

**South Downs National Park Inquiry**  
**(Re-opened)**

**Electricity Pylons**  
**in**  
**Areas of Natural Beauty**

**House of Lords Debate (from Hansard)**

**17 November, 1964**

**Core Document**  
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## Electricity Pylons in Areas of Natural Beauty, 17 November 1964

[Link to column 547](#)

[Link to here](#) 4.56 p.m.

[Link to here](#) LORD EGREMONT rose to ask Her Majesty's Government whether they will consider causing the Central Electricity Board to put underground 400 kV power lines in areas of outstanding natural beauty. The noble Lord said: My Lords, I rise to ask the Question standing in my name on the Order Paper. I must ask your Lordships' indulgence. This is the first time that I have addressed your Lordships. Until recently, and for twenty years or more, I was what some people call a "back room boy", and in those circumstances one was seldom seen and even more seldom heard. Therefore, it is with more than ordinary diffidence that I address your Lordships this evening.

[Link to here](#) I do not wish to inject anything of a politically controversial nature into this Question. What I should like to do is to inject some common sense. I once raised this question with the predecessor of the present Minister of Power. I was met with a look like a stone wall with broken glass on top. Nevertheless, hope springs eternal in the human breast. What I am talking about are pylons 160 feet high, which is only a few feet less than the height of Nelson's Column. They would be twice the size of pylons which your Lordships have known, and disliked, before.

[Link to here](#) What I have particularly in mind are fifteen miles of West Sussex—fifteen miles of outstanding natural beauty, over which it is planned to plant these pylons. These pylons, which are 160 feet high, would, so to speak, be passing through; they would be carrying 25 cables from Dungeness to Cornwall. The cables would be very thick. They would form a screen which would sag to about 25 feet off the ground. It is possible that large landscape features elsewhere in the United Kingdom might absorb huge pylons of this size: I do not know, but I suppose it is possible. What I do know is that the West Sussex countryside is small, intimate and beautiful. It cannot absorb these huge pylons. They would stick out as terrible emblems of what a monopoly might successfully do to rattle and ruin the face of the fairest [Link to column 548](#) part of Britain, within 60 miles of London.

[Link to here](#) These huge erections would march across a skyline, and much of the line would be on high or open ground in sight of the Downs and the Rother Valley. For instance, between Lodsworth and Midhurst, the line would be on Or near the summit of the escarpment—at one point about the 400 foot contour line, where pylons and cables would be silhouetted against the skyline and visible all the way from Chanctonbury Ring, fifteen miles to the East, to a corresponding distance to the West. These giant pylons would cross the centre of the open country which constitutes the famous view from the Downs above Harting.

[Link to here](#) What about the economics of the scheme? These giant pylons, at least 160 feet high, carrying 400,000 volts, would be the biggest pylons one had ever seen. But not for long. The voltage of the super-grid transmission network is expected to be raised to 750,000 volts in the 1970s, needing even more awful, wider, taller towers. It does not bear thinking about—unless we put the lines underground. The plain fact is that to put underground the lines, for example, in these fifteen especially beautiful miles of West Sussex would mean, on the Electricity Board's own figures, an additional cost equivalent to only three-quarters of 1 per

cent. of their estimated programme of expenditure up to 1969. I am convinced that the economics could be made more simple and easy if only we got down to tackling the problem really earnestly.

[Link to here](#) We have here in the Central Electricity Board a monopoly which has given the impression, unwittingly perhaps, that it is a corporation without a conscience to be pricked or a bottom to be kicked, for why cannot these lines go underground? "Oh", they say, "it is far too expensive. If anybody else could suggest a cheaper way of putting the lines underground we might adopt it." So long as we have this buck-passing we shall have bigger and bigger pylons and a more and more horrible Britain. Such an attitude is not distinguished. It is like Euclid's definition of a point: no parts, no magnitude, only a position.

[Link to here](#) My Lords, is it too expensive? Here are some more figures. I took them from an able article by a Mr. G. C. Gracey in [Link to column 549](#) the July issue of Design. To put underground 1 per cent. of future super-grid lines would add no more than one-tenth of 1 per cent. to bulk supply charges. This would cater for most of the cases where visual amenity is a serious concern. If you take into account the conservative nature of financial policy in respect of depreciation, you will find that it would not represent any significantly large expenditure. I apologise for boring your Lordships with these sums, but they are important. I do not expect any definite reply to-day from Her Majesty's Government; but when they study figures such as these I hope they will be agreeably surprised. And these figures do exist. In the meantime, and in any case, in the matter of putting cables underground the Electricity Board are still living in the horse-and-buggy age. You would hardly believe it, but the insulation of underground cables to-day is still the oil insulating paper that was introduced by (I need hardly say) one of the Ferrantis about 1880. Not nearly enough is being done to find alternatives to the overhead by item. It will not be done unless people make a fuss, and I am making a fuss now; and if the Board's wayleave officer asks to see me at Petworth I shall have him thrown down the stairs.

[Link to here](#) One final word about expense. Delays due to public inquiries alone can cost from £10,000 to £20,000 a week. If £20,000 were offered as a prize for the best method of reducing the cost of underground cables by 10 per cent. we might be getting somewhere. I do most earnestly suggest to Her Majesty's Government two things: first, that they should cause the Electricity Board to put underground these cables in this most beautiful part of West Sussex, and, secondly, that they should cause research about putting cables underground to be much increased. Well, my Lords, these are some views from the erstwhile back-room boy. I only hope that, after Her Majesty's Government have had time to consider them and similar views, they may suddenly start singing: See what the boys in the back room will have And tell them we're having the same.

[Link to here](#) 5.5 p.m.

[Link to this speech](#) *[THE MARQUESS OF SALISBURY](#)*

My Lords, I should like, if I may, to support [Link to column 550](#) the noble Lord, Lord Egremont, on what he has said. I am sure we should all be extremely grateful to him for raising this subject. As your Lordships know, it is his maiden speech in this House—and a very good one too! And, what is more, it has been devoted to a subject with which this House is, I think, particularly fitted to deal because, although it may be regarded as in some ways a

controversial subject, it is certainly a non-Party subject and is entirely devoted to saving something of the beauties of this country which are so rapidly disappearing before our eyes.

I do not think we in this country quite realise how quickly these things are being eroded. Not so long ago we had Manchester's assault upon the Lake District which your Lordships who were here at the time will well remember. Then we had a similar proposal as that to which the noble Lord, Lord Egremont, has referred, to run pylons across the beautiful Avon Valley. And now we hear to-day of a similar desecration of one of the loveliest parts of Sussex. If it could be proved to our satisfaction that there is no alternative to this desecration no doubt we should seriously have to consider whether we should be justified in rejecting proposals of this kind: but, so far as I know, no public evidence has been produced that all possible efforts are being made to find some alternative.

These great, powerful public institutions with which we are all now so familiar seem to think it quite unnecessary for them to make any effort to justify their actions to the public. They just issue their fiat and expect the country to accept it without more ado. Nor are we given any idea of their future plans of where all this is going to lead; whether this is the end of the desecration or whether there are further things to come along. They are wrapped in mystery until it is too late for us to make any effective opposition to them. As the noble Lord, Lord Egremont, has said, the outlook, if not for us—and some of us are getting quite old now—for our children, does not really bear thinking about.

What I should like to ask the Government to-day is this. Could they not appoint some body, some independent body, to look into matters of this kind and cross-examine the Central Electricity Generating Board and try to find out, [Link to column 551](#) first, what their present plans are and, secondly, what their future plans are; and not only to cross-examine them but to publish the results of their cross-examination? The House of Lords is a body which I think is noted for its breadth of mind and independent judgment, and now that this subject has been raised here I do hope that the Government will give an assurance that they will at any rate look further into this and kindred schemes before it is too late, and make a report to this House on what they discover.

[Link to here](#) 5.9 p.m.

[Link to this speech](#) *THE EARL OF BESSBOROUGH*

My Lords, it is a very pleasant task indeed to join with the noble Marquess in congratulating the noble Lord, Lord Egremont, on his excellent maiden speech, which, I may say, he has made in the presence of his father on the same Bench—something which does not happen very often in this House. I do not know whether the noble Marquess can recall a former occasion, but in my time in your Lordships' House I do not think it has happened before. I also had the great pleasure of sitting with the noble Lord's uncle on Benches on the other side of the House. I remember, too, serving with him in the war in North Africa, and I have therefore become accustomed to his rather special brand of wit—what we might describe as the Wyndham wit. Being a neighbour in Sussex, I felt obliged to say something to support his plea for further consideration of this matter, further consideration before these enormous electricity pylons are allowed to disfigure the beauties of our countryside.

Apart from our declared interest in West Sussex, we should, I think, also consider other parts of the British Isles, not only the Lake District which the noble Marquess mentioned but the Highlands of Scotland and the glorious scenery of Wales. I do not like the charm of our countryside being marred by these what I might describe as rather inferior Eiffel Towers. To-day I see a Derbyshire farmer has been fighting the Generating Board for more than a year over the super-grid it is proposed to run across his land right in front of his house. Scenes which Constable immortalised for us are being spoiled, so that the artists [Link to column 552](#) of the future will have to include in their landscapes these large steel, scaffold-like edifices linked together by sagging wires.

I am sure that your Lordships will agree that no one wishes to deprive the inhabitants of any part of these Islands of enjoying the benefits of electric power. These should be available to all. It is also essential, if the industrialisation of this country is to spread, as I fear it must, much more evenly to the less well developed areas. I fully recognise that there are many difficulties involved in placing these power lines underground; not the least of these are of course financial. However, I consider it is unfortunate that in this technological age we have not yet been able to evolve a system whereby these cables can be laid underground speedily and at relatively low cost. I agree with the noble Lord, Lord Egremont, that further research should be undertaken with this end in view.

I believe that the Generating Board do take some trouble over the siting of these pylons. They say they do. But I hope the noble Lord, Lord Stonham, who is to reply for the Government will at least be able to give us an assurance that they will never be erected without any regard to the scenery which they are spoiling. I hope that in certain areas perhaps for short distances the cables will be put underground, maybe a mile or two, or less, and not necessarily the entire cable. In the case of the area mentioned by the noble Lord, Lord Egremont, even if the whole 15 miles of cable cannot be put underground perhaps certain parts of it may be; and this would not involve the very great cost of putting longer lengths underground.

The noble Lord has mentioned the towns of Lodsworth and Midhurst, which know well, too, and the view of the Downs above Harting. Such pylons would destroy that glorious country in which, as Belloc said, Chanctonbury is crowned in the middle place. I think, too, of a particularly lovely avenue of beech trees leading to my own home in Sussex at the end of which rises one of these massive constructions, albeit, some three miles away. It might have been better had it been sited in the centre of the avenue, but in fact it is not. I must admit that it would be a great joy if it could be moved, either out of sight or centred more appropriately. The only [Link to column 553](#) compensation for mists and bad weather in winter is that it is not then visible.

My Lords, on such occasions as these I remember the eloquence and skill of the late Lord Birkett, who advocated so wisely and strongly that we should progress by protecting rather than by marring the beauty spots of this country. This non-political yet none the less controversial issue is one which I hope your Lordships will earnestly consider, and I am very grateful to my noble friend for having raised it. Your Lordships may remember the word; of Belloc: The moon stood over Chanctonbury, so removed and cold in her silver that you might almost have thought her careless of the follies of men. My Lords, none of us should be careless of what I believe to be our sacred trust.

[Link to here](#) 5.16 p.m.

[Link to this speech](#) *[THE EARL OF DUDLEY](#)*

My Lords, I should like to add my praise and congratulations on his maiden speech to the noble Lord, Lord Egremont, a very old friend of mine, of whose great abilities and very nimble wit I have been aware for many years. He does not always show it because he is naturally reticent, which I suppose was ingrained in him when he was a back-room boy; but now he is no longer a back-room boy I hope he will come here often and give us the benefit of his opinions and good sneaking, and I hope his noble father will be sitting on his left. I do not know whether your Lordships read an article in the Press the other day criticising a book by the noble Lord, Lord Snow. It showed a great genius for journalism and also a pretty wit. Perhaps he started that when he and my son were co-editors of their school magazine. I am getting rather tired of some of our political writers and I hope he will turn his genius to this line as well.

I sympathise very much with what he says, because I own a 2,000-acre property in a most beautiful corner of Hertfordshire. It is in the Green Belt and one might be in the heart of the country. It really is a lovely part: of natural beauty. The noble Marquess has been there and knows I am not "overbaking the pudding". The Central Electricity Generating Board are going to put pylons clean across my farm and the farms of my neighbours, starting this summer. They will not be as big as the ones my noble friend Lord Egremont talks about, but the [Link to column 554](#) concrete bases will be 17 feet in diameter. It is a considerable handicap to my farm. My farm is one of a thousand acres there, and in the interests of good husbandry I have taken out a great many hedges to enable me to reap and sow more quickly than I did. But now, with these things, it will be a case of "dodgem" round the pylons at great cost in labour.

I know it is a difficult position. I know that the actual underground burying of cables is nothing difficult with present machinery; it costs practically nothing at all. I am not to benefit, by the way, from these pylons that go across my land; they are to boost the electricity supply from Watford to Chesham. They are not helping me, and I still have several cottages on my property where there is no electricity. But I understand cables have to be buried in oil-impregnated tubes. I did not know until I heard my noble friend Lord Egremont's speech that that invention was so old. I believe it is very costly; I think it is eight times the cost of putting them overhead. There is nothing I can do about it. I signed my agreement last week, doing it hatefully, not wanting to do it in the least degree, but not wanting to get on the wrong side of the Electricity Board, hoping I shall get some electricity in my cottages.

I hope the noble Lord, Lord Stonham, will give us a full assurance that the Government and its technological departments will look into this matter very closely, and that in this scientific age it will be possible, at a later date, to bury these cables at a reasonable cost and restore the beauty of the Green Belt. After all, what is the use of having a Green Belt if you are going to ruin it by these electricity pylons? You might just as well build houses on it, and the Government might make a little extra money from advertisement hoardings along the road. So I hope they will really get down to work to see what can be done in regard to this matter.

[Link to here](#) 5.21 p.m.

[Link to this speech](#) *[LORD CHORLEY](#)*

My Lords, I hope that your Lordships will forgive me if I speak again this afternoon, but I think that I have spoken in every one of the debates on this subject over the last fifteen years. As honorary secretary of the Council for the Preservation of Rural England, and being greatly concerned with these matters, I should like to say how much I agree with what the noble [Link to column 555](#) Lord, Lord Egremont, has said, and to congratulate him on using his maiden speech to bring this important matter once more before the House.

I want only to say a few words in support of his plea that this section—after all, it is a short section—of the big Grid line in West Sussex should be put underground. Undoubtedly it will be most expensive, but the late Minister made one or two orders requiring this sort of line to be placed underground. There is the particularly well known case of the line from Derbyshire across South Yorkshire. That was most expensive. The Minister accepted the view that the countryside there was of outstanding beauty, though I do not think it could in that respect be put higher than this countryside in West Sussex. So, with this valuable precedent, I hope that the new Minister will see his way to follow the precedent so admirably set by the Minister who now sits on the other side of the House.

I should like it to be known that we in the amenities movement have a great deal of sympathy with Sir Christopher Hinton and his people. We have to criticise them from time to time, but I am quite sure that he is sensitive to this problem. I have more than once heard him speak on it, and anybody who has heard him could not think that he was other than quite sincerely sympathetic to the view of the amenity societies.

Undoubtedly this is mostly a question of expense. A great deal of trouble has been taken in Sussex to try to find the least objectionable line. The Board are now employing the services of one of the most outstanding amenity planners (if one can use that term) in England, Miss Sylvia Crowe, whose work is known to everybody concerned with these matters and a great deal of trouble and time has been put into the solution of this problem. The difficulty is that it is not soluble on the overhead-line basis, at least over long areas of this beautiful countryside; but in this exceptionally vulnerable section I feel that a strong case has been made out for burying the cable, with, if necessary, a subsidy from central funds. It is only a question of a few miles. I agree with what the noble Earl, Lord Bess- [Link to column 556](#) borough, said about it: obviously, we cannot expect to have the whole length of this line put underground. But we can hope, and, I think, expect from the new Government, that sympathetic consideration will be given to putting a fairly long stretch of the line underground in this particularly vulnerable section of this lovely county.

[Link to here](#) 5.26 p.m.

[Link to this speech](#) *VISCOUNT MERSEY*

My Lords, I want only to ask two questions of the noble Lord who is to reply. I take it that this is really a question of finance, and that no Government, neither the present nor the late Government, would wish to put up pylons if they could possibly put the line underground. On the figures that we have been given, such an enormous difference in cost is shown that it makes it difficult for the Central Electricity Board to carry out such a policy as is now urged except at the expense of putting up their charges, which will hit many people all over the country. But the difficulty I have found, in looking at the figures we have been given (no doubt we shall be given some more) is to know whether they are correct.

I take it, and it cannot be in dispute, that underground cables are a great deal more expensive than pylons. I accept that point. But if you work out what the cost of pylons is going to be, that is only the start of the story. Obviously, you have to deal with maintenance. I have no idea of what sort of figure that amounts to; but structures of this kind obviously have to be repainted, and so on, and the figure involved must be a considerable one.

Then I think of the unfortunate people with houses or cottages, or whatever it may be, who suddenly find themselves and their amenities practically ruined. One may have a small house with a pylon of this size only about 20 or 30 yards from its door. I take it that the value of the house would be halved, and I assume that the owner would have redress in the ordinary course of events. He would also, no doubt, apply for a reduction in the rateable value of the house. I should have thought he would possibly have a good case for redress in respect of the reduced value of the property, and might well ask for compensation. I should be most grateful if, when he comes to reply, the noble Lord [Link to column 557](#) opposite could give us some information on what is proposed in that respect, because I think it is immensely important; and, of course, it all adds to the cost of having the pylons.

That is all I have to say, except that I should like to join with other noble Lords who have congratulated Lord Egremont on his excellent speech, which gave no evidence at all of his being an inexperienced "back-room boy". I hope that he will come here and speak to us often in future, and will raise questions of this sort which I think are of great interest to all noble Lords on both sides of the House.

[Link to here](#) 5.28 p.m.

[Link to this speech](#) *LORD SOMERS*

My Lords, before the noble Lord, Lord Stonham, replies, I should like to say that, although I am no expert on these subjects, I cannot feel that the laying underground of cables is so far away. I well remember that when I lived in the depths of the country I had to connect my property with a water main in the village, which was about a mile away. This was done by a method which I had not encountered before. The pipe was attached to the rear of a tractor and was drawn through the ground at a suitable level, rather as a piece of cotton is drawn through a piece of material. I should have thought that methods like that, provided that the ground is soft, could also be used for cables. Of course it is a different matter where one has to cross under roads. It has already been noted that, naturally, not all cables can be put underground, but I think that the Government should give earnest consideration to this question of spoiling both our natural beauty and the amenities of private property, which has been mentioned by other noble Lords.

Before I sit down I, too, should like to congratulate the noble Lord, Lord Egremont, on his maiden speech. When I compare it with my own, I am filled with envy. I only hope that we shall hear him many times again.

[Link to here](#) 5.30 p.m.

[Link to this speech](#) *LORD STONHAM*

My Lords, I, too, would join with every other noble Lord who has spoken in congratulating the noble Lord, Lord Egremont, on a most entertaining maiden speech in which his native wit poked through. I am very [Link to column 558](#) glad that he now has an opportunity to exercise his talents in public, because I feel that that wit often must have been suppressed when he was serving his twenty years as a back-room boy. Although I would add that it was "some" back room—in fact, it might almost be described as a "power house"; and that, no doubt, is why he has chosen this particular subject for his first essay in your Lordships' House. I am particularly pleased, too, that he has made this speech in the presence of his father. I imagine that this is an occasion which cannot often be repeated because the circumstances would not be so likely to arise again.

My Lords, I am aware that my voice sounds like gravel. I do not know whether my face looks like a wall with broken glass on top, as was the case with a former Minister of Power when he was asked this particular Question. It may not be that I can wholly satisfy the noble Lord, nor indeed any other noble Lord who has spoken so far; but I would congratulate the noble Lord, Lord Egremont, on the start which he has made in this House, not only in making his maiden speech, but in taking this particular subject. It is a tribute to the importance of the subject, and no doubt to his own qualities, that, instead of what I had anticipated—that is to say, that the noble Lord would open and that I would close—we have had, I think, eight speeches in this debate. For that I am grateful, and I can give an immediate assurance that my right honourable friend will study the whole debate and pay great heed to what has been said.

One thing I should like to make clear is that, so far as I am aware, everyone, including myself, who has spoken in this debate is a land-owner—I, of course, on a very much smaller scale than the noble Earl, Lord Dudley. I have not 2,000 acres, but, like the noble Earl, I have pylons on my land, and I understand that I shall shortly be giving wayleaves for more pylons. One of the reasons why I am in agreement is that, like the noble Earl, I am anxious to get electricity on to my own small farm in places where it was not before.

The noble Marquess, Lord Salisbury, said that if it could be proved to our satisfaction that there was no alternative [Link to column 559](#) to desecration, then we should have to accept it.

[Link to this speech](#) *[THE MARQUESS OF SALISBURY](#)*

My Lords, I did not quite say "accept it". I said that we should have to consider it very seriously.

[Link to this speech](#) *[LORD STONHAM](#)*

It might amount to the same thing. But whether or not I shall prove this to the noble Lord's satisfaction, at least I am going to give the facts as I see them, and it may perhaps give a somewhat different picture from the one that has already been presented. The Central Electricity Generating Board in formulating their proposals, and the Minister in considering them, are under a statutory duty to take into account the effect which the proposals would have on the natural beauty of the countryside. Whenever objections are made to a proposal to construct 400,000-volt lines in an area of outstanding beauty, the possibility of placing at least some part of the lines underground is always considered. But because of the very high cost of placing 400 kV lines underground this can be done only in very exceptional circumstances, and there could be no question of making it, as Lord Egremont asks, the invariable rule in

such areas, because the cost would be beyond anything we could contemplate. Each case must therefore be considered strictly on its merits.

The noble Earl, Lord Bessborough, asked for an assurance that decisions of this kind would never be taken without the most searching inquiry and the most careful consideration of all those kinds of things which have been raised in this debate. This scheme first started, as it were, in a practical way in 1959; there have been searching inquiries going on ever since. The noble Lord, Lord Egremont spoke almost as if there were a degree of unanimity in the area about what should be done in this particular case. But no fewer than nine different schemes have been put forward: the red scheme, the green scheme, the yellow, the purple, the short blue and indeed the long blue, the brown, the minor deviation and the Buriton diversion. Indeed, even the two Inspectors, having picked up pieces of each of those schemes to put into a composite whole, came to the point where they themselves disagreed. Most remarkable [Link to column 560](#) reasons have been put forward for objections and suggestions. For example, the Nature Conservancy objected to the green route, particularly where it went through Crimbourne Wood, which was part of a larger area of woodland of considerable scientific interest known as The Mens.

I was asked also about the extent to which advice was taken, and my noble friend Lord Chorley mentioned Miss Sylvia Crowe. She was engaged by the Central Electricity Generating Board to advise on this route; she is a Past President of the Institute of Landscape Architects. Having considered the whole matter, in advising the Board to apply for the red route she was guided by considerations such as these: the views to and from the South Downs; the views from Blackdown and its associated hills and ranges; the effect on local landscapes; the effect on views from individual properties; the use of broken and complex landscapes; the elevation of the ground, and the possible use of tolerance in siting the towers. In the light of such examinations, and the fact that Sir William Holford is a member of the Board and has taken a particular interest in this subject, it cannot be said for one moment that these matters are lightly considered or that the people who make the decision have no regard for amenity. But when one considers these things one realises that a decision has to be reached eventually. The noble Viscount, Lord Mersey, raised the quite important point about somebody's property being ruined and asked about compensation. There is, I understand, compensation available when value is affected; it is usually settled by negotiation. It could go to the Lands Tribunal if agreement was not reached.

It has been suggested or implied in this debate so far that the only way to save our lovely countryside from desecration is to put lines underground; but a great deal can be done to mitigate the effect of overhead lines on the countryside by careful routing and great care is taken by the Board in making their proposals. The Board consult local planning authorities and so on.

The noble Marquess asked whether the C.E.G.B. could not be instructed to tell us what are their plans for the future [Link to column 561](#) and where they are moving. They have consulted county authorities and told them their plans for as far ahead as 1970. That is a continuing process which is going on. They have consulted the National Parks Commission and other interests, and, of course, the Minister in considering all these plans is in consultation with the Minister of Housing and Local Government.

However, when one speaks of amenity, my right honourable friend the Minister of Power has to bear in mind that visual amenity, important though it is, is only one of the amenities. It is one of his prime duties to ensure that throughout the country there is a sufficient supply of the important amenity of electricity. Other solutions have been considered; for example, whether localised generation with fewer transmission lines would not be preferable. But if that solution were adopted, then the number of power station sites which would have to be obtained each year would be very much greater, and the Board's capital cost would be increased by as much as £35 million a year. The smaller stations, which would thus be provided, would be considerably less efficient, and therefore more costly in operation.

The question of cost has been mentioned, and I should like to deal with the implications of adopting the proposal which has been embodied in the noble Lord's Question. The National Parks, and areas of outstanding natural beauty so far designated account together for something like 15 per cent. of the total area of England and Wales. Many places, including the one we are now discussing, have not yet been—although I have no doubt this one will be—designated as areas of outstanding natural beauty. What I am saying is that the areas of such beauty which we want to preserve are considerably more in total than 15 per cent. of the entire land area of England and Wales, so it is a very big thing that we are thinking of.

The C.E.G.B. have planned some 1,200 miles of 400 kV overhead lines to be built by 1970, in the next six years, and there will be more after that. Of course, it is not possible to say what proportion of those 1,200 miles will fall within the designated areas, but it will not be possible to avoid them entirely, especially as [consumers in and near them want more power.](#)

I must emphasise this point about underground cable being enormously more expensive than overhead lines. For very heavy duty 400 kV lines the cost overhead is about £54,000 a mile, but underground cable to carry the same amount of energy would cost, according to the latest estimate, £1,182,000 a mile. That is 22 times as much. When the Board originally gave their estimate for this particular inquiry, they themselves said £900,000 a mile. They had hoped to make economies, but the cost of cooling underground is so great that the current estimate, based on the estimates of the contractors who will themselves provide and lay cable, is £1,182,000. The cost of the particular 15 miles underground with which the noble Lord is mainly concerned would be £18 million.

These are not matters that can be considered lightly. Heavy insulation of underground cables has to be provided, whereas the insulation of overhead lines is provided free by the surrounding air. If we said, as the noble Lord asked, that in future all lines going through areas of outstanding beauty must go underground, it would be tantamount to signing an open cheque, and it would be bound to have some effect on the price of electricity. More important, it would involve a considerable diversion of capital resources which we just cannot afford. Of course, that is not to say that these lines are never going to be put underground. My noble friend Lord Chorley mentioned some 3½ miles in the High Peak district, but the C.E.G.B. may be able there to take advantage of a disused railway tunnel. In the same way, in the Glaslyn area there is another 3¾ miles which is going underground to preserve a marvellous vista of Snowdon. But these circumstances are wholly exceptional.

Although the issue in each case is mainly one of cost, it is by no means the only factor. Your Lordships should not think that this is all honey, that there are only advantages in putting the

cables underground. The physical operation of placing these lines underground is fraught with all kinds of difficulties, especially in cultivated areas. For example, for the equivalent of the Bolney—Lovedean line, in which the noble Lord is interested, four trenches placed at least six feet apart [Link to column 563](#) with the necessary access road would make a corridor of land at least 42 feet in width. That would be another Roman road going right down to Cornwall, but double the width. That would involve a considerable amount of disturbance to the properties which would have to be crossed. I am talking about going underground. The trenches and the access road would involve the clearing of hedges and woodlands along the route.

While it would be possible to cultivate the land immediately over and adjacent to the cables, once they were laid, it would not be possible to erect buildings or structures of any sort along the route. There would be drums of cable weighing anything from 13 to 16 tons each which would have to be transported to the site, and joints involving excavation of large pits would be necessary every 240 yards—about every furlong: nearly eight to the mile. For cooling the cables there would have to be a heat exchanger unit, the size of a large bungalow, every two or three miles; and every seven miles or so there would be a substantial building, much bigger than a large bungalow, to house the compensation equipment for balancing the charging current of the cables. Of course, there might be difficulty in finding acceptable sites for these buildings. There would be the scar created by the placing of the cables. Also, it has been found that underground cables tend to dry up the surrounding earth, and this would be bound to have a noticeable effect on the vegetation growing above.

My Lords, with all these disadvantages how could we possibly justify the expenditure of well over £1 million on every mile for laying underground cable—22 times as much as the cost of overhead lines? These lines with which the noble Lord is particularly concerned—and rightly, of course—form part of a major transmission line across the South of England, from Dungeness, in Kent, to Exeter, and then beyond into Cornwall. This line is required to reinforce supplies to meet the increased demands for electricity from consumers in the Southern Counties, and to connect with new power sources on the coast.

Since the public inquiry, criticism of the Board's proposal has centred largely on this western section which we have been discussing, between Petworth and [Link to column 564](#) Buriton. Of course, as I mentioned, several alternative routes were suggested. To give an indication of the extent to which this matter has been inquired into, an alternative was suggested by the Midhurst Rural District Council, which would have had the effect of taking the lines further away from Midhurst and Cowdray Park. The inspectors recommended this route, and another alternative further east, for investigation before any final decision was taken. But after consultation with the Minister of Housing and Local Government, the former Minister of Power decided to reject the inspectors' recommendation and to consent to the route proposed by the Board.

The decision letter, which is a very long letter, makes it clear that the time factor was only one of the factors involved in the decision. If the alternative routes had held out some hope of acceptance, and time had been of little account, they might have been investigated. As it was, it certainly appeared that they would be at least as hotly opposed as the Board's route, and, consequently, a further inquiry would have had to be held, so that a great deal of further delay, with all the risk to supplies which that would involve, would have been inevitable. As I said, the proposal has already been under consideration for nearly five years.

My Lords, I must make it clear that my right honourable friend the present Minister has no power at all under the Act to withdraw the consent which his predecessor granted to the Board. This consent carries with it deemed planning permission, and provides a tolerance of 200 yards on either side of the approved route. So it is a swath from Sussex to Cornwall, a quarter of a mile wide, that we are considering. But before the Board can construct the lines they must either obtain voluntary wayleaves from the owners and occupiers of land to be crossed by the line, or, failing that, obtain compulsory wayleaves from the Minister of Power.

The noble Lord, Lord Egremont, said, "If the inspector comes along, or the official comes along, asking for a way-leave, I shall kick him down the stairs." He is, of course, perfectly entitled to do that, if he likes, but I should not have thought it would strengthen his case. It might, at least to some extent, [Link to column 565](#) damage the image which he has already created by his speech to-day. But he has every right, of course, to refuse voluntarily to grant a wayleave, in which case the matter would have to go before the Minister to decide whether to grant the Board a compulsory wayleave in any particular case. And before that was done the owner or occupier concerned would be given an opportunity of being heard. This would normally be done by appointing one of the Minister's inspectors to hold a hearing at which the cases of the Board and the owner-occupier could be heard, and the Minister would reach a decision in the light of the inspector's report.

[Link to this speech](#) *THE EARL OF DUDLEY*

My Lords, may I ask the noble Lord one question? He tells us of the difference in price between overhead cables and underground cables, and says that the cost of the latter is twenty-two times higher. Does that apply only to the larger type which the noble Lord, Lord Egremont, mentioned—that is, 400 KV power lines—or does it apply to all power lines? I have been in very close touch with the Central Electricity Board about my land, and they have told me that it is only eight times.

[Link to this speech](#) *LORD STONHAM*

I am glad the noble Earl has asked that question. This price of £1,182,000 applies only to the 400 KV lines. There are, of course, pylons carrying lines with 275,000 volts which are only 136 feet high, compared with the 165 feet high pylons of which we are now speaking.

[Link to this speech](#) *THE EARL OF DUDLEY*

But they are just as ugly.

[Link to this speech](#) *LORD STONHAM*

Yes, but these are not all that much more ugly. One would have imagined this was something terrifically new. But the important thing for the noble Earl to bear in mind is that these 400 KV lines will carry three times as much current as the 275 KV lines. Therefore, there are far fewer of them, and far fewer pylons; and that is why, perhaps not in the area affected but certainly in the aggregate, and nationally, they produce less scars.

I was dealing with the point about wayleaves. If an owner objects, there can be a hearing and the Minister has to decide. If the Minister decides not to grant a compulsory wayleave, then

the [Link to column 566](#) Board has to find a way round; and if the Board does apply for a compulsory wayleave over the noble Earl's land, then that is the procedure that would have to be followed—although, of course, I cannot anticipate, assuming that the noble Lord did refuse to grant a wayleave, what my right honourable friend's decision might be in that case.

My Lords, I have tried to answer the questions that have been asked. I did not, when I started, imagine that I was going to satisfy everybody, but I have given, I think, facts which must be considered and which are basic to this problem; and I hope that that at least will be of use to the noble Lord in further considering this matter. But I want to say this, on the general question: we have to face the fact that this country has an urgent and increasing demand for electricity which has to be met; that demand is doubling itself every nine years, according to the latest count, and the interests of the country require that the necessary plant and equipment for meeting this demand should be provided, not only efficiently and quickly, but also with due regard to securing a proper balance between the claims of amenity and the claims of economy.

I am seeing my right honourable friend on (I think it is) Thursday, and I will most certainly see that these points are very thoroughly brought to his notice, although I am quite sure that he will have read this debate even before then. But I say to your Lordships that after prolonged and searching inquiry it has been decided that these to some extent conflicting claims of amenity and economy have been best reconciled in the scheme which was approved by the former Minister of Power, and that my right honourable friend has agreed that in the national interest it must now go forward.

[Link to this speech](#) *THE MARQUESS OF SALISBURY*

My Lords, I know that nobody has any power, on an Unstarred Question, to say anything further, and all I want to do is to ask the noble Lord a question, though I must say that I was a little surprised by his very definite statement that it is impossible for the Minister to undo any decision made by a former Minister. That certainly does not seem to have been the attitude of the Government in certain [Link to column 567](#) other spheres, as we heard only this afternoon.

The question I want to ask is this. I understand from the noble Lord, Lord Stonham, that the plans of the Electricity Generating Board are pretty well completed up to 1970, anyhow, and that they have consulted the National Parks Commission and the county councils on these plans. The only people who have not heard about these plans are the general public. If they are so widely known as this, would it be possible for the noble Lord to suggest to his right honourable friend that some type of map could be drawn up which would show what plans have been approved up to 1970? Because, even if there is nothing to be done about these plans—and I would agree with the noble Lord that he made a very powerful case—I think we ought to know what we are up against; and I would be very grateful if he would ask just that question of the Minister.

[Link to this speech](#) *LORD STONHAM*

My Lords, on the question of my right honourable friend's powers in this matter, I would repeat that under the Act as it stands he has no power to vary a previous decision. The noble Marquess will be aware that my right honourable friend the Minister of Transport, greatly to my regret, has not the power to vary certain decisions made by his predecessor under the 1962

[Transport Act](#)—which decisions, in my view, will devastate the countryside. But, unfortunately, without further legislation nothing can be done. On the noble Marquess's question, however, I should like to make it clear—and I am sure he will accept this—that before the C.E.G.B. can publish tentative plans they must consult with major authorities in order to secure some measure of agreement. But, apart from that reservation, I think he is certainly on a very good point, and I will bring it to the attention of my right honourable friend.

[Link to this speech](#) [LORD REDESDALE](#)

My Lords, before the noble Lord finally sits down perhaps he will give me the chance (I know that he has been asked many questions to-night) of asking just one further question. In view of the fact that the demand for electricity will go on increasing in the years to come, there will obviously be, on this basis, need for bigger and bigger pylons. There has been some talk in the past about a superconductor system using liquid nitrogen to cool the line. I was wondering whether the noble Lord could give us some assurance that the C.E.G.B. will be given a very substantial grant at this stage to enable research to be carried out now on new methods of conducting electricity, so that in the future, before they have to build something twice the height of Nelson's Column to carry it, we may have a different system, a system which one would hope would be more economical, would save charges all round and would be able to carry the electricity demands made upon it in the years to come.

[Link to this speech](#) [LORD STONHAM](#)

My Lords, of course I cannot commit the C.E.G.B. to grants for research, but they are already spending millions of pounds on research.

[Link to this speech](#) [THE EARL OF BESSBOROUGH](#)

And on super-conductivity.

[Link to this speech](#) [LORD STONHAM](#)

I was coming to that. They are spending £11½ million on underground cable, mainly in urban areas, every year. It is in their interest to get these costs down. But, on the point which has just been raised by the noble Lord, where a good deal of money has already been spent on research, it was thought until recently that it might be decades before that system would produce results, but only last week Dr. Kurti, of the Clarendon Laboratory, said it would be feasible in five years or so—that is an opinion, and it is the most recent opinion we have had—but we do not know at what cost. Obviously, all these matters are being very carefully considered. There will be even more intensive consideration in the hope that we can get a breakthrough: and if we get a breakthrough, then it will be much easier to take down pylons than to tear down power-houses.

[Link to this speech](#) [LORD REDESDALE](#)

But not, my Lords, to grow the trees they have to cut down underneath.

[Link to here](#) House adjourned at one minute past six o'clock.