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MR TURNBULL, NO 10

PRIME MINISTER'S DISCUSSION WITH SIR JOHN MASON

I gather from Sir John Mason that his discussion with the Prime Minister when she was admitted to the Royal Society ranged widely but as far as acid deposition is concerned, he made the following points:

- (a) There is substantial doubt on the validity of some of the scientific evidence relating to acid rain eg:
- (i) the seasonal variation of acidity of rain does not appear to correspond with the seasonal variation of sulphur dioxide emissions;
 - (ii) sulphur dioxide emissions from power stations peaked about 10 years ago but the acidity of lakes in Scandinavia has continued to increase;
 - (iii) one of the largest "increases" in measured acidity coincided with a change in measurement technique.
- (b) There are increasing indications that nitrogen oxides are as important/more important than sulphur dioxide as the primary source of acid deposition. Also that photochemical oxidants which are mainly emitted from vehicle exhausts may be the key in determining the rate of deposition of gaseous oxides pre-existing in the atmosphere.
- (c) In the face of this scientific uncertainty, panic actions intended to reduce acid deposition could be expensive and ineffective.

I should add that Sir John Mason is Director of the recently announced Royal Society/Scandinavian National Academies' scientific study on acid deposition and is a noted scientific 'hawk' - his views might not be shared by the Chief Scientist of the Department of the Environment or by the Chairman of NERC for example. Nevertheless he is a very distinguished atmospheric scientist and his views do carry some weight.

RBW

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