected and sometimes expected problems that other nuclear power stations don't get. These power stations were built in what will probably historically turn out to be one of the worst organised programmes of nuclear construction, they were built ...

O'HALLORAN: What, you mean anywhere in the world?

HELM: It's probably the case that there's nowhere else in the world where you'll find a sequence of reactors like the advance gas-cooled reactors built and driven through as a programme in quite such an inefficient way. These stations were all built differently, they were built to different specifications, the budgets were tight



**BALLANCE:** Around 3am that morning – about seven hours after the incident had started – they decided to restart the gas circulator to check that it was all right. That very quickly had quite a severe reaction - there was a very loud noise, the temperature gauge went off scale and the alarms went off very quickly indeed.

**O'HALLORAN:** Because of the damage done, the reactor had to be shut down for six months, and that contributed to British Energy's near collapse later that year. In the Nuclear Inspector's investigation report, British Energy comes in for excoriating criticism over the staff's response to vibrations and alarms.

**READER IN STUDIO:** The operator's ignorance of the local plant vibration monitoring and logging system is not acceptable, and there seems to be little attention afforded to vibration alarms generated.

**READER 2 IN STUDIO:** The operator's decision to run the gas circulator to confirm their theory on the fault's diagnosis in an unfamiliar situation was not obviously conservative.

**READER IN STUDIO:** A safety case assessment, containing a justification for continued operation of Reactor One was issued nearly three weeks after the event, which is too slow and doesn't demonstrate a high priority is given to nuclear safety.

**O'HALLORAN:** Member of the Scottish Parliament, Chris Ballance, found the inspector's conclusions disturbing, the more so because initial reports of the incident by the inspectorate and the company gave little indication of the gravity of the failures.

**BALLANCE:** The May 2002 event was initially reported as being a minor event and it was really very much whitewashed over and it wasn't until we got a tip off that there might be something worth looking at, so we put in a Freedom of Information request to the Nuclear Installations Inspectorate to get their report of the incident. And when that report came by we discovered that it was considerably more serious, that it was quite a major incident.

O'HALLORAN: How serious a criticism do you think that is, that they did not show or demonstrate a high priority is given to nuclear safety?

BALLANCE: I think that it is one of the most extreme statements that you can get for the Nuclear Installations Inspectorate to criticise a nuclear operator for not giving a high priority to nuclear safety. If their first priority is not safety, then what is their first priority? From other parts of the report, it would look as if their first priority is cost saving and not nuclear safety, and that is a damning indictment of British Energy.

O'HALLORAN: Some people might say, you would say that, wouldn't you, being a Green member of the Scottish Parliament, it's in your interests to knock the nuclear industry.

BALLANCE: My interest is in making sure that the industry acts safely, and also to make sure that the industry doesn't get away with cover-ups.

O'HALLORAN: After the further difficulties with the gas circulator, which cropped up this year, British Energy's Chief Executive Bill Coley told investment analysts he was "not pleased with the level of unplanned losses" of electricity generation. And he pinpointed what he called "human performance issues" at Torness. To John Large, that implied demand for better performance and an end to blunders had a familiar ring.

LARGE: That's exactly what the NII were calling for four years earlier, for improvements in this particular aspect, the gas circulator aspect project team at that particular station. So over those four years we can see yet another human performance error taking place, whereas the NII specifically identified this requiring improvement. Well to me it's showing that the staff are not adequately trained or resourced. And that means that they were put on risk four years ago to actually correct this deficit in operator performance, and they've clearly failed to do so.

O'HALLORAN: British Energy's Dr Andy Spurr says that the long shutdown at Torness, plus special inspections the company carried out at other nuclear plants, showed that it puts nuclear safety ahead of profit.

O'HALLORAN cont: Do you accept that your people at Torness in that incident showed ignorance, poor decision-making, lack of training and so on, and that there was a serious problem that had to be addressed by the company?

SPURR: No I don't. What ...

O'HALLORAN: So you think the nuclear inspectors are wrong when they point to those things, do you?

SPURR: You would have to, you would have to discuss with the NII what they actually said and what they meant by their comments. We continually improve the training of our operators, and whatever lessons need learning from whatever events, we always do that as matter of routine before continuing to operate.

O'HALLORAN: If the needed improvements were made at Torness and the necessary lessons learned, why did your chief executive find it necessary in August this year to voice his concerns about human error there in the response of staff to a further incident involving a gas circulator?

SPURR: Well, what wasn't reported was that the chief executive said that he believed that the staff were superb, great team, highly competent and committed.

O'HALLORAN: I think he said, from the reports I've seen, that he was not pleased with the level of unplanned losses and there were human performance issues, primarily related to the Torness plant in East Scotland.

SPURR: What he identified was the fact that in that particular instance there was certainly an isolated event where we could have and we should have done better.

O'HALLORAN: So why did you tell me just now that he told them they'd done a great job?



SPURR: What the chief exec said, and I'll repeat it, that our staff are superb, they're a great team, but in this particular instance, there is no doubt that we could have and should have done better.

O'HALLORAN: British Energy's rash of power plant faults have helped to cut its share price by around a third. And that's not just a headache for shareholders. Every tax-payer in Britain now has an interest, because the Government took a 65% control of the company after its near collapse four years ago. In the rescue, the Government also took on liabilities of at least £5 billion. Recently, with British Energy showing profits, the Government was poised to sell off its stake. But the reactor crisis has meant that plan must now be shelved, says Steve Thomas of the Public Sector Research Unit at Greenwich University.

THOMAS: The Government has rights to 65% of the profits of British Energy, and that money goes straight into the nuclear decommissioning authority to pay for the very large liabilities that we have from this civil nuclear power programme. In theory, the right to 65% of the profits of British Energy could be converted into shares, and last summer the Government was contemplating selling that 65% share as shares on the Stock Exchange.

O'HALLORAN: Because British Energy was doing well with these recent, fairly recent, very high electricity prices?

THOMAS: Yes, the share price of British Energy had gone up by a factor of about three from its re-launch in 2005.

O'HALLORAN: From around 250 pence to what, around 750 pence?

THOMAS: That's right, yes.

O'HALLORAN: And what's happened to the share price in the last couple of months, after all these problems with cracks?

THOMAS: Well the share price is very volatile at the moment but it's down below 500 pence at the moment.

O'HALLORAN: So it's lost a third of its value, something like that, the company in the last two or three months?

THOMAS: Yes. When the Government was thinking about selling its shares, it was expecting to get about £3 billion for them, so that reduction in the value of the shares has knocked about a billion pounds off potential Government receipts.

O'HALLORAN: And it could get worse. Because of all the operational problems, British Energy is having to invest more in its plant. Meanwhile electricity prices are heading downwards. If those trends continue, says Steve Thomas, another crunch could be coming.

THOMAS: British Energy's future depends, to quite a large extent, on the wholesale of electricity price and that, by its nature, is very unpredictable. The present levels seem to me unsustainably high, and British Energy's costs are going up rapidly, and I think there is a significant probability that the costs will exceed the price quite soon.

O'HALLORAN: And the result of that will be?

THOMAS: The same as in 2002, its costs will exceed its income and it will need to be rescued again or the Government will have to take some measures to deal with the problems.

O'HALLORAN: But a more immediate problem is, how will the unplanned shutdown of a number of AGR reactors affect power supplies now? Especially if there's a severe cold spell. As we head into the bleak mid-winter, city energy analyst Mark Hives, of Societe Generale, is none too sanguine.

HIVES: I think the position this winter, in terms of gas supply and electricity generation, is potentially worse under the same temperature conditions than it has been in recent winters. Firstly, we have the issues with British Energy's reactors being offline and also the UK's indigenous gas production is lower this year than it was in previous years – by as much as 8% or 10% or so.

O'HALLORAN: But if we have a sudden cold snap and these nuclear reactors, several of them are still shut down, does that make power cuts more likely?

HIVES: It makes them more likely than last year for two reasons. Firstly the reactors are down and they weren't last winter, so there is a loss of capacity. And secondly, as you say, if the temperatures are lower than they were last winter, then that puts an additional demand on the system.

O'HALLORAN: So there is a chance, a bigger chance than last year or the year before that we could see power cuts in Britain?

HIVES: Given lower temperatures, yes.

O'HALLORAN: National Grid – the company responsible for power supplies – refused to be interviewed, but it says the margin of spare generating capacity is, due to British Energy's problems, around 4% lower than predicted three months ago. But it points out the margin at around 18% is similar to the figure three years ago. At the same time, British Energy insists there's life in the old reactors yet. In particular, says Dr Andy Spurr, the AGRs at Hinkley Point and Hunterston are important to security of supply and the company will repair them and get them running again.

SPURR: These reactors produce about 5% of the UK's power and what we do, as with any device that you have, is we monitor it regularly. We make sure it's in good shape and we'll continue to operate these reactors whilst it's safe and economically viable to do so.

O'HALLORAN: So, in this rather critical period of December, we're going to be without those four reactors and therefore without 5% of Britain's electricity generating capacity. That's a bit unfortunate, isn't it?

SPURR: It's certainly the case that we would rather them be operating than not, for the reasons I gave before. To have these reactors operating is good for the nation and it's good for British Energy. However, we do not and we will never take risks with safety and therefore we're actually keeping these reactors offline until we've repaired them and we've made safety cases to put them back on-line.

O'HALLORAN: But how disappointed are people at your level in the company with the huge impact this has had on the company, a loss of around 30% in the share price? Some people even talking about the danger of British Energy having to be rescued again like it was four years ago?

SPURR: Well, we're a long long way away from that particular scenario. It is certainly the case that, that we would prefer to be operating more reactors than we have done in our half-year. However, we have not and we will never put any safety issues before commercial operation, and we're taking the business decisions to do that. We're putting these reactors back online and they will come back online when they're ready to do so.

O'HALLORAN: But the unexpected reactor shutdowns raise the question of how dependent Britain has become on these elderly power stations. The answer to that is too dependant, according to energy economist Dr Dieter Helm. He points out that to get through periods of high electricity demand, a safety margin of surplus generating capacity is needed. The trouble is, he argues, for a long time Britain hasn't had a big enough safety margin, and that means higher electricity prices as well as too great a risk of power cuts.

HELM: The fault lies in the actual design of the energy market and the energy policy framework. People are not incentivised to bring in sufficient capacity such that we all have a comfortable and stable energy price and we can all relax every winter, including the ministers themselves, that the lights are going to stay on. I mean, what sort of situation is it when the minister is running around every ten minutes checking up if there's enough power stations available? This is the sort of thing that happens in developing countries.

O'HALLORAN: Is that really happening in Britain at the moment?

HELM: It did last winter. Last winter there was a really severe problem, and Government ministers and officials were daily watching the margin to see if it was going to be – quote – all right. And that isn't a sensible position for any energy minister to be in. And for any modern economy, let alone one that claims to be the

HELM cont: fourth largest in the world, to be in a position where the lights might actually go out, this is a really rather ridiculous economic position to have got to.

O'HALLORAN: The Trade Secretary and Industry Secretary, Alistair Darling, responsible for energy, refused to be interviewed. But, the DTI said, though they were never complacent, they had no reason to expect blackouts this winter. They said it's the market that has the responsibility to balance supply and demand, with National Grid overseeing the process. The words safe and reliable have often been used about nuclear power by its supporters. But in the case of British Energy, ensuring safety meant ultimately that the reliability - or at least availability - of plants had to be sacrificed. When the reactors are switched back on, the winter supply worries may begin to go away. What won't go away are the questions this saga poses about Britain's energy strategy and about an electricity market structure which makes the country so reliant on such old and unpredictable hardware.

SIGNATURE TUNE