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PRIME MINISTER

CONTINGENCY PLANS FOR A NUCLEAR ACCIDENT

The Cabinet Office have proposed that your Answer setting out the contingency plans for a nuclear acccident overseas should be published next Tuesday.

I did wonder whether it was sensible to publish this during the Debate on the Address at a time when the Opposition could refer to it during their speeches. On the other hand, the subjects chosen for the debates do not provide natural opportunities for this and possibly Members are likely to have other axes to grind. Bernard is content that it should be published on Tuesday.

Agree publication on Tuesday?

DW

DAVID NORGROVE

CC BE To uste.

25 June 1987

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10 DOWNING STREET

LONDON SW1A 2AA

From the Private Secretary

MR. UNWIN Cabinet Office

CHERNOBYL - THE NEW NATIONAL CONTINGENCY PLAN

The Prime Minister has seen your minute to me of 16 June together with the revised draft answer describing the new national contingency plan.

In your covering minute you refer to the fact that the Polish action in distributing potassium iodate tablets was not justified by the levels of radioactive iodine experienced in the relevant areas. The Prime Minister has commented against this that nevertheless such action probably gave some confidence to the population that something was being done.

The Prime Minister is content with the proposed answer. She has asked that full briefing should be provided for the No. 10 Press Office with clear guidance on the questions which should be referred to experts in the relevant departments or bodies.

We shall need to consult the Prime Minister again about the precise date of publication. It would be helpful for Mr. Ingham and me to have an opportunity to comment on the briefing within the next few days so that any changes can be made in time to allow publication very early in the new session if that is what the Prime Minister decides.

I am sending a copy of this minute to Sir Robert Armstrong, Brigadier Budd and ${\rm Mr.}\ {\rm Ingham.}$

(DAVID NORGROVE) 18 June 1987

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MB

Prine hister Content um to approve the

P02733 proposed answer prided the

Department of Energy and Atres

concerned as thoroughly From: Mr Unwin

prepared to defend and answer 16 June 1987

MR NORGROVE - No 10 questions about it? DEW 17/6. (w m)

cc Sir Robert Armstrong Brigadier Budd Mr Ingham - No 10

Chernobyl - The New National Contingency Plan

My minute of 12 May submitted for approval by the Prime Minister a proposed written answer on a new "umbrella" national plan to cope with an external nuclear accident. Your response of 13 May queried the conclusions in paragraph 7 of the statement on the need for specific contingency arrangements for evacuation, shelter and distribution of potassium iodate tablets.

- 2. We have referred this back to the Department of Energy, who have in turn taken further advice from the Nuclear Installations Inspectorate, the National Radiological Protection Board and the operators as well as other Government departments. Their conclusions are summarised in the attached note entitled 'Risks From Muclear Accidents Abroad".
- You will see that the view of the experts remains that the very low probability of a nuclear accident overseas creating a radiological hazard requiring evacuation, sheltering or the issue of potassium iodate tablets in the UK does not justify the preparation of specific contingency

plans for these eventualities. Paragraph 2 gives some figures relating to the scale of an accident and the distance of the stricken establishment from our shores. Whereas an accident at Gravelines (55 Km away from the UK mainland) would need to exceed the scale of the worst design based accident by a factor of 60 before evacuation would have to be considered, the figure for Paluel (100 Km away) is a factor of 1000. As you noted, the evacuation radius around Chernobyl was 30 Km.

- 4. This assessment applies, of course, to a nuclear accident overseas. So far as a domestic UK nuclear accident is concerned, work is in progress between DHSS and NRPB as part of the review of existing contingency plans to determine whether stocks of potassium iodate tablets should be held in places other than the immediate vicinity of UK nuclear establishments. Expert UK opinion is that the Polish action in distributing potassium iodate tablets was not justified by the levels of radioactive iodine experienced in the relevant areas, which were significantly below the internationally recognised reference levels at which potassium iodate tablets should be taken. Naruthou I was hear done the political tablets and something was hear done.
- 5. You also asked whether the evacuation area in the Soviet Union would have been larger if a second reactor at Chernobyl had been damaged. There are too many imponderables (eg. the type of damage, climatic conditions at the time, the duration of emissions etc) to speculate with any precision on this. But the attached note draws a clear distinction between the Chernobyl type of reactor (RBMK) and those in the UK and other Western European Countries, and I do not think this point invalidates the conclusion above.

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6. I should be grateful, therefore, if you would re-submit the papers to the Prime Minister with a view to a statement soon after Parliament reopens. I attach a fair draft of the statement in which I have amended the introduction to paragraph 7 to meet your presentational point, but otherwise the draft is unchanged from the previous version. We shall also, of course, supply Mr Ingram with full background briefing covering the potassium iodate and other points.

3~

J B UNWIN

Question Following her Written Answer of 18 December 1986 will the Prime Minister say what stage has now been reached in preparing a contingency plan to deal with the effects of any future nuclear accident overseas.

Answer The main framework of the new contingency plan, to cater specifically for the consequences for this country of nuclear accidents outside the UK, is complete. Departments and organisations involved in implementing the plan are now preparing their own, complementary, individual contingency plans. Discussion of certain aspects with elected member representatives of the local authority associations will take place in the near future.

The main features of the new plan are:-

Central Government Arrangements

- 1. There are designed to carry out the following tasks:
 - Establish the hazard likely to be faced by this country;
 - b. Determine the measures required to protect and/or reassure the public;
 - c. Issue whatever specific directions or general information may be required;
 - d. Keep Parliament properly informed.
- 2. These tasks will be carried out under the auspices of the Department of the Environment (the Lead Department) where a Co-ordination Centre will be established. Officials of departments and organisations directly concerned will work in the Co-ordination Centre where assessments, based on monitoring information, will be co-ordinated, recommendations will be made on action to be taken and briefing material

will be prepared for Parliament, Ministers and the public. Those departments, (including territorial depts), with statutory responsibilities eg. for health, agriculture, control of contaminated cargoes etc, will thus be enabled to discharge them in the context of a co-ordinated response to the effects of an accident.

3. The Secretary of State for the Environment will answer in Parliament on all aspects of Government arrangements except those which are the specific departmental responsibility of other Ministers. Should a need arise the Lead Department would seek support from the appropriate Cabinet committee, under arrangements made by the Cabinet Office.

Monitoring and Data Assessment

- 4. The whole country is to be covered by a network of monitoring stations based on existing facilities. The necessary equipment is already in place in some of these stations and will be installed in the others. Arrangements will be made to supplement the information obtained from these stations by deploying portable detectors, mobile sampling equipment and possibly aerial monitoring devices, as well as using information available from those hospitals, universities, local authorities and other organisations with monitoring facilities.
- 5. Data from all monitoring sources will be stored on a Central Data Base Facility (CDF) and be available to departments and organisations responsible for making assessments. Commercial electronic mail (eg. BT Gold) telephone, telex and facsimile systems will be used to transmit monitoring information to the CDF. Assessments and advice based on them will be disseminated on appropriate channels, which will include the media, Viewdata systems (eg. CEEFAX and ORACLE) and departmental channels (eg. MAFF, DHSS, FCO and territorial departments) for specific purposes eg. to permit Ministers to carry out their statutory responsibilities. Assessments and the advice based on them will also be stored on the CDF and interested organisations will be given access to them.

Public Information

6. During the period immediately following the Chernobyl accident extensive use was made by the public of departmental 'hot lines' in London, Edinburgh and Cardiff. These facilities will be continued. In addition, information and advice will be routed to the public via local authorities, health authorities and the regional structure of the relevant central Government departments. Further discussions will be held with local authority associations and others about practical aspects of implementing this part of the plan.

Public Protection

- 7. The considered conclusions of the expert authorities concerned, after a careful analysis of the Chernobyl experience and other relevant factors, is that an accident overseas, even to an installation on the French or Belgian coasts, would be most unlikely to produce effects in this country that would justify making specific contingency arrangements for evacuation, shelter or distribution of potassium iodate tablets. Arrangements will, however, be made to cover the following:
 - a. Treatment of those returning from affected areas overseas for effects of exposure to radiation by Health Departments;
 - Possible contamination of food and water by DOE, MAFF, Scottish,
 Welsh and Northern Ireland Offices;
 - c. Advice to UK citizens abroad or intending to travel by FCO, DTI, D.Transport, MOD, DHSS, (together with ABTA and the media) as appropriate;
 - d. The import/export of contaminated goods by DTI, DHSS, MAFF and terrotorial departments closely co-ordinated with arrangements being made under EC auspices.

Action will be co-ordinated as necessary under lead department auspices.

Relationship with Plans for an Accident inside the UK

8. Existing plans to cope with a nuclear accident inside the UK, relating to individual nuclear installations, which will remain the responsibility of the Secretaries of State for Energy, Scotland, Defence or Transport as appropriate, have mostly been publicised in some detail in the areas to which they apply and in more general terms in the Health & Safety Executive publication 'Emergency Plans for Civil Nuclear Installations'. Any accident in this country would almost certainly require implementation of parts of this plan eg. activation of the monitoring network. There will therefore be close correlation between this plan and existing plans, which are currently under review.

Review Arrangements

9. The new plan will be kept under regular review. Arrangements will be made for appropriate exercises to practise the plan and, where necessary, improve it.

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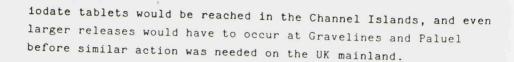
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The Chernobyl accident occurred because of a combination of design weaknesses and deliberate failures by staff to observe prescribed safety procedures. The RBMK reactor is different in design from any system in use or proposed for use in this or any other Western European country. These factors, coupled with stringent requirements in Western Europe for engineered control and automatic protection systems, give confidence that the Chernobyl accident does not have any direct relevance for the safety of United Kingdom reactors, and were the basis for the conclusion in the first stage of the Cabinet Office review, which was subsequently endorsed by the Layfield Report, that existing emergency plans and procedures continue to provide a valid basis for the response to any nuclear accident in the United Kingdom.

2. We have no reason to suppose that any nuclear installation in Western Europe, where regulatory requirements are similar to those in the United Kingdom, constitutes any greater hazard than UK reactors. The Nuclear Installations Inspectorate (NII) maintains regular contact with other regulatory bodies in Western Europe, both bilaterally and multilaterally eg through the Article 37 Group of the European Communities which considers accidental as well as planned releases of radioactivity. The reactors closest to the UK are those located on the French coast at Gravelines (55km away from the UK mainland) and Paluel (100km). The Flamanville plant in Normandy is 30km from the Channel Islands. The NII estimates on the basis of information considered in the Article 37 Group of Experts that even in unfavourable weather conditions, the release of radioactivity from the worst design basis accident (d.b.a) would have to be exceeded by a factor of at least 50 at Flamanville before the emergency reference level (ERL) for evacuation was reached in the Channel Islands, and by factors of at least 60 and 1000 at Gravelines and Paluel respectively before evacuation was required on the UK mainland. An increase at least ten-fold in the magnitude of the release from the worst d.b.a at Flamanville would be required before even the lower limits for sheltering and the issue of potassium



Since Chernobyl the Soviet Authorities have embarked on important technical modifications to improve the safety of their RBMK reactors, and efforts will continue both within the IAEA and through bilateral exchanges to encourage both the USSR and other Eastern European countries to develop and improve safety of their reactors and operating regimes. We have also embarked with the nuclear industry on an attempt to improve our information about the safety and reliability of individual reactors in Eastern Europe, many of them of the RBMK type. It is, of course, impossible to be sure that there will be no further nuclear accident in Eastern Europe. In the case of the Chernobyl accident, however, there was no general evacuation beyond 30km from the site, and the radiological impact outside the Soviet Union was well below the ERL for sheltering or the issue of potassium iodate tablets, although it did result in the imposition of restrictions on the movement and sale of certain foodstuffs and livestock in many parts of Western Europe, including the UK.

CONCLUSIONS

4. The foregoing suggests that any nuclear accident overseas would be very unlikely to create a radiological hazard requiring evacuation, sheltering or the issue of potassium tablets. We cannot rule out the possibility of a major accident occurring which would give rise to even larger releases of radioactive materials than occurred at Chernobyl, but there could be no justification for preparing detailed plans to deal with such a remote possibility. Action to protect the public is likely to be limited to monitoring and the possible imposition of controls on foodstuffs.

Atomic Energy Division Dept of Energy