PREM 19/1400

MT

C

Confidential Filing

British Rail ~~mainline~~ electrification.

Hastings - Tonbridge Rail Services

EAST COAST MAIN LINE ELECTRIFICATION

TRANSPORT

November 1980

Referred to	Date	Referred to	Date	Referred to	Date	Referred to	Date
~~5.2.81~~		~~12.6.84~~					
~~[illegible]~~		~~19.7.84~~					
~~5-3-81~~		~~25.7.84~~					
~~3.4.81~~		~~26.7.84~~					
~~7.4.81~~		30.7.84					
~~11-4-81~~							
~~27-4-81~~							
~~28.4.81~~							
~~29.4.81~~							
~~1-5-81~~							
~~10-6-81~~							
~~17-6-81~~							
~~22-6-81~~							
~~30.11.81~~							
~~4.12.81~~							
~~12-5-83~~							
~~28/10/83~~							
~~13.1.84~~							
~~29.5.84~~							
31.5.84							

PREM 19/1400

TO BE RETAINED AS TOP ENCLOSURE

Cabinet / Cabinet Committee Documents

Reference	Date
E (NI) (84) 4th Meeting Item 2	26/07/1984
E (NI) (84) 9	19/07/1984
E (81) 20th Item 2	17/06/1981
E (81) 64	12/06/1981
E (81) 63	12/06/1981
E (81) 15th Meeting	14/04/1981
E (81) 44	03/04/1981

The documents listed above, which were enclosed on this file, have been removed and destroyed. Such documents are the responsibility of the Cabinet Office. When released they are available in the appropriate **CAB** (CABINET OFFICE) CLASSES

Signed [signature] Date 04/10/2013

PREM Records Team

Published Papers

The following published paper(s) enclosed on this file have been removed and destroyed. Copies may be found elsewhere in The National Archives.

House of Commons: Second Report from the Transport Committee: Session 1981-1982, Volume 1 – Report and Minutes of Proceedings, Printed 5 April 1982, 317- 1

House of Commons: HANSARD, 30 July 1984, column 21 to 23: British Rail (Electrification)

House of Commons: HANSARD, 28 October 1983, column 229 to 230: Line Electrification

Signed ______________ Date 04/10/2013

PREM Records Team

CONFIDENTIAL

PRIME MINISTER 25 July 1984

ELECTRIFICATION OF THE EAST COAST MAIN LINE

The Policy Unit has spent some time with D/Tp and BR officials, testing the assumption behind this project. We have looked particularly hard at three elements:

- the maintenance savings, which account for over half the project's benefits;

- the energy savings; which account for another third;

- the volume of passenger business on ECML which BR can expect over the next 30 years.

There is no doubt at all that electric traction is considerably cheaper to maintain and more convenient to operate. Electric trains are cleaner, more reliable, do not require uncoupling and refuelling. The factual evidence bears this out. A University of Leeds' study indicates that BR's electric locomotives require 44% fewer maintenance staff for a given mileage than their diesel locomotives. This comparison is supported by data for six other European railway systems. Total train service costs on the electrified West Coast Main Line are 25% cheaper than on the East Coast Main Line. Electric locomotives offer operational advantages, which BR value. They are available

CONFIDENTIAL

for use more frequently, they break down less, and contribute to punctuality. Factors such as these explain BR's enthusiasm for electrification.

We asked if these benefits had been exaggerated because BR did not allow for the reduced maintenance costs of diesels which they could achieve anyway, by rationalising their facilities. BR have conceded this point and allowed a 10% improvement in maintenance efficiency (see the second line of the attached table, reproduced from the D/Tp officials' annex: if the project earns 5% in real terms, its net present value (NPV), discounted at 5%, is zero). In addition, we think it prudent to assume that the cost of maintaining a new generation of diesels would be 10% lower. Surely diesels can be designed better, learning from past mistakes?

Fuel Savings

The project achieves fuel savings from two sources. Electricity is cheaper for BR than oil, and BR assume oil will get much dearer than electricity (24% dearer by 2010 and 40% by 2018). Clearly, the project is less profitable if the two energy prices rise slowly, and more in line with each other.

BR have used the more conservative of the range of projections which the Department of Energy have provided to the Sizewell Inquiry, involving a crude price of $55/barrel in 2010. One cannot rule out an even more conservative assumption, namely, a crude price of $33/barrel in 2010 and that electricity and oil will not change their relative price. If there is slow progress on nuclear capacity, a weakening in the OPEC cartel, and the continued restriction on coal imports, then oil and electricity prices would move pretty much in line. This scenario (Scenario C in the attached table) could reduce the rate of return of the project to less than 5%. This would be seen as an extreme assumption: it would be difficult to turn the project down on this hypothesis alone.

Passenger Traffic Forecasts

BR have assumed an unchanged passenger mileage for ECML. We think this is a defensible assumption. Inter-City traffic has held up for 30 years, despite growing competition from air, better roads, the growth in car ownership, and the growth in competition from long-distance bus. Of the 5 Inter-City businesses, ECML volumes are more likely to hold up than any other. It is a fast, popular and almost profitable line, considerably quicker than bus. Its volume has survived 4 years of unregulated bus competition and air fares which are as cheap, and sometimes cheaper. A price war between domestic airlines is a potential threat, but it is difficult to envisage a dramatic reduction in domestic air fares of the kind that we hope to see one day on international routes. There is not a cartel on domestic air routes. BR is also better placed than airlines from the point of view of accessibility. The alternative assumption used by D/Tp to test the project - that passenger traffic will fall by 1% a year for 30 years - is in our view an extreme assumption for this particular route.

Assessment

A fair test of the project is the 5% discount rate, which is used for other public sector investments. The more demanding 7% rate which BR apply to their own investment is designed to counter their own optimism. The assessment has dealt with this problem, so there is no need to do it again. (The private sector would typically use a higher rate.)

On a 5% test, the project can withstand no increase in oil prices relative to electricity, or some loss of traffic to competitors, or better maintenance of diesel. However, if several of these combine, they would take the project below the 5% real rate of return - the fairly undemanding test set for public sector investments.

Conclusion

The appraisal of this project is now technically good. But BR has a history of disappointment on large projects.

Commitment to this project will definitely worsen BR's cash flow position in the late 1980s, just when Inter-City is struggling to reach its target, and when the Government needs cash savings. BR has still to demonstrate that it can establish a viable Inter-City business, and changing the accounting base is no answer.

There are two options worth considering:

Either: delay the whole project further, on the reasonable grounds that the Government wishes to see more evidence of improvement in other aspects of Inter City business before backing it with more capital. Delay of the project improves the returns and gives you more time to see if the new management can deliver.

Or: approve London-Newcastle and await more evidence of success before approving the rest.

We reluctantly recommend approval of London-Newcastle. It is a marginal decision in terms of reward against risks, and a 5% return on this project is no better than the target for the whole Inter-City business. We would not like investment in London connecting links, improving passenger comfort and service on stations, and the construction of new stations, to suffer from this particular project; and would

CONFIDENTIAL

expect BR to deliver more on efficiency as they will see this as a morale-booster.

NICHOLAS OWEN

CONFIDENTIAL

CONFIDENTIAL

TABLE 13 - CENTRAL ASSUMPTIONS

£m

	7% DR	5% DR
BR NPV estimate	2.9	50.4
NPV after allowing for 10% improvement in maintenance efficiency	-5.6	39.3

TABLE 14 - SENSITIVITY TESTS

Change in NPV (£m)

	7% DR	5% DR
A. Service Levels		
1. 1% per annum decline in passenger traffic 10% per decade reduction in service levels	- 18.9	-27.6
B. Maintenance Costs		
1. Reduction of 10% in costs of maintaining new generations of diesels	- 6.5	-9.5
2. 10% variation in maintenance costs of HST power cars	± 6.2	±9.0
3. 10% variation in maintenance costs of Class 89 electric locomotives	± 3.5	±4.9
4. Alternative ageing profile: 2½% per annum growth throughout vehicle life	- 12.4	N.A.
C. Fuel Prices		
1. Scenario C	- 27	-40.6
2. Scenario X	+ 26	+36.5
D. Revenue Gain		
1. Intermediate range of journey time elasticities	- 9.6	-12.6
E. Capital Costs		
1. 10% variation in capital cost of infrastructure	± 14.2	±15.2
2. 10% variation in capital cost of electric locomotives	± 4.0	±4.5
F. Combined Test 1% per annum decline in passenger traffic plus scenario C fuel prices plus reduction of 10% in maintenance costs of new diesels	- 47.3	-71.1

P.01355

PRIME MINISTER

Electrification of the East Coast Main Line:

E(NI)(84)9

BACKGROUND

British Rail has long wished to electrify a number of main lines, most importantly the East Coast Main Line (ECML) between London and Edinburgh. Since 1981 the Government has linked decisions on main line electrification with progress on the strategy for the Inter-City sector of BR: in particular, Ministers have refused to take decisions on the electrification of the ECML until BR produce a strategy showing a satisfactory path toward the achievement of Inter-City's commercial targets.

FLAG A (Item 1)

2. In his memorandum on BR's Inter-City strategy (E(NI)(84)8), the Secretary of State for Transport argues that BR has now produced a satisfactory strategy for Inter-City. If the Sub-Committee accept this view the way is clear for consideration of BR's proposals on ECML electrification.

FLAG B

These are set out in Mr Ridley's memorandum E(NI)(84)9: Mr Ridley recommends that they should be accepted.

3. BR and officials of the Department of Transport have carried out a full appraisal of the project. It would have a gross capital cost of £306 million, at late 1983 prices, spread over the period 1984 to 1991. But the ECML would any way require substantial further investment even if it were not electrified. The net additional cost of electrification is estimated to be £140 million.

4. On the basis of the central assumptions used in appraising the project, and with a discount rate of 5 per cent (the minimum used in assessing public sector investment projects, but arguably appropriate in this case), the project is calculated to have a net present value (NPV) of £50 million; if allowance is made for an improvement in the efficiency of maintaining the alternative diesel stock, the figure is reduced to £39 million. It is, moreover, arguable that in order to allow for appraisal optimism a higher rate of discount should be used. On the basis of a rate of 7 per cent, the NPV over the life of the project is close to zero. In other words, from a purely economic and financial standpoint it is a matter of indifference whether or not to proceed with it.

5. As usual with long term investment projects the underlying assumptions are uncertain; and quite wide variations in them are plausible. It follows that the calculation of the NPV is subject to similar uncertainties. However, departments generally agree with the judgement in paragraph 18 of E(NI)(84)9, that "the economic case for BR's proposal is finely balanced".

MAIN ISSUES

FLAG C

6. In previous correspondence the Chancellor of the Exchequer (minute of 31 May) argued that BR's proposals should be considered within the framework of the nationalised industries' Investment and Financing Review (IFR); it was implied that a decision was unlikely to be possible before the autumn. This line of argument was supported by the Chancellor of the Duchy of Lancaster in his minute of 12 June. However, I understand that Treasury Ministers are now likely to accept that it would be reasonable to take a decision without waiting for the IFR. The net cost of electrifying

FLAG D

the ECML would amount between now and the end of 1988 to only £109 million, according to the figures in Table 3 of the Annex to E(NI)(84)9: the Chief Secretary apparently does not regard this as so large as to jeopardise the success of the Review.

7. It is also possible that the Sub-Committee might wish to defer a decision on the ECML proposal if they regarded BR's Inter-City strategy as outlined in E(NI)(84)8 as unsatisfactory. However, the details of the ECML proposal are largely unaffected by the strategy: deferment of a decision in these circumstances would in essence be a continuation of the tactical approach of deferring decisions on main line electrification proposals in order to put pressure on BR to come up with an acceptable strategy for Inter-City.

8. Subject to these points, the issue before the Sub-Committee is simply whether to accept or reject BR's proposals. Neither acceptance nor rejection need be unconditional: for example, acceptance could be subject, at least so long as large amounts of capital have not been committed, to continuing progress with efficiency; or rejection could be coupled with a willingness to reconsider in a few years' time.

9. If Ministers are satisfied with BR's Inter-City strategy, whether to approve electrification of the ECML becomes a matter of assessing the economic and financial appraisal. The main considerations are set out in the memorandum and its annex, and there is no need to repeat them.

10. In addition, Ministers may wish to consider the following points.

a. The Chief Secretary is likely to argue that the project is borderline; and that in these circumstances it would be prudent not to invest substantial sums of public money. The project should therefore be rejected.

b. Assumptions about the course of fuel prices in the 1990s are very important in the appraisal (see paragraph 36 and Part C of Table 13 in the Annex to the memorandum). On the lowest energy price scenario the project would only just break even at a 5 per cent discount rate.

c. On the other hand, the Board have the basis for arguing that the project does (if only just) pass the tests of economic viability, and they regard it as a high priority in their investment programme. Mr Ridley considers that the Government does not have adequate grounds for setting aside the BR Board's judgement.

Possible conditions

11. After a certain point, so much expenditure has been committed that it is no longer realistic to attach conditions to large capital projects. However, for at least a year or two, if Ministers are willing to approve the ECML scheme in principle, it would be reasonable to keep open the possibility of cancellation if progress with productivity is inadequate. Ministers may also wish to warn BR that they will insist on any other electrification schemes being appraised as rigorously as the ECML.

Announcements

FLAG E.

12. Although the memorandum makes no proposals about announcements, Mr Ridley's minute of 24 May said that the Government should aim at announcing its conclusions before the Summer Recess if possible. The Sub-Committee will wish to consider whether the Government, rather than BR, should make an announcement and, if so, what should be its form and timing. You will probably wish to invite the Secretary of State for Transport to circulate a draft to the Sub-Committee.

HANDLING

13. You will wish to invite the Secretary of State for Transport to open the discussion. The Chief Secretary, Treasury might be asked to reply. The Secretary of State for Scotland and the Secretary of State for the Environment may have comments on the implications for Scotland and the English regions respectively.

CONCLUSIONS

14. You will wish the Sub-Committee to reach conclusions on the following.

(i) Should the proposals of British Rail for the electrification of the East Coast Main Line be accepted or rejected?

(ii) Should any conditions or qualifications be attached to the decision?

(iii) Announcements.

PLG

P L GREGSON
Cabinet Office
25 July, 1984

CONFIDENTIAL

BM

cc DOE CO
SO CDLO
DTI HMT
CS, HMT
DN
DOE

10 DOWNING STREET

From the Private Secretary

12 June 1984

Dear Dinah,

East Coast Main Line Electrification

The Prime Minister has seen your Secretary of State's minutes of 24 May and 8 June and the Chancellor's minute of 31 May. She agrees that your Secretary of State should bring forward his proposals on ECML as soon as possible with the aim of reaching a decision before the Recess. She has commented, however, that the issues to be resolved are important and complex - eg savings on fuel and on maintenance, the allocation of costs, the relationship with the Inter-City strategy, and the alternative uses of cascaded rolling stock - and in attempting to meet this timetable there must be no question of dealing with these issues superficially.

I am copying this letter to the Private Secretaries to members of E(NI) and to Richard Hatfield (Cabinet Office).

Yours sincerely

Andrew Turnbull

(Andrew Turnbull)

Miss Dinah Nichols,
Department of Transport

CONFIDENTIAL

6

CONFIDENTIAL

CCND

NBPM

AT 13/6

Chancellor of the Duchy of Lancaster

PRIME MINISTER

EAST COAST MAIN LINE ELECTRIFICATION

I have seen the Secretary of State for Transport's minute to you of 8 June. Surely it would be an impossible situation if we were to agree now to £x million - or £x hundred million - on this project; and were then to be told that British Rail had to be given an EFL to accommodate it; so that when we came to October we faced the same situation as we faced last October having to axe the EFLs to keep Public Expenditure within the prescribed limits?

There are two - not one - aspects to any capital investment project. First ought we to afford it - ie is it financially worth while? Second can we afford it - ie do we have the money? The first we may be able to answer now. The second we cannot answer except in the context of the Public Expenditure Survey.

I am copying this minute to other members of E(NI) and to Sir Robert Armstrong.

A.C.

A. C.
12 June 1984

CONFIDENTIAL

Transport Nov 80

BR Electrification

1.

PRIME MINISTER

Mr Ridley wrote on 24 May informing colleagues that he would soon bring forward East Coast Main Line Electrification for Ministerial discussion; and trailing some of the issues involved.

The Chancellor replied on 31 May, suggesting that this question be absorbed into the Investment and Finance Review. Mr Ridley has responded urging a decision before the Recess.

The issues are certainly complex involving judgments about:

- allocation of costs
- the link with the Inter-City strategy
- savings on maintenance
- savings on fuel
- effects of "cascading" existing East Coast rolling stock to other lines.

Nevertheless I do not see the need to delay this until October or November which is what absorption into the IFR would involve.

Agree that while scrutiny of project should be vigorous, the issues should be decided, one way or the other by Recess.?

AT

11 June 1984

cc NO CONFIDENTIAL

PRIME MINISTER

EAST COAST MAIN LINE (ECML) ELECTRIFICATION

I have seen Nigel Lawson's minute to you of 31 May in which he proposes that our decision on this project - on which I have now received BR's submission - should be taken in the context of the annual review of nationalised industries' investment and financing (IFR).

Of course, we shall have to take account of ECML electrification in the IFR - if we approve the project. But I believe that the IFR would be the wrong context in which to consider this as an investment case, and would impose an unnecessary and damaging delay.

The purpose of the IFR is to consider BR's overall funding requirement for the next three years in the light of the Corporate Plan. It would not be sensible to attempt to take decisions on a single long-term investment project - however big - in the shorter-term IFR process. We should aim to reach a decision on ECML electrification first - including the implications for BR's finances and its merits relative to other claims on public expenditure - and then take account of that decision when determining the Board's EFL for 1985/86 and succeeding years.

The Corporate Plan will not be finally agreed until August and the IFR discussions, on the basis of past experience, will continue into the autumn. The implication of Nigel's

CONFIDENTIAL

CONFIDENTIAL

suggestion is therefore that a decision on the project could be significantly delayed. For the reasons I set out in my minute to you of 24 May, such a delay would be politically damaging. It would be impossible convincingly to defend further delay. I am sure that we should aim for a decision, one way or the other, before the summer recess.

I note what Nigel says about the links between the performance of Inter-City and the ECML electrification project. For the reasons I gave in my minute of 24 May, I believe that we should base our decision on ECML electrification on whether the project is, in its own right, a worthwhile investment. But we shall be able to consider the project in the light of the Inter-City strategy, which I expect soon and certainly before the end of this month. These seem to me the essential elements in taking a decision.

I am copying this to other members of E(NI) and to Sir Robert Armstrong.

NR

NICHOLAS RIDLEY
8 June 1984

CONFIDENTIAL

Transport 11/80 Electrification

ce NO CONFIDENTIAL

BF with DoT response

AT 1/6

Treasury Chambers, Parliament Street, SW1P 3AG
01-233 3000

PRIME MINISTER

EAST COAST MAIN LINE ELECTRIFICATION

I have seen the Secretary of State for Transport's minute to you of 24 May.

2. The key issue which he addresses is the tactical handling of the Government's relations with the railways. As he points out, we have so far taken a tough line in refusing to approve this major prestige electrification project until we have reached agreement on a satisfactory path to commercial performance for Inter-City. We have adopted a similarly tough stance on the PSO grant target and have pressed for progress on productivity to be linked with BR pay negotiations, although we were not able to achieve as much as we would have liked on that this year. All this is encouraging railway management and employees to deliver greater efficiency and reduce operating costs. But there is still a long way to go.

3. The sums of money involved in ECML electrification are potentially very large and they will have to be judged both on their own merits and against other pressing priorities. To drop any linkage with overall improvements in Inter-City performance would be a major step and I am not yet convinced that we can have sufficient confidence in BR's future performance to allow us to do this. The annual review of nationalised industries' investment and financing will shortly begin and I think that this will be the right framework within which

to consider BR's proposals. The chances that we shall reach a conclusion on all this before the summer recess seem very remote.

4. I am sending copies of this minute to the other members of E(NI) and to Sir Robert Armstrong.

N.L.

(N.L.)
31 May 1984

Transport Nov 80 BR electrification

Prime Minister (1)
The Chancellor may make some of these points for you. Agree to await his response, and then consider your own reply?

CONFIDENTIAL

PRIME MINISTER 29 May 1984

Yes

DWB 29/5

EAST COAST MAIN LINE ELECTRIFICATION

(attached)

We have been anticipating for some time a note from Nicholas Ridley, which reflects the BR Board's strong wish to uncouple the ECML electrification proposal from the Inter-City strategy. The reason for BR's anxiety is simple. They are convinced that ECML electrification is a sound investment but are having difficulty in showing how Inter-City can make a profit by 1988. The sector lost £160 million in 1983. BR only hope to halve this loss by 1988, on present accounting methods. Hence their desire to view the project "on its merits" and to "move the goal posts" by changing the accounting conventions to unload some of the heavy infrastructure costs which presently fall on Inter-City on to other sectors.

There is a good logical argument for uncoupling, and for changing the accounting. In his terms of reference, Bob Reid has been instructed not to embark on major route closures. We are not going to close the ECML. Moreover, it is the second least unprofitable line of the Inter-City sector. (West Coast is the best.) The heavy loss-makers in the sector are in the South West. BR argue that an investment which makes the ECML less unprofitable, and possibly even profitable ought to be undertaken. It will need new investment in locomotives and rolling stock anyway in the late 1980s.

BR puts a logical case for the changes in the accounting system. The changes would force BR managements to identify which parts of the infrastructure they wanted, and were prepared to pay for, and which they were not. Excess capacity would then be closed down faster than under the present system, which simply dumps the infrastructure which no other sector wants on Inter-City. It should therefore lead to more sensible decisions. It would make it easier to argue the case for closures of the more outrageously uneconomic provincial lines, as their costs would rise.

Despite these points, you should resist, at least for the time being, Nicholas Ridley's proposal to uncouple ECML electrification from the viability of Inter-City, for two reasons. First, this tactic has served you well in forcing BR to adopt commercial attitudes, as is evident from the progress that Bob Reid has made on a number of fronts. Conspicuously absent, from the list, however, is the progress of Inter-City. You would want, I am sure, to be reassured on this point before acceding to Nicholas Ridley's suggestion. Second, there are good analytical reasons for linking ECML electrification to the strategy. The link forces BR to make realistic assumptions about its rolling stock requirement, with and without electrification.

We recommend that you allow the Treasury Ministers to respond. At this point you might reply along the lines that:

(i) you are encouraged by the way Bob Reid is tackling a number of the problems confronting him;

(ii) Before agreeing to uncoupling ECML electrification from the strategy you would like to see evidence that there are genuine prospects of improvement in Inter-City performance.

(iii) the accounting changes should only be accepted if they clearly bring operational improvements. Costs have to be cut, not shuffled around the system. How will excess assets be shed and why are they not at the moment?

Such a reply would not rule out subsequent agreement to these proposals.

NICHOLAS OWEN

DATAAA

CONFIDENTIAL

cc NO

PRIME MINISTER

EAST COAST MAINLINE ELECTRIFICATION

Later this week I expect to receive BR's revised proposals for the electrification of the East Coast Main Line (ECML). And Bob Reid plans to send me his strategy for the Inter-City business within the next three or four weeks. I thought I should give you warning of this because of the political sensitivity of the issues and my intention to bring them to colleagues for discussion shortly.

There is widespread support for electrification of the ECML, in the House and outside. There has been mounting criticism - including some from our own side - of the delay in reaching a decision on the scheme BR submitted in May 1983. We have insisted that the decision must await the completion of BR's Inter-City strategy. So once we have received both the revised ECML proposal and the Inter-City strategy, further delay would be politically damaging. I believe that we should aim to take an early decision on the electrification proposal and to announce our conclusion before the summer recess if possible.

Since 1981, we have deliberately linked decisions on mainline electrification with progress on the Inter-City strategy. In particular, we have refused to take decisions on ECML electrification until BR produce a strategy showing a satisfactory path towards the achievement of Inter-City's commercial target. This linkage made sense in the very different circumstances of 1981, when every available means had to be used to improve BR's then wholly unsatisfactory performance.

CONFIDENTIAL

Matters have changed very much since then. The Board have now brought the railway's finances under much tighter control, and costs are beginning to come down. We have in Bob Reid a strong Chairman who is wholly committed to achieving the target we have set him for reducing the subsidy by £200m by 1986. BREL is now being tackled radically: BR have already announced the closure of three workshops, and by 1986 will have reduced the 1982 BREL workforce by a third. Orders for new rolling stock are going out to competitive tender. In 1981, in the context of a major statement on mainline electrification, Norman Fowler told the House that we were looking for BR to reduce posts by 38,000 by 1985; in fact by the end of 1983, they had already reduced staff numbers by over 31,000. The railway hotels have been sold; BR are selling property at the rate of £70m a year; and they are on course to privatise Sealink this summer. The Board have wholly abandoned the argument that the answer to the railways' problems is simply more and more investment.

So, in these very different circumstances, when we come to appraise BR's case for ECML electrification we should consider it strictly on its own merits. There are of course some connections with the Inter-City strategy (for example the strategy would have implications for the use to which any rolling stock cascaded from the ECML could be put on other parts of the Inter-City sector). Certainly, the Inter-City strategy remains important in its own right; and we must maintain the pressure on BR to achieve a fully commercial performance on these services. But in the new circumstances we now face, I believe that we should base our decision on ECML electrification on whether the project is, in its own right, a worthwhile investment.

I should mention that I have asked BR to use the "sole user" method of costing infrastructure for the Inter-City strategy, because it seems to me more logical than the alternative method used hitherto, which is called "prime user". It makes the Inter-City target more possible to achieve but it will also provide a more defensible basis for charging private sector users of public railway track. I will explain the differences to colleagues when we come to consider the strategy. I will, of course, also describe what the outcome would have been if "prime user" had been used. The methods used to allocate the costs of railway infrastructure have a significant impact on the financial performance of the different parts of the railway, because infrastructure costs form a large part of total costs. The switch to "sole user" does not affect the economic case for ECML electrification in the slightest. But I think it is more justified.

I am copying this minute to other members of E(NI) and to Sir Robert Armstrong.

NR

NICHOLAS RIDLEY
24 May 1984

NDPM

AT 13/1

CHIEF SECRETARY TO THE TREASURY

Treasury Chambers, Parliament Street, SW1P 3AG

Di~~ana~~ Nichols
Private Secretary to the
Secretary of State for Transport
Department of Transport
2 Marsham Street
LONDON
SW1P 3EB

13 January 1984

Dear Dinah

CAMBRIDGE RAILWAY ELECTRIFICATION

Your Secretary of State wrote to the Chief Secretary on 10 January on this subject. The Chief Secretary is clear that tight financial discipline is the key to success in our dealings with BR so he is glad to see that your Secretary of State proposes to reject the Royston to Cambridge proposal. He has looked sceptically also at the Bishop Stortford to Cambridge proposal but, in view of the appraisal that has been done, he is content for electrification there to go ahead. He hopes that your Secretary of State will draw ~~for~~ the necessary distinctions in his statement to make clear that main line electrification is still a separate issue.

Copies of this go to Andrew Turnbull and Richard Hatfield.

Yours sincerely

Jon. Gieve

JOHN GIEVE
Private Secretary

file

Bre

bc Nick Owen

10 DOWNING STREET

From the Private Secretary

13 January 1984

Cambridge Railway Electrification

The Prime Minister has seen your Secretary of State's letter to the Chief Secretary of 10 January. She agrees with the proposal to approve the electrification of the line between Bishops Stortford and Cambridge and to turn down the scheme to electrify the line between Royston and Cambridge.

I am copying this letter to John Gieve (Chief Secretary's Office) and Richard Hatfield (Cabinet Office).

(Andrew Turnbull)

Miss Dinah Nichols,
Department of Transport

Prime Minister ①
Agree to Ridley's proposals.
AT 12/1

CONFIDENTIAL

Yes MT

cc Mr Redwood

MR ~~TURN~~BULL

CAMBRIDGE RAILWAY ELECTRIFICATION

Mr Ridley's decisions look sensible, and are consistent with the Government's approach to BR.

On the costs side, BR management is prepared to reduce maintenance staff (see FT story today about 3,500 redundancies at BREL in the next year) and hence achieve savings which electrification can make possible.

On the revenue side, we are concerned that BR might underestimate the impact of bus competition, once the M11 extends closer into central London, and the effect of any line closures North of Cambridge on Cambridge-London traffic. However, bus competition is more of a threat to BR's long-distance services than to long distance commuter traffic from locations such as Cambridge. Even a completed M11/M25 system would have difficulty competing with rail for City commuters arriving at Liverpool Street. Moreover, the South Cambridge population is growing rapidly. The sensitivity to lower traffic forecasts on the Bishops Stortford route tested by BR (only half the expected growth in revenue) seems to cope adequately with these points.

Mr Ridley is right to reject the Royston proposal. The decision would doubtless irritate local interests (eg if Bishops Stortford-Cambridge is electrified, why not Royston-Cambridge?), especially as the cost per mile of the electrification work is roughly half as great on the Royston-Cambridge stretch (only £2 million for 10½ miles, compared to nearly £10 million for 24 miles) because there are fewer bridges. However, operating costs on the Royston stretch are higher with electrification than with diesel. This is because the four-car electrical units - the smallest available - would not be economic with the small flow of traffic on this route, unless, as BR have done, one makes wildly unrealistic forecasts about the growth in traffic (one-third). The diesel units used at present are only two-car units. There is also the point that some of this extra traffic would be at the expense of the other route.

We recommend support of Mr Ridley's decisions.

NICHOLAS OWEN
12 January 1984

CONFIDENTIAL

2CNO

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

01-212 3434

The Rt Hon Peter Rees QC MP
Chief Secretary to the Treasury
HM Treasury
Parliament Street
LONDON SW1P 3AG

10 January 1984

Dear Peter

CAMBRIDGE RAILWAY ELECTRIFICATION

You will recall that in 1981 my predecessor considered proposals by BR to electrify several lines in East Anglia. The "Anglia East" scheme (from Colchester to Ipswich, Harwich and Norwich) was approved. But BR were asked to reappraise the "Anglia West" scheme (from Bishops Stortford to Cambridge and from Royston to Cambridge). BR have completed their reappraisal of the Cambridge schemes, in the process reducing the capital cost by over £6 million mainly by not building a new maintenance depot which was in the earlier plan. They now seek approval to electrify the lines to Cambridge at a cost of just over £12 million.

The southern parts of both routes to Cambridge are already electrified. The services to Cambridge provided on these routes are part of the London and South East passenger network. So this is a proposal to round off electrification on two stretches of line which provide primarily commuter services; it is not mainline electrification.

BR is not going to propose closing rail services between London and Cambridge. Nor could we reasonably suggest that they should do so. So the issue for decision is whether electrification is the most cost-effective way of providing these services.

I have no doubt that electrification is the most economic option for the 24 mile Bishops Stortford - Cambridge line. Electrification would allow the replacement of diesel by electric services on this section, and eliminate diesel operation "under the wires" from Bishops Stortford to Liverpool Street on through Cambridge trains. There would be big savings in maintenance and fuel costs and some extra revenue. As compared with the base case of continuing with diesel, an investment of £9.78m in electrification would yield a positive NPV of £16.4m and an internal rate of return of 28%. It would still yield a return of 22% even if revenue gains were only half those estimated by the Board. Since the proposal shows a good and robust financial return, I propose to approve it.

The Royston - Cambridge scheme is very different. The service on this route carries fewer people than the Bishops Stortford service, and passengers from Kings Cross have to change at Royston. Electrification of the 10½ miles of route would cost just over £2 million, and needs careful appraisal as an "add-on" to the main scheme. The Royston - Cambridge electrification scheme in fact only just produces a positive net present value in BR's evaluation but their case rests entirely on forecasts by them of improvements in revenue. I am not convinced by these forecasts. I therefore propose to turn down this part of the scheme as not economically justified.

A decision to approve the good scheme (Bishops Stortford) and turn down the doubtful scheme (Royston) would, I believe, give the Board the right message and be consistent with the objectives we gave Bob Reid on 24 October.

I propose to announce my decisions on Cambridge electrification in reply to a PQ on 16 January when I have First Order Questions.

I am copying this letter to the Prime Minister, and to Sir Robert Armstrong.

Yours ever
Nicholas

NICHOLAS RIDLEY

10 JAN 1984

Prime Minister
To note that DoT have taken your strictures to heart. AT 31/10

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

01-212 3434

Andrew Turnbull Esq
Private Secretary
10 Downing Street
LONDON SW1

27th October 1983

Dear Andrew,

HASTINGS-TONBRIDGE RAILWAY LINE

Thank you for your letter of 26 October.

The Secretary of State is grateful for the Prime Minister's agreement that the electrification option should be approved.

Mr Ridley shares the Prime Minister's concern about the deficiencies in BR's appraisal of this scheme. He understands that action has been taken since the scheme was submitted to improve the Board's appraisal arrangements. Clearly, this is essential and we shall be drawing the deficiencies in the submission to Mr Bob Reid's attention as an illustration of the need for improvement.

I am sending a copy of this letter to John Gieve (Chief Secretary's office).

Yours,

Dinah

DINAH NICHOLS
Private Secretary

27 OCT

FILE

da

10 DOWNING STREET

From the Private Secretary

26 October 1983

Hastings/Tonbridge Railway Line

In his minute of 20 September your former Secretary of State reported that he favoured the electrification option, reversing the earlier decision reached by Mr. Howell after consulting MPs for the constituencies affected. Mr. King wrote again on 12 October setting out why he had come to a different view and how British Rail and the Department conduct the investment appraisal of electrification proposals.

In the light of this further explanation, which she understands your new Secretary of State endorses, the Prime Minister now agrees that the electrification option should be pursued.

She has commented, however, that she found the changes in facts and assessment disturbing. She wishes to emphasise that investment appraisals from British Rail and the Department cannot command confidence unless they are properly argued and are economically sound.

I am copying this letter to John Gieve (Chief Secretary's Office).

Andrew Turnbull

Miss D.A. Nichols,
Department of Transport.

1

PRIME MINISTER

Electrification of the Hastings/Tonbridge Line

Mr. King minuted you on 20 September seeking agreement to electrification. At your request he set out at greater length his reasons for preferring electrification as opposed to the diesel option which had been agreed in the Spring - see Flag A. A meeting was arranged but was postponed to allow Mr. Ridley to consider the case. This he has now done and he is now ready to come to a meeting. I am told he endorses Mr. King's conclusions.

I wonder, however, whether in the light of Mr. King's further explanation, and of the Policy Unit's (lukewarm) endorsement of electrification, you still feel a meeting is necessary.

Flag B

AT

25 October 1983

Not for the decision.

But I find the change in facts and assessment revealing and alarming.

It is a very bad basis for any future proposal from M.O.T. - and has left No 10 with lack of confidence in their submission.

MT

PRIME MINISTER

Tonbridge/Hastings Railway Line

You are holding a meeting on Monday afternoon to discuss this. There are three aspects you need to consider:

(i) The investment appraisal.

(ii) The political feeling from the constituencies affected.

(iii) Whether approval of electrification in this case would build up excessive hopes about electrification on the wider scale.

On (i), the differences in costs are not large, particularly when factors not included in the appraisal are taken account of, eg the benefit of using the standard SR electric stock or the greater risk involved in developing new diesel stock. Policy Unit favour permitting the electric option, but pressing message on investment appraisal.

On (ii), there seems to be some confusion on the consultation process. Ian Gow consulted the then Minister of Transport and Hastings/Tonbridge MPs on whether the diesel option would be acceptable. The outcome was that it would be but it is not clear what propositions were put forward on the duration of the disruption created by the two options. Since then political feeling has been in favour of the electrification option.

On (iii), the Department of Transport argue that electrification of this line need not have implications for the wider electrification issue. Tonbridge/Hastings is an exception in the SR network; and the Department use a different approach in assessing electrification of parts of the non-commercial railway.

AT

14 October 1983

CONFIDENTIAL

cc Mr. Mount

Prime Minister

MR. TURNBULL

TONBRIDGE-HASTINGS RAIL SERVICE

In discussion of this item with Mr. King, the Prime Minister could either:

i. try to persuade him to reject the electrification option in favour of a marginally cheaper, diesel option; or

ii. use the discussion as an opportunity to impress on Mr. King, and through him, the British Rail Board, that investment projects will not be accepted unless they are both properly argued and economically sound.

We would recommend the second option. Having discussed the appraisal in some detail with Mr. King's officials, we feel we should accept their judgement that the case for rejecting BR's preferred choice of electrification is not sufficiently strong. The difference in costs, partially offset by the superior revenues likely to be earned by the faster electrified service, are well within the margins of error associated with appraisals of this kind. Some questions, which might be useful to raise in discussion, which I attach, are not likely to undermine Mr. King's argument.

We would advise, therefore, that the Prime Minister should use the meeting to reinforce the message at (ii) above. The following points might be helpful:

1. The appraisal of this investment which was put to and accepted by the BRB contained a number of howlers, which Transport officials have now corrected. For example, BR

- did not spell out the effects of singling a longish stretch of track on the reliability of services

- costed the rolling stock to the electrification option free of charge on the grounds that it was 20 years old, even though this stock could be used elsewhere in the system for many years

CONFIDENTIAL

- ignored a cheaper diesel unit currently being designed

- disregarded the bus bodies option on the grounds that it was "an untried option"

2. The Government would expect all future submissions to comply with the appraisal methodology applied by the Department of Transport.

3. BR could be asked to jump one last hurdle to secure their favoured electrification option. There is undoubtedly an operational advantage in standardising the Southern Region on electrification (easier to provide cover for breakdowns, possibilities of switching rolling stock etc). This point has not been made much of in the appraisal. Could the BRB demonstrate that it justifies the extra cost (£5million, less an allowance for better revenues, with electrification)?

Nicholas Owen
NICHOLAS OWEN
14 October 1983

POINTS TO RAISE ON THE APPRAISAL

1. Why invest now at all?

The alternative is refurbishment. Transport emphasise that the cost of refurbishment could be higher than BR's estimate. But isn't this risk inherent in all the systems?

2. Mark V Coaches

The cheapest option of all is the Mark V coach (£62.8m). But could it be cheaper still? This option takes advantage of the fact that there is currently a surplus of under-frames because Inter City coaches are due for scrapping. These under-frames will wear out in 10-15 years or so. The appraisal covers a 30-year span. Transport assume that these coaches will then be replaced by a new production run of 96 narrow-bodied 150s, at a total cost of around £30 million. This may be an unduly cautious assumption. How do we know that an alternative, cheaper bus body option might not be available in 1995?

3. High maintenance of diesels

The disadvantage of diesels is their high maintenance cost, but is it necessary to pay £100,000 for each locomotive per annum on maintenance? Would a private contractor charge so much?

4. Operational advantages of standardising

Are these costed? Shouldn't they allow BR to use fewer coaches on the line, because the Southern Rail system can provide cover against breakdown and maintenance? But electrification requires 86 vehicles, hardly less than the Mark V coach option (88 coaches).

KC/NO FM

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

Andrew Turnbull Esq
Prime Minister's Office
10 Downing Street
LONDON
SW1

12 October 1983

Dear Andrew

TONBRIDGE-HASTINGS RAILWAY LINE

I am replying to Michael Scholar's letter of 27 September. The further information for which he asked is enclosed (enclosures A and B).

The Secretary of State is very concerned at the impression that his recommendation on this case does not follow on the action decided at the Prime Minister's meeting on 27 April and the subsequent discussion with MPs. He has asked me to set out briefly, therefore, his understanding of the course of events following that meeting.

It is clear from Michael Scholar's letter of 28 April (copy attached at C for ease of reference) that the prospect of the closure of the line to passengers for several months while the electrification works were done weighed heavily in the discussion of the options with the Prime Minister. The Secretary of State understands, however, that shortly after the meeting on 27 April but before Mr Howell saw the local MPs, the Railways Board gave a revised estimate of the length of time that the service would need to be closed. The Board's new estimate is that the service would need to be closed only on 10 weekends; on weekdays, which are of course crucial for commuters, a restricted service would continue to operate. Altogether, the engineering works would go on for about 6 months. This is, of course, a very different estimate from the one on which the Prime Minister formed her initial judgement of the options.

In accordance with the conclusion recorded in your letter of 28 April, Mr Howell, Mr Eyre and Mr Gow met the local MPs on 3 May. No official was present. The aim of the meeting was to test the strength of their declared preference for electrification. The Secretary of State understands that the local Members' main concern was that the service should continue, that there should be a through service from London, that it should be improved, and that there should be a statement before the local elections. On that basis, Mr Howell said in answer to a PQ on 4 May that:

> "As I have made clear, the Government is prepared to approve a substantial new investment in the Tonbridge-Hastings line, leading to a continued and improved through service on the London-Tonbridge-Hastings route.
>
> The type of equipment to be used has yet to be settled; when it is I shall make an announcement."

During the subsequent General Election campaign, Mr Warren spoke strongly in his constituency about the need for electrification. Clearly, it remained a live local issue. For example, Sir Patrick Mayhew wrote to Mr Howell on 24 May to tell him that:

> "It is significant that notwithstanding the additional delay to services which electrification would evidently impose while work was being done, the [Tonbridge Wells and District Railways Travellers'] Association so strongly favour electrification to new diesel units."

Immediately after the Election, the Secretary of State asked Mr Mitchell to establish the facts and recommend to him how the case should be brought to a conclusion. As a result of his work, a further diesel option has been identified, the details of which are set out in the attached note. Briefly, it emerges as the best of the diesel options and it uses standard diesel units, so avoiding the need for a special build just for this line. But it would require the same civil engineering works as would electrification. Throughout the last 4 months, Mr Mitchell has been under great pressure from most of the local Members for an early decision firmly in favour of electrification. This was made very clear to him in a meeting he had with the local MPs on 5 July when they said that they would regard the disruption of the service in the short term as a price worth paying to obtain electrification with minimum singling of the line.

In making his recommendation to the Prime Minister on 20 September the Secretary of State had in mind the following main points:

(a) the disruption to passengers while the line was electrified would be much less than the Prime Minister was led to expect back in April and was regarded as acceptable by the Government's supporters and local users;

(b) the best of the diesel options would entail broadly the same amount of disruption;

(c) the best diesel option involves the use of diesels which do not yet exist even in prototype form and which may, therefore, prove more expensive and less satisfactory than the Department and the Board have assumed in their evaluation of the option;

(d) diesel units have lower acceleration than electric ones and this is particularly significant on a commuter line operating over hilly country;

(e) there is a very strong local feeling that anything other than electrification would be unsatisfactory;

(f) there is little in financial terms to choose between the options.

The Secretary of State also wonders whether this case may have been considered as in some way involved in the questions of Inter-City main-line electrification, and perhaps as "the thin end of the wedge" for such proposals. He in fact considers it not in that context at all, but he sees the present absence of electric trains on this part of the line as a gap in the existing electric third rail network of Southern Region, due originally to the narrowness of the tunnels.

For these reasons, the Secretary of State believes that the assessment of the case for electrification, with minimum singling, is different from and stronger than it was when the matter was put to the Prime Minister last April. And it remains his belief that the best course would be to approve the proposal.

I am sending a copy of this letter to John Gieve (Chief Secretary's Office).

Yours sincerely

Alison Triplett

for
MISS D A NICHOLS
Private Secretary

A

ANNEX A

A - CRITERIA FOR ELECTRIFICATION

1. The criteria applied to electrification schemes for the non-commercial railway business (i.e. passenger services in L&SE, the other conurbations and rural areas) are different from those applied to schemes for the commercial railway businesses (Inter-City and Freight).

The Non-Commercial Railway

2. For the non-commercial railway, which includes Tonbridge-Hastings, the criterion applied to an electrification proposal is the same as the test applied to any other proposed investment; does it represent the most cost-effective way of maintaining the service?

The Commercial Railway

3. The criteria for the electrification of routes used mainly by the commercial rail businesses were set out by the then Secretary of State (Mr Norman Fowler) in his statement to the House of Commons on 22 June 1981 (copy attached). He invited BR to come forward with a 10 year programme of schemes for electrification only of those potentially profitable main line routes where it was clear that the benefits could justify the investment. He meant by that statement that the Government were only prepared to consider schemes for the electrification of lines on which the Inter-City and freight services were capable of operating commercially, that is, earning a 5% return on the assets employed. These electrification schemes would have to show a good prospect of earning a 7% return on the sums invested. That test discount rate was set 2% above the rate of return set for the commercial businesses as a whole in order to allow for risk and appraisal optimism.

22 June 1981

STATEMENT BY NORMAN FOWLER, SECRETARY OF STATE FOR TRANSPORT
HOUSE OF COMMONS, 22 JUNE 1981

BRITISH RAIL (ELECTRIFICATION)

The Government has completed its examination of the report on main line electrification. For this, we have reviewed the prospects for the freight and inter-city businesses of the railway which could benefit from electrification, in order to judge the strength of their case for further major investment. I had earlier met rail management and unions in the Rail Council, to hear their arguments for further investment in the railway and particularly in electrification, and to discuss the pressing need for increases in efficiency and productivity in railway operations, and I am seeing them again later today.

This examination has had to take place at a time when the current financial position of the British Railways Board gives serious cause for concern. The trading position of the Board has worsened during the year, and immediate substantial economy measures are now required. The Government for its part will continue to support the efforts of the Board to meet the difficulties it has to face. But the Government will expect the industry's management and unions to play a full part in bringing about the necessary improvements.

As far as the businesses are concerned, our aim is that as much freight as can economically do so should go by rail. But the future of the rail freight business depends crucially on reduction in its costs. If the efforts of the Board to eliminate uneconomic capacity, and to secure new agreements on working practices, do not produce their results quickly, and costs are in consequence not substantially reduced, then the rail freight business will continue to shrink. Only if these cost reductions are achieved will there be enough freight traffic on the railway to contribute significantly to the case for electrification. These are matters entirely in the hands of the industry, but the

...vernment is bound to take account of progress on them in its ...rther decisions on future investment.

The Government's policy is that subsidy should go only to socially necessary passenger services such as rural and commuter services. The inter-city rail business, which could benefit from electrification, should be fully commercial. So far, in spite of large investment, the inter-city business has not made progress towards earning an adequate return on the assets employed. Immediate steps must therefore be taken to match the capacity offered closer to profitable demand. Given the necessary measures, services comprising the majority of inter-city business should be able to support new investment and win traffic on a commercial basis. I am accordingly asking the Railways Board to bring forward plans for an inter-city business that will achieve a fully commercial performance by 1985, and to start on the necessary changes immediately.

Given the necessary will in all parts of the industry these measures can succeed. There is no alternative if there is to be a healthy future for the large commercial railway businesses, which will benefit their customers and those who work in them, and justify a selective programme of main-line electrification. The Government is not prepared to give an unconditional commitment to the electrification of an extensive network and progress on electrification will depend on the achievement of the changes necessary to secure manpower reductions and improvements in productivity.

I am therefore inviting British Rail to prepare and submit a ten-year programme of schemes for electrification only of those potentially profitable main-line routes where it is clear that the benefits could justify the investment. These should be presented together with the new commercial plans that are now required for the businesses. The approval of each successive electrification project will be conditional on the profitability of the investment in question and on the achievement of necessary improvements in productivity.

Telephone No: 01-212 1431
Night Calls: (6.30 pm to 8.00 am)
Weekends and Holidays: 01-212 7071

B

ANNEX B

B. TONBRIDGE-HASTINGS ELECTRIFICATION: FURTHER INVESTMENT APPRAISAL

1. Before the General Election, the Department conducted its own evaluation of a range of options for renewing the Tonbridge-Hastings service. A summary of this work and the conclusions are contained in the analysis enclosed with Mr Richard Bird's letter to Mr Michael Scholar of 28 March 1981.

2. Since the Election, we have carried out further appraisal of the 2 cheapest diesel options and of BR's electrification option. We have identified a further option for renewing the service with standard-bodied Class 150 Diesel Multiple Units; and we have examined the case for postponing any new investment until 1992 by means of refurbishing the existing rolling stock to last for another 5 or 6 years. The results of this work may be summarised as follows:

OPTION		NET PRESENT COST (£m)	
		Renewal in 1986	Renewal in 1992
I	Electrification	66.0	64.0
II	Narrow-bodied Diesel Units (Class 150)	65.0	62.5
III	Standard-bodied Diesel Units (Class 150)	63.5	60.0
IV	Mark V coaches, hauled by diesel locomotives	~~63.5~~ 63.0 *	62.0

Notes

A. The figures above differ from those in the evaluation sent by Mr Bird on 28 March in two respects:

* Amendment sent by Dept. of Transport (Mike Williams)

i. The net present cost of electrification in 1986 is £66m rather than £67m because we have included a sum for the value of the fixed works at the end of the project life. (A difference of £600,000 becomes £1m as a result of rounding.)

ii. The net present cost of narrow Class 150s in 1992 is slightly lower (by £500,000) to reflect a scaling down in our estimate of the likely cost of such a vehicle.

B. Tables containing a breakdown of the net present cost of each of the 4 optionms are attached. The figures have been agreed by BR, with the exception of the option for building Mark V coaches in 1992 which was evaluated later than the others.

3. While this evaluation indicates that, on central forecasts, the net present cost of the scheme could be reduced by postponing the major investment until 1992, and that the least-cost option in that year would be standard bodied DMUs, these conclusions are subject to serious reservations.

4. First, the major investment could be postponed only if the existing stock was refurbished, and had the asbestos removed from it, by the end of 1987. The cost of this work is est~~i~~imated at £55,000 a carriage. But there must be a risk that, when the carriages are opened up, this figure will prove to be an underestimate; and an increase in refurbishment costs could eliminate the saving from postponing the major investment.

5. Second, and accordingly, the better course is to go ahead with the major investment now. On that basis, the analysis suggsts that the least-cost option is the Mark V coaches (Option IV). But the costings for these coaches assume that the Mark I underframes are a free good, whereas it is likely that they would have an alternative use. The costings also assume a standard of comfort no better than that of a bus: standards comparable to those of the present vehicles, or of other long-distance commuter services,would cost more. These factors reduce or eliminate the financial advantage of this option.

6. The two best options, therefore, are electrification (Option I) and standard-bodied diesel units (Option III). The capital and maintenance costs of Southern Region EMUs are reasonably well-established. But the diesel vehicles are not yet built - the prototypes will not be available until next year and the figures in the analysis are, therefore, only a best estimate. The actual costs may turn out to be higher, and for that reason the electrification option is preferred.

ELECTRIFICATION

		Net Present Cost (£m) 1986	1992
1.	Fixed works, £25m over 3 years (BR figure)	20.5	14.6
2.	86 electric multiple units at £268,000 each (BR figure)	18.6	13.2
3.	Residual value of 86 EMUs in 2011, assuming 40 year life	-1.1	-1.6
4.	Scrap value of existing DEMUs (BR figure)	-1.2	-0.5
5.	Maintenance of existing DEMUs, 122 vehicles at about £19,000 each per annum (BR figure)	8.4	20.7
6.	Fuel for existing DEMUs at about £900,000 per annum (BR figure)	3.5	6.8
7.	Maintenance of 86 EMUs at £10,300 each per annum (BR figure)	8.3	5.0
8.	Power for EMUs (BR figure)	8.5	5.4
9.	Impact of rising fuel prices	1.9	1.9
10.	Maintenance of fixed works	1.4	1.0
11.	Residual value of fixed works	-0.6	-0.8
		68.2	65.7
12.	Revenue gain	-2.0	-1.5
		66.2	64.2

NARROW-BODIED CLASS 150 DMU

		Net Present Cost (£m) 1986	1992
1.	Fixed works £4.8m, mostly in the period 1987-1989 (BR figure)	3.3	3.3
2.	Maintenance of 122 existing DEMUs at about £19,000 each per annum (BR figure)	8.4	20.7
3.	Fuel for DEMUs at about £900,000 a year (BR figure)	3.5	6.8
4.	Scrap value of DEMUs	-1.2	-0.5
5.	Capital cost of 96 new narrow bodied DMUs at £310,000 per vehicle	23.8	16.2
6.	Residual value of DMUs assuming a 30 year life	-0.6	-1.4
7.	Maintenance costs at £17,500 per vehicle per annum	15.7	9.7
8.	Fuel costs for 96 vehicles at £0.914m per annum	9.5	5.3
9.	Impact of rising fuel prices	2.1	2.1
10.	Maintenance of fixed works (BR figure)	0.3	0.3
		64.8	62.5

MARK V COACH

		Net Present Cost (£m) 1986	1992
1.	Fixed works £4.8m	3.8	3.3
2.	Maintenance costs of DEMUs at £19,000 each per annum (BR figure)	8.4	20.7
3.	Fuel for DEMUs at about £900,000 per annum (BR figure)	3.5	6.8
4.	Scrap value of existing units	-1.2	-0.5
5.	88 Mark V coaches at £100,000 each	7.2	4.8
6.	Maintenance of Mark V coaches at just under £9000 per vehicle per annum	6.2	4.1
7.	11 diesel locomotives at £800,000 each	7.1	4.8
8.	Residual value of diesel locomotives, assuming a 30 year life	-0.6	-0.8
9.	Maintenance of 11 locomotives at £100,000 each per annum	8.6	5.7
10.	Fuel costs at about £1.2m per annum	10.4	6.2
11.	96 narrow-bodied Class 150s at £310,000 per vehicle.	6.3	5.5
12.	Maintenance of 96 Class 150s at £17,500 each per annum	1.7	0.8
13.	Fuel for Class 150s at £0.9m per annum	0.9	0.4
14.	Residual value of DMUs	-3.3	-3.5
15.	Impact of rising fuel prices	3.5	3.5
16.	Maintenance of fixed works	0.3	0.3
		62.8	62.1

STANDARD-CLEARANCE CLASS 150 DMU

		Net Present Cost (£m) 1986	1992
1.	Fixed works costing £11.7m over 3 years (BR figure) (1984-6; 1989-91)	10.0	6.8
2.	Maintenance of 122 existing DEMUs from 1982 at about £19,000 per annum (BR figure)	8.4	20.7
3.	Fuel for DEMUs (BR figure)	3.5	6.8
4.	Scrap value of DEMUs	-1.2	-0.5
5.	Capital cost of 86 Class 150 DMUs at £270,000 each	18.8	12.8
6.	Residual value assuming a 30 year life	-0.4	-1.4
7.	Maintenance of 86 DMUs at £17,500 each per annum	14.1	8.7
8.	Fuel costs of 86 DMUs at £818,000 per annum	8.5	4.7
9.	Impact of rising fuel prices	2.1	2.1
10.	Fixed works maintenance	0.3	0.3
11.	Residual value of fixed works	-0.6	-0.8
		63.5	60.2

CONFIDENTIAL

C

RECEIVED
3 MAY 1983
SECRETARY OF STATE
TRANSPORT

10 DOWNING STREET

C.

From the Private Secretary

28 April, 1983

Dear Richard,

Hastings-Tonbridge Rail Service

The Prime Minister held a meeting on Wednesday, 27 April to discuss the renewal of the Hastings-Tonbridge rail service. Your Secretary of State, Mr. Ian Gow, M.P., Mr. Alan Walters and Mr. Osmotherly were present.

Your Secretary of State said that there were three options for renewing this service. It would be possible to renovate and patch up the existing stock, to provide some further years service. Alternatively diesel bus stock could be developed and used as a replacement for the existing stock. The third alternative was to single the track through the tunnels and electrify it using the third rail method.

In discussion, it was noted that the British Rail submission had been shown to be inadequate in a number of important respects. The costing of the diesel bus option must be subject to particular uncertainty, since this would be breaking entirely new ground in British railway operations. The economics of the diesel and the electric options were not markedly different from one another, and it seemed likely that the local pressure groups would be much less enthusiastic about the electrification, once they realised that this would mean withdrawal of all services for a number of months while the new track was laid.

The Prime Minister said that your Secretary of State, together with Mr. Gow, should consult the Government supporters most closely concerned to test the strength of their declared preference for electrification. If, as seemed likely, they saw great difficulty in the prospect of losing their rail service for a number of months altogether, while electrification took place, the Government should conclude in favour of the diesel option.

/I am

CONFIDENTIAL

I am sending a copy of this letter to John Gieve (Chief Secretary's Office).

Yours sincerely,

Michael Scholar

Richard Bird, Esq.,
Department of Transport

CONFIDENTIAL

Jie TMP

c Ferdie Mount

BR Fares

10 DOWNING STREET

From the Private Secretary

27 September 1983

Dear Dinah,

TONBRIDGE-HASTINGS RAILWAY LINE AND RAILWAY ELECTRIFICATION

The Prime Minister has seen your Secretary of State's minute of 20 September about the proposal to electrify the Tonbridge to Hastings line.

The Prime Minister has commented that it was her impression that it had been decided in May to go for the diesel option, following a meeting between the previous Transport Ministers, together with Ian Gow and local Members concerned (Sir Geoffrey Johnson Smith, Messrs. Godman Irvine, Stanley and Warren). The Prime Minister is opposed to the proposal to electrify this line, particularly in view of the general criteria for electrification. She has asked us to arrange a discussion with your Secretary of State and officials and with the Chief Secretary; she will be grateful if, in advance of that discussion, you would let us have the updated investment appraisal of both diesel and electric options, and a note on the general criteria for electrification.

I am sending a copy of this letter to John Gieve (Chief Secretary's Office).

Yours sincerely,

Michael Scholar

Miss D.A. Nichols,
Department of Transport.

CONFIDENTIAL

CONFIDENTIAL

23 September 1983

MR. SCHOLAR

cc Mr. Mount

THE HASTINGS-TONBRIDGE LINE

Mr. King has not quite understood the sense of the April meeting held to discuss this project. It was noted then that the diesel option was marginally superior in financial terms. Mr. Gow's subsequent meeting with the MPs concerned revealed no strong feelings either way. This should have been the end of the matter: we would go for diesel.

Mr. Mitchell's subsequent research confirms that the diesel option is likely to be marginally better. The enthusiasm which he has discovered among the users seems to be largely tactical: users fear that electrification will help to guarantee the future of their line whereas it is thought that, if narrow-bodied diesel rolling stock continues, the line is likely to be reviewed whenever this wears out.

The fact remains, however, that neither the Ministers nor their officials at Transport feel that their own, fairly detailed assessment of the options justify rejection of BR's preferred electrification option. The 'life-time' costs (over 30 years) of electrification are reckoned to be £4.5 million higher than the best diesel option, but it would generate £2 million more in revenue because it offers quicker journeys and it would standardise Southern Region's rolling stock and make life easier operationally. The diesel options would involve new equipment whose costs are uncertain. We agree that the advantage of replacing the diesels is not sufficiently decisive to justify rejecting BR's preferred choice.

However, we remain attracted to the idea of cheaper, light-bodied trains. These would involve bus bodies on existing underframes, pulled by existing locomotives. This option would imply no disruption of the line and no singling at tunnels. It would not be as comfortable as entirely new equipment. It wouldn't last as long either. The initial costs of this option are perhaps one-third of the electrification project but on the Department of Transport's 30 year costings it appears no cheaper than the diesel option, because capital expenditure would be needed in 15-20 years' time. However, by then, who knows what new options may exist, or how the future of the line itself may look?

We would not urge that the Prime Minister should object to the line Mr. King proposes unless she feels it's worthwhile asking for a reconsideration of the option involving bus bodies on existing underframes, on the grounds that initial costs are lower and that other options may become apparent in 15 years or so, when this stock needs replacement. Mr. King will almost certainly reply that this is an interesting concept which he has in mind at the "cheaper" end of the market; it would not be acceptable on the main commuter routes.

The reply should emphasise, in any event, that the consideration of this case underlines the need to examine BR's investment appraisal very closely.

NICHOLAS OWEN

2

CONFIDENTIAL

(1)

CC NO

This must be discussed again with me. Please look out the notes on electrification for me

Prime Minister

Prime Minister

Ian Gow (Flag A) recorded a decision in favour of diesel. Now D/Tp have gone back to electrification. Reply as at X at Flag B?

MCS 23/9

TONBRIDGE - HASTINGS RAILWAY LINE AND RAILWAY ELECTRIFICATION

Pt 6

David Howell minuted you on 10 March about the Railways Board's proposals to electrify the Tonbridge-Hastings line, and you discussed the issues with him on 27 April. See MCS to DOT 28.4.83 (Pt 6

David Howell's conclusion was that, in purely financial terms, electrification seemed marginally less attractive than some possibilities for diesel operation which my Department had worked out. But the figures for diesel were less certain because the vehicles did not yet exist, and problems in development might change the position. He believed that it was right to go for electrification partly because it would be the most popular solution with users of the line, and rather more because there was no option which he could point to as being so certainly better as to justify preferring his judgement to the Board's.

At the meeting on 27 April, I understand you agreed that the economics of the diesel and electric options were not markedly different. However, you thought that the local supporters of electrification might be much less enthusiastic if they realised that it would mean withdrawal of all services for a number of months while new track was laid. David Howell and Ian Gow undertook to consult our supporters to test the strength of their preference for electrification in the light of that prospect. They did have a private word; but then the Election intervened, and I inherited the problem still unresolved.

Previous papers please

CONFIDENTIAL

I asked David Mitchell to take another very close look at the economics of the diesel and electric options. He has done that, and has evaluated at least one significant diesel option not already looked at which is, narrowly, the best of the diesel options. But the result of this extra work has been to confirm the same broad picture which we had before. There are a number of diesel options which are close in value to the electrification option, and which could turn out to be marginally better in financial terms. But there is no diesel option which is outstandingly better than electrification favoured by BR and the diesel options are still subject to the risks associated with developing prototypes. There is also an operational aspect which is important when assessing the balance between close alternatives. The diesel train of this power is considerably slower in acceleration and causes real problems in fitting it in to the very tight timetabling at the London terminals with the tremendous number of standard electric trains.

We have now got better information about the disruption to services from the civil engineering work which would be needed to enable standard-width trains (either diesel or electric) to go through the narrow tunnels. There is a difficulty with one tunnel, where singling is not possible and both lines would have to be laid in concrete to preserve safe clearances. On the Board's judgement, that work would take about three months, with single track working during the week but complete closure, with a substitute bus service, on about ten weekends.

David Mitchell raised the question of disruption at a further meeting with our supporters. It is clear that there is a lot of anxiety at the present situation, where the need for specially narrow stock means that the future of the line

CONFIDENTIAL

comes into question each time the stock wears out. There is strong support for a move which would put their line onto the same footing as all the other commuter lines in the south east, and the short term disruption is seen as a price well worth paying for that. Indeed I have just received a very strong letter from Patrick Mayhew urging the need for an immediate announcement of this electrification.

The study of the history of this scheme confirms the need, as I said at E(NI), for the Board's investment appraisal methods to be improved. However, in respect of this case David Mitchell has now looked at it in further detail and has discussed it fully with me. In the light of his analysis, I think he is right to recommend that the Board's proposal should be approved. This is what I now propose, and in view of your interest, I therefore thought you should know that, subject to your agreement, I propose to write to the Chairman accordingly.

I am sending a copy of this minute to Peter Rees.

No.
Further discussion please. We had agreed the previous decision and I'm quite clear that you have been persuaded to reopen it. It is a bad decision in view of our stated criteria for electrification.

TOM KING

20 September 1983

CONFIDENTIAL

TRANSPORT: BR Fares
Pt 6

SUBJECT CC MASTER.

FILE SW
bcc: Mr. Owen

10 DOWNING STREET

From the Private Secretary

28 April, 1983

Hastings-Tonbridge Rail Service

The Prime Minister held a meeting on Wednesday, 27 April to discuss the renewal of the Hastings-Tonbridge rail service. Your Secretary of State, Mr. Ian Gow, M.P., Mr. Alan Walters and Mr. Osmotherly were present.

Your Secretary of State said that there were three options for renewing this service. It would be possible to renovate and patch up the existing stock, to provide some further years service. Alternatively diesel bus stock could be developed and used as a replacement for the existing stock. The third alternative was to single the track through the tunnels and electrify it using the third rail method.

In discussion, it was noted that the British Rail submission had been shown to be inadequate in a number of important respects. The costing of the diesel bus option must be subject to particular uncertainty, since this would be breaking entirely new ground in British railway operations. The economics of the diesel and the electric options were not markedly different from one another, and it seemed likely that the local pressure groups would be much less enthusiastic about the electrification, once they realised that this would mean withdrawal of all services for a number of months while the new track was laid.

The Prime Minister said that your Secretary of State, together with Mr. Gow, should consult the Government supporters most closely concerned to test the strength of their declared preference for electrification. If, as seemed likely, they saw great difficulty in the prospect of losing their rail service for a number of months altogether, while electrification took place, the Government should conclude in favour of the diesel option.

/I am

I am sending a copy of this letter to John Gieve (Chief Secretary's Office).

M. C. SCHOLAR

Richard Bird, Esq.,
Department of Transport

CONFIDENTIAL

Prime Minister #2

You asked to see the full case and costings. These are attached. We are arranging ~~Agree~~ to a meeting with Mr Howell? (It will be at least a week away, given your diary). MCW 25/4

MR. SCHOLAR

HASTINGS/TONBRIDGE RAIL SERVICE

The Private Secretary (DoT) letter of 22 April can only be seen in the context of the fact that British Rail abhors diesel pockets more than nature abhors a vacuum. It is notable that our enquiry has induced the Department to do its own evaluation and increased the electrification cost by £20 million and reduced the diesel alternative by £10 million. A £30 million relative change from the original submission!

Now, on the Department's assessment, the diesel alternative is £4 million cheaper than the electrification programme. One would have guessed that this would have led the Secretary of State to prefer the diesel programme, first because it is cheaper, and secondly because it is not an all-or-nothing proposition and could at various stages be stopped or amended. The electrification proposal is an all-or-nothing proposition: all is sunk.

Not so. The DoT argues that they are more or less certain of the electrification costs, but on the other hand they fear that the diesel costs might be higher than the estimate. But this is nonsense; if they have done their estimates right, and made the proper expected evaluation, then the likelihood of the costs being higher is exactly balanced by the likelihood of them being lower.

The DoT submission is admitting to the fact that they produced deliberately biased figures, and biased too in favour of the diesel alternative. This has all the appearance of desperation after finding that their own figures discredit the electrification option.

British Rail's anxiety to show that the diesel alternative is inferior has led the Department considerably to improve on British Rail's submission. There is, however, another alternative low-cost option which was rejected for consideration by British Rail Board and not reviewed by DoT (this was suggested by the Director of Research of British Rail in 1982). This option involved buying new coaches made up of bus-type bodies on existing Mark I underframes. The bodies could be built in the time frame by a bus builder. They would be hauled by Class 33 locomotives (on the existing restricted clearances). These locomotives would be fitted with controls to enable them to be operated from the remote end of the train as a pusher as well as the conventional puller.

CONFIDENTIAL

These bus-bodied coaches would cost much less than the normal coaches. The capital cost was about £8.2 million.

Like the saga of the 1981 Electrification Report, the Hastings/ Tonbridge project has followed the same pattern of, first, DoT supporting British Rail's case, second, our questioning of that case, third DoT revising it very considerably, and, fourth, coming back with a much modified argument. I am perfectly certain that British Rail have suppressed many low-cost options, similar to that suggested by the Director of Research in 1982, in order to make their case for electrification apparently water-tight. We should oppose it.

ALAN WALTERS
25 April 1983

Tran BR Pt6

CF/ PA

MLS 25/4.

CONFIDENTIAL

LEC NO

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

01-212 3434

Told McBird → Resubmitted figures.

I don't believe the figures. — but in any event I should need a much more detailed paper which includes revenue assessments and the basis of calculation of any figure both capital and current ...

Prime Minister

Mr Howell feels strongly about this. Shall we arrange a meeting — Mr Howell + an official, and Alan Walters?

MLS 22/4

M Scholar Esq
Private Secretary
10 Downing Street
Whitehall

22 April 1983

Dear Michael,

THE HASTINGS - TONBRIDGE RAIL SERVICE

Thank you for your letter of 14 April.

!! As the Prime Minister suspected, the Railways Board's submission did underestimate the cost of electrification and it also over-estimated the costs of the diesel alternatives. The Department therefore made its own evaluation, with costings based on both the investment and operating costs of all the options over a 30-year period. That evaluation included the two cheapest diesel options, which the Board's submission mentioned but dismissed without evaluation. The Department's work produced the results summarised in Table 1 of the appraisal attached to my letter of 28 March.

The Secretary of State reached his conclusion on the basis of the Department's evaluation, not the Board's. As you will see from the attached Table, the difference, in financial terms, between the options is small - £67m for the third rail electrification scheme preferred by the Board compared with £63m for the two most sensible and cheapest diesel options. But whereas third-rail electrification is tried and tested and the rolling stock that would use it already exists on neighbouring lines, the diesel replacements, which would have to be specially narrow to fit the tunnels, have not yet been developed. It is all too likely that the new vehicles would turn out to be more expensive than we have estimated; and the Board have tended to under-estimate the cost of life-extending old stock. By contrast, the Board have a pretty good record in estimating and containing the cost of electrification, and the Secretary of State intends to press the Board to reduce the cost of their preferred scheme. In other words, we are comparing the known and built with the unknown and unbuilt, and standard stock with a specialised product.

In short, it was and remains the Secretary of State's firm view that patching up the existing stock and renewal with specially narrow diesel stock could well turn out to be the most expensive course. He does not believe that it would

CONFIDENTIAL

be right for the Government to make BR take this risk, and it is certainly not what the customers want. That is why the Secretary of State decided in favour of electrification and against the diesel options.

The existing stock is old and corroding and visibly deteriorating. There is growing pressure from the Government's supporters for an early announcement of approval to the third rail electrification of this service. The Secretary of State remains convinced that this would be the right course - for the reasons given in this minute and in previous correspondence - and wishes to make the announcement as soon as possible.

I am copying this letter to John Gieve in the Chief Secretary's office.

Yours sincerely,

Richard Bird

RICHARD BIRD
Private Secretary

2F

A. Board's Preferred Third Rail Electrification Option

Relevant lifetime costs derived from Board's submission	£46m
Relevant lifetime costs as estimated by the Department	£67m

The cost of electrification and track work in the Board's submission is £24m. The Department has also used this figure. The difference between the Board's and the Department's estimates of lifetime costs arises because the Department has included the cost of rolling stock which the Board treated as free. The Board's estimate included an allowance of £4m for increased revenue; the Department has reduced that figure by half.

B. Costs of Best Diesel Alternatives

Board's estimate of relevant lifetime costs of the best diesel option which they considered	£73m

Department's estimate of lifetime costs of alternative diesel options:

option G:	£63m
option H:	£63m

Option G involves the same patching up of existing units, as in the Board's option, with the introduction of new stock in the early 1990s. It is cheaper because it involves an alternative design of rolling stock, with higher seating capacity, and therefore fewer vehicles with savings in capital and operating costs. Option H involves diesel replacement in 1986, but again involves an alternative design of cheaper rolling stock.

C. Costs of Life Extension (Patching Up)

The Department's option G includes the life extension of all of the existing vehicles at a cost of some £55,000 each. This is in line with the cost of similar work on other types of vehicles with asbestos insulation requiring to be removed. On past experience the costs of life extension are more likely to be under- than over-estimates. Corrosion is a special problem with these vehicles which when built included parts from earlier vehicles. There are only just enough for the service. If individual vehicles turn out to be in particularly bad condition and have to be scrapped, there is no spare capacity to maintain service quality.

All diesel powered vehicles involve more expensive capital and maintenance costs than electric vehicles but do not, of course, require lineside equipment.

D. Firmness of Cost Estimates

The Board's record on estimating the costs of electrification is a good one. The present proposal involves no untried equipment - all is already in wide use on the Southern Region. Both of the best diesel options involve some untried items which exist only as prototypes now under construction. Their capital and maintenance costs are inevitably less firm than those for existing designs of electric vehicles and associated lineside equipment.

CONFIDENTIAL

bc FM 19 AW

JC

10 DOWNING STREET

From the Private Secretary

14 April 1983

THE HASTINGS TO TONBRIDGE RAIL SERVICE

Many thanks for your recent letter about the Hastings to Tonbridge rail service with which you enclosed the Railways Board's submission together with the summary of the Department of Transport's economic evaluation of the options.

I have shown these papers to the Prime Minister. Mrs. Thatcher has commented that, although the Railways Board gives as the cost of its preferred electrification option some £24 million, a fuller definition of the lifetime cost of electrification is costed by the Department of Transport at £67 million. She suspects that the cost of electrification is being understated in the submission, and the cost of keeping the line open by an efficient renewal programme is being overstated.

The Prime Minister's conclusion is that the line must be kept open, but by renewing, and gradually improving, the existing service, and not by electrification.

I am sending a copy of this letter to John Gieve in the Chief Secretary's Office.

M. C. SCHOLAR

Richard Bird, Esq.,
Department of Transport.

RM

CONFIDENTIAL

MR. SCHOLAR

HASTINGS/TONBRIDGE RAIL SERVICE

BR's argument, which DoT does not contest, is that it would be technically tidy to electrify this diesel pocket and make the Southern system wholly electric.

There is also a secondary, but in practice more important, reason. Once they have won the Hastings/Tonbridge electrification, then the East Coast electrification will be thought to be conceded much more easily. Similarly the APT development will be thought to be more likely to be approved. Hastings/Tonbridge is the "foot in the door". It will preempt proper Serpell consideration. Using Hastings/Tonbridge as a lead is a very good ploy since there is an active railway lobby and the area is predominantly Tory.

British Rail have considered in a cursory way alternatives but have rejected them because they are alleged to be technically inferior, even though they may be financially much better. For example, the BR Director of Research in 1982 suggested purchasing new loco-hauled coaches made up of bus type bodies on existing under frames, and hauled by Class 33/2 locomotives. This would have cost only £8.2m. The option was rejected, however, because it would mean bringing the locomotives out of store, and above all because it would not eliminate the diesel-operated pocket.

Similarly, British Rail have rejected the "life extension" of the existing services by postulating the option in the worst way. The point is that life extension is not an all-or-nothing proposition; it can be done gradually. And above all it preserves open all future options. Electrification would, on the other hand foreclose all future options.

As an investment appraisal it is quite scandalous. My "back-of-the-envelope" calculations suggest that BR's preferred electrification would cost at least £20m and probably £30-£40m more than keeping the line open by an efficient renewal programme.

British Rail have clearly given up proper investment appraisal and are using political pressure instead. We could respond to this pressure by arguing first that single line electrification would

/preclude

CONFIDENTIAL

preclude necessarily a much better alternative to be developed later within the full system; secondly that "life extension" of the present system could be associated with reductions in fares which recognise the somewhat inferior service. Residents of Hastings and Tonbridge who are charged standard fares for a substandard service have a reasonable complaint; let's recognise it by, say, reducing fares on these lines by 15%-20%.

This combination of lower fares plus a modest improvement of the worst rolling stock would be the best strategy that would go some way towards satisfying the local political aspirations.

AW

ALAN WALTERS
13 April 1983

(1)

Prime Minister

Ferdie Mount thinks we should not agree to electrification, as proposed by BR and Dept of Transport. Alan Walters powerfully supports this view (flag C). Ian Gow, having carried out the consultation you asked him to do, recommends in favour of electrification.

Agree to electrification, or should I write as at X in Ferdie's note?

MLS 13/4

Dr Scholar

HASTINGS & TONBRIDGE RAILWAY LINE

1. Thank you for your Note of yesterday's date, which I return, plus the file.

2. I have spoken to:-

(a) Kenneth Warren (Hastings) who is very strongly in favour of electrification; who says that there is intense local feeling on the matter; and that failure to electrify would be electorally damaging to him in his constituency.

(b) John Stanley (Tonbridge & Malling) who says that the line must be kept open and that he would prefer electrification.

(c) Patrick Mayhew (Royal Tunbridge Wells) who spoke with real intensity of feeling in favour of early electrification. He says that there is the strongest feeling in the constituency about this and he would be dismayed if electrification did not proceed.

3. I understand (although I have not spoken to them) that Geoffrey Johnson Smith and Bryant Godman Irvine also feel very strongly about this issue.

4. One of the problems is that all five Conservative Members of Parliament have had regular meetings, over a long period of time, with British Rail and have adopted a high profile public posture in their constituencies as being

favourable campaigners for the electrification case. According to Patrick Mayhew, Reggie Eyre had said, in terms that electrification would proceed.

5. I think that the case has been put up by David Howell is a lousy one. However, David Howell came to see me yesterday and his depth of feeling on this subject (however unjustified) is intense. He thinks that it will be very damaging to him and to his Department if his recommendation is overruled by the Prime Minister.

6. Bryant Godman Irvine is a man of no consequence; but the other Members are; though I say this without enthusiasm, I recommend that the Secretary of State and the Tory Members should have their way.

Tessa

12.4.83 pp IAN GOW

10 DOWNING STREET

Mr Gow

Please would you let me know the outcome of your discussions with Messrs Stanley and Warren? I will then resubmit these papers to the Prime Minister.

MCS 11/4

WARREN - STRONGLY IN FAVOUR OF ELECTRIFICATION
MUCH LOCAL FEELING - ELECTORALLY VITAL

CC/10

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

SECRETARY OF STATE FOR TRANSPORT

Miss J M Swift
PS/Chief Secretary
Treasury Chambers
Parliament Street
LONDON SW1

7 April 1983

Dear Miss Swift

Thank you for sending Richard Bird a copy of your letter of 31 March to Michael Scholar about the renewal of the Hastings-Tonbridge rail service.

The Secretary of State has studied the Chief Secretary's comments. He had, of course, considered all the points raised by the Chief Secretary and his views on them were set out fully in Richard Bird's letter of 28 March to Michael Scholar.

The Secretary of State welcomes the Chief Secretary's agreement that there should be a demonstration as soon as possible of the benefits of innovation and diversity. But Hastings-Tonbridge is not the right test case for mounting a successful demonstration and, in any event, as the Chief Secretary recognises, it is not possible to pursue the more radical options until the Government is further ahead with its consideration of the longer-term issues. This point is dealt with in paragraphs 7-10 of the letter of 28 March.

As you know from paragraphs 2 and 3 of Richard Bird's letter, the Secretary of State has considered whether he should delay a decision but has concluded that this would not be justified. The attached copy of a letter from a local travellers' association illustrates clearly the need to settle the form of replacement now. Even so, the modernised service would not be in full operation before 1986.

As to remedying the weaknesses in the Board's investment procedures, the Secretary of State is grateful for the Chief Secretary's support for the action he is taking, as recorded in the penultimate paragraph of the letter of 28 March.

Finally, the Secretary of State is very conscious of the timetable for the local government elections. The political pressure for an announcement about Hastings-Tonbridge before the local elections is intense, and is likely to be reflected, for example on 20 April when the Secretary of State will next be First Order for Questions.

I am sending a copy of this letter to Michael Scholar.

Yours sincerely

Andrew Melville

ANDREW MELVILLE
Private Secretary

2F

TUNBRIDGE WELLS & DISTRICT RAILWAY TRAVELLERS ASSOCIATION

TO: Patrick Mayhew, QC, MP
for Tunbridge Wells,
House of Commons,
London, SW1A 0AA.

From the Chairman:
[illegible].T.Jones,
[illegible],
M[illegible] Road,
Tunbridge Wells,
Kent, TN1 1S[illegible].
Tun.Wells (0892) 35639
office: 01-606-4455 x 652

27 March 1983

Dear Patrick,

Thank you for your letter of 18 January agreeing with me about the urgengy of a decision to modernise the Tunbridge Wells - Hastings line (although it is of course in fact the whole route from Tonbridge to Hastings via Tun.Wells that is in question). I write again now, two months later, because there has as yet been no further visible progress, meanwhile the condition of the existing rolling stock is continuing to deteriorate. In particular word has come to me that one of the existing 6-coach train units is now having to be reduced to five carriages because one coach has deteriorated to the extent that it cannot remain in service without a major overhaul, which is oviously not economically sensible to carry out considering that the whole thing ought to be withdrawn from service in about three years. If it transpires that there will, as a result, no longer remain sufficient 6-coach train-sets to make up (in pairs) the principal commuter trains into 12 coaches, there is bound to be serious overcrowding with many passengers standing regularly for 45 minutes each way in the peaks, which hardly makes a good start and finish to a hard day's work in London. Already I am aware of some overcrowding on one of the tail-end commuter trains, that is only 10 coaches (2 x 5) because there are no spare 6-coach sets. (This is the 08.17 from Tun.Wells Central.)

If one carriage has, without much forewarning, to be taken out of service this week, who can say how long it will be till it happens to another? Then suppose it happens in a diesel-multiple-unit that has already been reduced to only 5 coaches. It will not be very popular, but it will be no use blaming BR; they cannot properly or responsibly spend any money beyond minor pathing until a decision on the funding of the line's modernisation has been made by the Secretary of State. So can you please convey our increasing anxieties to the Secretary of State and elicit from him ~~xkxx~~ by what date we can expect to hear something positive.

I must stress that there is no longer time to wait for a politically most expedient timxing of an announcement, such as just before an election or in conjunction with some bad news such as closure of the line to Eridge. Indeed I must emphasise that if electrification is authorised, it would be a sad loss to Tun.Wells to lose the line to Eridge, but if not then it would be a disaster in view of the effect on the Tonbridge to Tun.Wells service. (Either way closure would be a disaster for Groombridge and East Sussex.) Hence the Hastings line must be decided on at once, and then an Eridge decision can take a few months longer so as to take account of the Hastings decision which must be made independently. I believe we ~~xx~~ are already just past the cut-off point for a Hastings decision to be in time to get the job done in time before the existing diesels are scheduled to commence withdrawal from service, even without allowing for the unexpected as has now happened to one unit. Serpell with all its unanswered cuestions must not distract from an urgent decision.

Yours sincerely

I am sending a copy of this letter to Michael Scholar.

Yours sincerely

Andrew Melville

ANDREW MELVILLE
Private Secretary

2F

(7

TUNBRIDGE WELLS & DISTRICT RAILWAY TRAVELLERS ASSOCIATION

TO: Patrick Mayhew, QC, MP
for Tunbridge Wells,
House of Commons,
London, SW1A 0AA.

From the Chairman:
H.T. Jones,
[illegible],
11 Guildford Road,
Tunbridge Wells,
Kent, TN1 1SW.

Tun.Wells (0892) 35639
office: 01-606-4433 x 632

27 March 1983

Dear Patrick,

Thank you for your letter of 18 January agreeing with me about the urgency of a decision to modernise the Tunbridge Wells - Hastings line (although it is of course in fact the whole route from Tonbridge to Hastings via Tun.Wells that is in question). I write again now, two months later, because there has as yet been no further visible progress, meanwhile the condition of the existing rolling stock is continuing to deteriorate. In particular word has come to me that one of the existing 6-coach train units is now having to be reduced to five carriages because one coach has deteriorated to the extent that it cannot remain in service without a major overhaul, which is oviously not economically sensible to carry out considering that the whole thing ought to be withdrawn from service in about three years. If it transpires that there will, as a result, no longer remain sufficient 6-coach train-sets to make up (in pairs) the principal commuter trains into 12 coaches, there is bound to be serious overcrowding with many passengers standing regularly for 45 minutes each way in the peaks, which hardly makes a good start and finish to a hard day's work in London. Already I am aware of some overcrowding on one of the tail-end commuter trains, that is only 10 coaches (2 x 5) because there are no spare 6-coach sets. (This is the 08.17 from Tun.Wells Central.)

If one carriage has, without much forewarning, to be taken out of service this week, who can say how long it will be till it happens to another? Then suppose it happens in a diesel-multiple-unit that has already been reduced to only 5 coaches. It will not be very popular, but it will be no use blaming BR; they cannot properly or responsibly spend any money beyond minor patching until a decision on the funding of the line's modernisation has been made by the Secretary of State. So can you please convey our increasing anxieties to the Secretary of State and elicit from him ~~xxxx~~ by what date we can expect to hear something positive.

I must stress that there is no longer time to wait for a politically most expedient timing of an announcement, such as just before an election or in conjunction with some bad news such as closure of the line to Eridge. Indeed I must emphasise that if electrification is authorised, it would be a sad loss to Tun.Wells to lose the line to Eridge, but if not then it would be a disaster in view of the effect on the Tonbridge to Tun.Wells service. (Either way closure would be a disaster for Groombridge and East Sussex.) Hence the Hastings line must be decided on at once, and then an Eridge decision can take a few months longer so as to take account of the Hastings decision which must be made independently. I believe we ~~xx~~ are already just past the cut-off point for a Hastings decision to be in time to get the job done in time before the existing diesels are scheduled to commence withdrawal from service, even without allowing for the unexpected as has now happened to one unit. Serpell with all its unanswered questions must not distract from an urgent decision.

Yours sincerely

TRANSPORT 7
BR fares
Pt 6

cc/N.O

CONFIDENTIAL

Treasury Chambers, Parliament Street, SW1P 3AG

Michael Scholar Esq
Private Secretary
10 Downing Street
Whitehall
London SW1

31 March 1983

Dear Michael,

HASTINGS-TONBRIDGE RAIL SERVICE

The Chief Secretary has seen Richard Bird's letter (undated) in response to your letter of 14 March about the renewal of the Hastings-Tonbridge railway.

He is not convinced that an early decision has to be taken on this proposal and would prefer more time to allow the alternative to be evaluated more thoroughly. It may be true that the alternative options already considered would not produce any worthwhile savings but there are more radical options that could be considered.

It would be unfortunate if the first major investment proposal put forward following Serpell could not be used as a test case for some experiments in innovation and diversity. He recognises that there are political difficulties in allowing the present service to deteriorate and that it may not be possible to pursue some of the more radical options until we are further ahead with our consideration of the longer term issues of railway policy.

He believes that it will be important to ensure that the steps being taken by the Secretary of State to remedy the weaknesses in the Board's investment procedures are followed through and that the Department is consulted at the earliest possible stage about all major projects to ensure that alternatives are properly considered and evaluated in good time.

I am sending a copy of this letter to Richard Bird.

Yours sincerely

MISS J M SWIFT
Assistant Private Secretary

CONFIDENTIAL

M.C.A/Mec

Transport

10 DOWNING STREET

Ian Gow

Please see Ferdie Mount's note about Hastings-Tonbridge. I have already sent you a copy of David Howell's office's further letter on the subject.

May we have a word?

MCS 30/3

1. MANY MANY THANKS.
2. I HAVE CHANGED SIDES
3. D.A.R.H. IS WRONG. YOU ARE RIGHT. I.G. 31/3/[illegible]

MR MOUNT

30 March 1983

cc Mr Scholar
Mr Walters O/R

HASTINGS-TONBRIDGE RAIL SERVICE

I enclose a note on this proposal.

I recommend stalling on this project because:

1) its costs are higher than BR claim;

2) the benefits of closure have not been assessed.

NICHOLAS OWEN

THE HASTINGS-TONBRIDGE RAIL SERVICE

In the context of the Serpell Report this line is not by any means a prime candidate - or even a candidate at all - for closure yet, to judge from the figures available to us, the investment which would be necessary to sustain this line in the longer term appears to be highly unprofitable. This paradoxical situation is perhaps a manifestation of the poor overall economics of the railway system.

According to Serpell, the Hastings-Tonbridge line, and the Eastbourne-Canterbury section to which it links, would be eliminated under the severest option discussed - a so-called Option A, "the viable option". This implies that the direct costs of these sections exceed 85% of their revenues. However, the HT line would survive under the less severe Option B, which include those London commuter services which would cover their direct costs and their allocated infrastructure costs (this suggests then, that although the HT's direct costs exceed 85% of the revenues, there is sufficient margin to cover the infrastructure costs). More generally, the London and South-East network is, according to Alfred Goldstein's Minority Report, among the most profitable parts of the entire railway system. This explains why, in preparing the present investment proposal, BR proceeded on the basis that closure was out of the question. The issue to be resolved was how to sustain the HT line in the most cost-effective way.

Benefits of Closure

No analysis of the costs and benefits of closure has been undertaken, for the reason just mentioned. However, it is possible to infer from BR's analysis of profit contributions (Appendix B, attached) that closure would make sense. Although the line is currently making a positive contribution to BR's cash flow of over £2 million a year, leaving aside the line's share of system costs, the contribution to cash flow would be significantly greater - £4.9 million a year from 1988 onwards - if the line was closed at end-1987 and that such business as could be retained were switched to other lines, at no apparent extra cost or additional investment. In contrast, BR propose to spend £24 million (in fact, considerably more - see below) to sustain a line with the prospect of net contribution of around £4 million a year in the 1990s - less than would be achieved by investing nothing at all.

BR's Option

All these figures are probably optimistic. In the first place, BR's traffic forecasts assume constant revenue in real terms without any serious attempt to assess the impact of competition from alternative modes of transport. Secondly, as the Department of Transport's analysis reveals, BR have grossly underestimated the costs of the project, mainly by costing to the project as a free resource, 80 or so vehicles on the grounds that they would otherwise be scrapped. This is unlikely, and even if it were so, the maintenance cost of this ageing rolling stock would be considerable; indeed it is precisely this argument which is driving this project forwards to Ministers' consideration. The Department of Transport have reworked the costing of the proposals to take this and other factors into account. Their costings (£6~~0~~7 million ~~and upwards~~) are significantly higher.

If new investment is to be undertaken, BR's proposal should be adopted, for although it is marginally more expensive than some alternatives, the additional cost (£4 million) of minimising the single line sections would probably justify itself in reliability and commercial appeal.

Conclusions

In a limited, railway context a case for proceeding is understandably appealing; if one were to begin a programme of closures one would not start with this line. However, in national terms, an investment as doubtful as this does not justify itself. The poor quality of investment in this country, both in the public and private sectors, is an important cause of our low rate of growth. Public expenditure on investment projects eventually crowds out other projects, via its effects on interest rates and taxation. It follows that bad projects tend in the long-term to depress national income. Supporters of the proposal will point to the social and political costs of closure, but poor economic performance has its social and political costs, too - social tensions, inability to finance social services, most of which have greater relevance than rail travel.

These considerations argue for not proceeding with the projects, at least until the closure option has been properly costed. This would delay the project slightly, if indeed that were the outcome, but this does not appear to be a critical factor. No safety grounds are mentioned in the analysis, nor is there evidence that service levels have been affected by the relative age of the rolling stock.

I recommend that BR and the Department of Transport be asked to provide a costed closure option before any decision is taken.

NICHOLAS OWEN

PROFIT CONTRIBUTION

	1982 £000	1983 £000	1984 £000	1985 £000	1986 £000	1987 £000	1988 £000	1989 £000	1990 £000	1991 £000	1992 £000	1993 £000	1994 £000	1995 £000
ON INVESTMENT (See Note 1)														
Earnings	8304	8304	8304	8304	8304	8304	-	-	-	-	-	-	-	-
Train Working Expenses	5058	5058	5058	5058	5058	5058	-	-	-	-	-	-	-	-
Terminal Expenses	984	984	984	984	984	984	-	-	-	-	-	-	-	-
	6042	6042	6042	6042	6042	6042	-	-	-	-	-	-	-	-
Margin Before Interest	2262	2262	2262	2262	2262	2262	-	-	-	-	-	-	-	-
ON INVESTMENT (See Note 2)														
Earnings	-	-	-	-	-	-	4911	4911	4911	4911	4911	4911	4911	4911
Train Working Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terminal Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Margin Before Interest	-	-	-	-	-	-	4911	4911	4911	4911	4911	4911	4911	4911
PROPOSAL														
Earnings	8304	8304	8304	8304	8450	8527	8587	8730	8781	8838	8895	8954	9017	9076
Train Working Expenses	5058	5265	5265	5161	4013	3972	3972	3972	3972	3972	3972	3972	3972	3972
Terminal Expenses	984	984	984	994	1002	1003	1003	1003	1003	1003	1003	1003	1003	1003
	6042	6249	6249	6155	5015	4975	4975	4975	4975	4975	4975	4975	4975	4975
Margin Before Interest	2262	2055	2055	2149	3435	3552	3612	3755	3806	3863	3920	3979	4042	4101
PRINCIPAL ALTERNATIVE														
Earnings	8304	8304	8304	8304	8304	8304	8304	8304	8304	8420	8436	8453	8474	8497
Train Working Expenses	5058	6622	6529	6437	6300	6331	4752	4966	4840	4286	7523	7523	7523	7523
Terminal Expenses	984	984	984	984	984	984	984	838	838	838	838	838	838	838
	6042	7606	7513	7421	7284	7315	5736	5804	5678	5124	8361	8361	8361	8361
Margin Before Interest	2262	698	791	883	1020	989	2568	2500	2626	3296	75	92	113	136
COMPARISONS (B) BETTER OR (W) WORSE														
PROPOSAL V NON INVESTMENT	-	(W) 207	(W) 207	(W) 113	(B) 1173	(B) 1290	(W) 1299	(W) 1156	(W) 1105	(W) 1048	(W) 991	(W) 932	(W) 869	(W) 810
PROPOSAL V PRINCIPAL ALTERNATIVE	-	(B) 1357	(B) 1264	(B) 1266	(B) 2415	(B) 2563	(B) 1044	(B) 1255	(B) 1180	(B) 567	(B) 3845	(B) 3887	(B) 3929	(B) 3965

NOTE 1. Based upon 1982 PP&CCA dated January 1982 - Passenger Service - London-Hastings (via Tonbridge) and Freight Services-Mountfield-Northfleet.(Freightliner, Speedlink, Parcels and Residual Freight have been excluded.)

NOTE 2. Consequent upon cessation of services on the Tonbridge-Hastings line this Profit Centre will be closed but it is anticipated that the earnings shown is the business retained and which will be transferred to other Profit Centres.

For C...

PROJECT APPRAISAL ASSISTANT

Prime Minister

Please see Mr Howell's office's letter (Flag A); and the Chief Secretary's (Flag B).

Agree I write as at X?

MCS 31/3

30 March 1983
Policy Unit

PRIME MINISTER

HASTINGS AND TONBRIDGE RAIL SERVICE

We cannot recommend that you accept the Department of Transport's request for immediate approval for electrification. David Howell himself points to "the weaknesses in the Board's investment procedures which were identified by the Serpell Committee and are exemplified by this particular case". This is a wholly inadequate instance of the line-by-line evaluation of electrification.

BR claims that its preferred electrification options would cost some £24m against £18m for "life extension" - patching up the existing vehicles. But on a fuller definition of the lifetime costs of electrification, the Department of Transport speaks of a sum of £67m. The rolling stock for the electrified line which BR reckons as being free (because they over-ordered) is itself some 20 years old and would itself soon need patching up. Incidental costs of the electrification scheme, we believe, would include the physical handing of a token from one driver to another because of single tracking in the tunnels. This picturesque practice is highly expensive in time and manpower, and is a notorious contributor to losses on rural lines.

We suspect that all the figures are being nudged to give the required answer. We do not even need to point out the alternative possibility of a high-speed bus service along an improved A21 road. For the moment, the first priority must be to get comprehensive and reliable costings.

Above all, we are unimpressed by the supposed urgency. We are told that the rolling stock is "coming to the end of its useful life", but so are we all, and we can usually be patched up for quite a few years longer.

!

X We suggest that, as an earnest of their post-Serpell good intentions, BR and the Department of Transport should be invited to make a full costed presentation of the options to you by mid-May.

FERDINAND MOUNT

I think Ian Gow should first have a word with John Stanley and Kenneth Warren. The former mentioned something about it to me the other day - but I cannot remember the precise point mo

CONFIDENTIAL

cc without attachments to Mr Gow, please.

CC NO

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

Michael Scholar Esq
Private Secretary
10 Downing Street
Whitehall

28 March 1983

Dear Michael,

HASTINGS-TONBRIDGE RAIL SERVICE

Thank you for your letter of 14 March about the renewal of the Hastings to Tonbridge rail service. You asked to see the base papers on which my Secretary of State had reached his conclusion. The two sets of papers that I think you would find most useful are enclosed. They are the Railways Board's submission and the summary of the Department's economic evaluation of the options. I also attach a map of the line.

Timing

The timing of modernisation has been one of the questions to which we have given particular attention. The line goes through a number of unusually narrow tunnels and bridges. The services on it are, therefore, currently provided by specially-built narrow rolling stock. This is now approaching the end of its useful life. The Railways Board say that if the services are to be kept going, they must begin work within the next few months on modernisation or on the renewal of the existing stock to keep it going for another 30 years or to "life-extend" the existing stock for perhaps another 5 years.

The Board's preferred electrification option would cost some £24 millions. "Life extension" (patching up the vehicles for another 5 years) would cost £18m; it would be so expensive because of the need to remove asbestos from the vehicles. The Secretary of State's conclusion - given what is said below about the suitability of this case for innovation - is that the potential benefits of delay are not large enough to justify holding up the decision on the form of replacement.

CONFIDENTIAL

The Options

There are three main alternatives to the electrification scheme preferred by the Board. Two of them involve diesel replacement. If the diesel units were available now they might well be more attractive than electrification. But neither of them has actually been developed: producing them would inevitably take some time and there is no guarantee that they would be less expensive in the event. So we do not know when they would be available or at what cost. By contrast, electrification involves the use of standard electric stock which already exists.

The Board's investment submission identifies two electrification options. One of them would involve making about 18 miles of the route south of Tunbridge Wells into a single track. That would produce a less expensive scheme than the Board's preferred solution, which is to single the track only where this is necessary to allow the present standard electric vehicles to get through the narrow tunnels and bridges.

Naturally, the Secretary of State considered very carefully the merits of the cheaper electrification option. He concluded that he should not require the Board to adopt it for two main reasons. First, during the peak hours, the "maximum singling" option would put commuters at a real risk of long delays. A hitch of only a very few minutes in the timing of trains, not only on the Hastings-Tonbridge stretch but also north of Tonbridge, could put out the whole timetable, involving commuters in delays of up to 15 minutes. Delays of that kind could turn passengers away from the railway, so worsening the line's financial performance. Second, and related to that point, the Secretary of State has had considerable success recently in pushing the Board to adopt a far more business-oriented approach. He intends to increase this pressure. To substitute his commercial judgement for the Board's in this case would run clear contrary to his intentions and would be an example of the conduct by the Department which is criticised in both the Majority and Minority Reports of the Serpell Committee. His intention, therefore, is to approve the Board's preferred option but to impress upon BR his wish that they should find ways to reduce the cost of the project while securing comparable benefits.

Suitability for Innovation

There are a wide variety of possibilities for innovation. One to which the Secretary of State attaches particular importance is the attraction of private capital into the running of services. The most attractive prospect for this approach at present involves the development of a new air terminal and

CONFIDENTIAL

associated facilities at Victoria Station, in association with the running of the rail link between Victoria and Gatwick. But the advice received so far from Morgan Grenfell is that even this development would be unlikely to secure the support of private investors unless safeguards for them were written into the deal which could conflict with the criteria identified by the NEDC and agreed by the Treasury in 1981. The Hastings-Tonbridge service is not profitable and would be far less attractive to private investors than schemes such as that for Victoria-Gatwick.

Another possibility the Secretary of State has in mind would involve private operators taking over the running of services and, where necessary, receiving grants - at a lower level than BR needs - for doing so. But that would require legislation, and raises some formidable problems about long-term responsibility for the assets, what happens in the event of default by the operator, and so on. These are real, practical difficulties to which solutions must be found to enable this initiative to go ahead. There is, however, no prospect of finding the solutions and obtaining the necessary legislation on the timescale required for decisions on the renewal of the Hastings-Tonbridge service.

As the Prime Minister knows, the Secretary of State also wishes to introduce technological innovation onto the railway. But this line does not represent a good test case because, for example, of the narrowness of the bridges and tunnels and the fact that many of the services from Hastings run through Tonbridge to London on lines north of Tonbridge shared with other, conventional services.

It was for these reasons that the Secretary of State reluctantly concluded that this was neither the right case nor the right time-scale for the application of the radical innovations he wants to pioneer.

The Secretary of State is already taking steps to remedy the weaknesses in the Board's investment procedures which were identified by the Serpell Committee and are exemplified by this particular case. He has instructed the Department to hold discussions with the Board at an early stage in the preparation of all major projects, to ensure that alternatives are properly considered and evaluated.

I am sending a copy of this letter and the enclosures to Margaret O'Mara.

Yours sincerely,

Richard Bird

R. BIRD
Private Secretary

CONFIDENTIAL

MEMORANDUM TO BRITISH RAILWAYS BOARD

TONBRIDGE TO HASTINGS ROUTE.

1. Objective.

Renewal of traction for London-Tonbridge-Hastings service by most economical method.

2. Proposal.

Route clearance, electrification at 750 v DC and resignalling between Tonbridge and St. Leonards (Bo-Peep Junction) to permit passage of all standard rolling stock.

3. Financial Summary.

Net Outlay for authorisation (Q3/82 prices)	£23.925m.
NPV at 7% TDR	£41.577m

The calculated Net Present Values embrace all the relevant cash flows for each option and the results are therefore comparable. They do not, however, include those infrastructure costs that are common to all options.

Effect on revenue account, 1995, compared with 1982 (See Appendix B Page 3)	£1.461m (B).

4. INTRODUCTION.

4.1 The section of line between Tonbridge and St. Leonards (Bo-Peep Junction) was constructed to very restrictive clearances, and severe restrictions exist on the working of locomotives and freight vehicles over the line.

4.2 The only passenger carrying vehicles authorised to run over the throughout route are specially constructed narrow-bodied diesel electric units in Classes 201/2/3 which work the service between Charing Cross/Cannon Street and Hastings, comprising 122 vehicles built in 1957/8. Many of these were built on old underframes as an economy measure. They constitute a special fleet, purpose built for the restricted clearances operative on the Tonbridge-Hastings line. As no other passenger carrying stock is authorised to work between Tunbridge Wells (Grove Junction) and St. Leonards (Bo-Peep Junction), the maintenance of passenger services between those points is presently wholly dependent upon the continued existence of this stock.

5. Present Position.

5.1 Whilst the planned life of Diesel Multiple Unit vehicles is 30 years, the bodies of these vehicles are already very heavily corroded and their condition is deteriorating rapidly. Increasing difficulty and cost is being experienced in endeavouring to maintain the stock in a serviceable condition and it can only be kept in service until the end of 1987 with remedial treatment during an extra classified repair cycle, at an estimated cost of £13.5m. It is therefore the Regional CM & EE's considered view, supported by the Director of Mechanical & Electrical Engineering, Board HQ that some vehicles cannot economically be sustained in traffic beyond early 1985. Electrification in May 1986 necessitates some vehicles undergoing repairs in 1984 and 1985 and these increased costs have been included in the evaluation.

5.2 If the vehicles were required to run beyond the end of 1987, extensive and costly body repairs, including the removal of all asbestos by the end of 1987, would be required to extend the life of the vehicles to 1991. The cost of these repairs has been estimated at £26.4m. It is clear that, even after such attention, the basic characteristics of this non-standard narrow-bodied stock are unchanged.

5.3 These considerations led to the conclusion that a continued passenger train service over the lines within the existing physical restraints is impracticable.

5.4 The basic train service is as follows:-

Passenger :	Tonbridge to Bo-peep Junction -	1 train per hour in each direction.
	Tonbridge to Eridge -	1 train per hour in each direction.

Additional services operate in peak hours over both routes.

Freight : Up to two services daily run in each direction between Tonbridge and Mountfield Sidings to convey empty and loaded wagons for traffic originating from British Gypsum Limited. Up to four trains a week of fuel oil are delivered to High Brooms oil terminal from Grain via Tunbridge Wells Central Goods.

.5 The results from the 1982 Business Report of the principal profit centres using the line are:-

	Earnings	Train Service and Terminal Expenses	Net Contribution	Operating Ratio
	£m	£m	£m	
Passenger London-Hastings	8.0	5.9	2.1	74
Freight Mountfield-Northfleet	0.3	0.1	0.2	33

5.6 The condition of the existing signalling installation between Tonbridge and Hastings is such that substantial renewal will be necessary before 1988 at a total estimated cost of £2.9m.

. Options Examined.

6.1 Continue the existing service by life extending the Class 201/2/3 DEMU's.

6.2 Class 141 DMU shuttle Tunbridge Wells - Hastings and electrification Tonbridge to Tunbridge Wells.

6.3 Electrification Tonbridge - Tunbridge Wells with DEMU shuttle Tunbridge Wells - Hastings until 1991 when replaced by Cl. 141 DMUs.

6.4 Electrification Tonbridge - Tunbridge Wells with DEMU shuttle Tunbridge Wells - Hastings until 1991, then electrification between these points.

6.5 Create structural clearances for standard stock and electrification.

6.6 Create structural clearances, electrification and more extensive line-singling.

6.7 Create structural clearances and introduce diesel locomotive push-pull service.

The above options were evaluated. The following options were considered and discarded for other good reasons.

6.8 Run down the Hastings service with closure in 1987.

6.9 Construct new narrow bodied stock

6.10 Bus bodies on Mk. 1 underframes with haulage by Cl. 33/2 diesel locomotives..

282k/0029K.

6.11 Sub-options involving closure of the line between Tunbridge Wells and St Leonards.

(i) Electrification Tonbridge to Tunbridge Wells.

(ii) Reinstatement of Polegate Spur

(iii) Increased electric service via Lewes.

7. Proposal- Create Structural clearances for standard stock and Electrification (Option 6.5) .

7.1 Electrification Works.

Provide third rail electrification at 750 V DC suitable for operating 12 car trains between Tonbridge and Hastings. See Appendix A for route details.

7.2 Structural Clearance Works.

Tunnel, bridge and permanent way alterations, to permit passage of all stock likely to use the line by:-

(a) singling the track in three tunnels

Somerhill
Strawberry Hill
Wadhurst

(b) provision of slab track in Grove Hill tunnel to accommodate double track.

(c) provision of additional refuges in Wells tunnel and certain viaducts.

(d) replacement of four overbridges for which Department of Transport dispensation for reduced clearances cannot be obtained.

7.3 Resignalling Works.

7.3.1 Multiple aspect colour light signalling and AWS equipment to be installed, and Track Circuit Block working introduced throughout.

7.3.2 Braking distances, to SR standards, to be provided to allow the increased line speed to be exploited, in conjunction with track improvements.

7.3.3 Six signalboxes, as listed in Appendix D will be closed. Control of the line to be exercised by Tonbridge, Robertsbridge and Bo-Peep Junction signalboxes.

The closure of the foregoing will permit a reduction in staff costs estimated at £0.15m p.a. (a reduction of 17 signalmen).

7.3.4 Modernisation of level crossing at Etchingham to AHB with supervision from Robertsbridge signalbox, and level crossing at Battle (Marley Lane) to CCTV, controlled from Bo-Peep Junction signalbox.

7.3.5 Transfer supervision of automatic half-barriers at Crowhurst Bridge to Tonbridge signalbox.

7.3.6 The maximum number of unstaffed level crossings will be reduced in status.

7.3.7 The minimum outlay needed for signalling alterations resulting from electrification amounts to £1.99m and, if centralised control was adopted, would mean a further £2.56m being spent on essential resignalling by 1988. The proposal provides for complete resignalling in modern form with centralised control from the year of introduction, at a total outlay of £3.55m, which produces an NPV surplus of £0.73m with an I.R.R. of 27.1%.

7.4 Station Alterations.

General clearance work as shown in Appendix E will be carried out to permit all existing SR main line EMUs, locomotives and other stock likely to use the line, to pass over the route.

7.5 It is considered that this combination of singling and minor works represents the minimum action to provide the line capacity essential for operation of rolling stock at an acceptable level and pattern of service. Appendix F shows details of rolling stock which will be permitted to use the line.

7.6 Rolling Stock.

7.6.1 Electrification will provide opportunities for more intensive programming of existing stock, by integrating Hastings services with the rest of the South Eastern Division. It will be possible to cover these services with only 86 additional electric multiple unit vehicles, and the means of providing these vehicles is shown in Appendix G.

7.6.2 The DEMU vehicles will start to be withdrawn between May 1985 and May 1986, as dictated by maintenance and service requirements, and it is forecast that no more than 104 vehicles will remain in service by May 1986, when all will be withdrawn. Some service adjustments will be necessary during the interim year, but it is confidently expected that passengers will be prepared to accept a reduced level of service during this period, in the knowledge that this is temporary.

7.7 Rolling Stock Servicing and Berthing.

Electric multiple units will be concentrated at Hastings and St. Leonards (West Marina), where some existing sidings will be electrified, to facilitate servicing and routine maintenance, with a net reduction of 12 posts.

7.8 Line Speed.

Raise ruling line speed from 70 mph to 90 mph, between Tonbridge and Bo-Peep Junction to improve journey times, as shown in Appendix H, and compensate for effect of singling in the tunnels. The cost amounts to £130,000 and produces revenue benefits of £26,000 which produces an NPV surplus of £90,000 with an IRR of 14%. Details of locations where achievement of full line speed would be prohibitively expensive and so is not proposed are shown in Appendix I.

7.9 Service Vehicles.

7.9.1 Certain specialised plant and equipment together with service vehicles will need to be provided for the duration of the construction works at a cost of £114,000.

7.9.2 It is the intention to convert existing vehicles which are surplus to requirements.

7.9.3 After completion of the scheme the vehicles will be available for any future electrification project or can be utilised in the work of replacing existing equipment on the Region's annual Traction Substation Equipment and Cables Renewals Programme.

8. Benefits.

8.1 Achievement of increased passenger receipts estimated at £0.77m p.a. at full fruition, resulting from electrification.

8.2 Improvement in safety standards, by the introduction of standard SR braking distances, to cater for the higher speeds, and AWS equipment.

8.3 Replacement of life-expired signalling equipment and rolling stock.

8.4 Net reduction of 11 staff as detailed in Appendix J.

8.5 Improvement in operational efficiency and flexibility by clearance of the route for all stock likely to pass over the lines, improvements to track layouts.

8.6 Reduction in the Regional fleet of DEMUs as a logical step towards the eventual objective of its complete elimination.

8.7 Minimisation of maintenance, repair and traction costs for rolling stock.

8.8 Affords a reduction of some 1.25m gallons per annum of diesel fuel oil.

8.9 Conforms to the Board Headquarters and Southern Region's rolling stock strategy report.

9. Alternatives.

9.1 Continue the existing service by life extension of Class 201/2/3 DEMU's.

Due to the age and physical condition of the existing vehicles, the maximum life extension considered possible is to 1991, at which point replacement vehicles of special narrow bodied design would have to be provided at an estimated cost of £39m, based on current forecasts for Class 210 vehicles.

In order to extend the life of the existing fleet, it will be necessary to strip all asbestos from the vehicles, make life extension repairs to some of the power units and the vehicle bodies which are extensively corroded. This alternative prevents these units being used as an effective source of engine spare parts for the remainder of the Region's fleet of DEMU's. The additional cost, compared with withdrawal by May 1986, of this overhaul programme and loss of spare parts is £17.6m. Moreover, it would provide no commercial betterment in terms of lighting, seating, internal decor and vehicle riding qualities.

The route would still be restricted to narrow bodied vehicles.

This alternative produces a Net Present Value of £15.591m and as the results are inferior to those for the proposal, this alternative has been rejected.

9.2 Class 141 DMU shuttle between Hastings and Tunbridge Wells with electrification between the latter and Tonbridge. During the peak hours the remaining DEMU service between Eridge and Tonbridge could not accommodate both the numbers of passengers discharged from the Hastings shuttle and the originating Tunbridge Wells passengers. A further interchange of trains at Tonbridge would be totally unacceptable. It would be essential, therefore, to electrify between Tunbridge Wells and Tonbridge to provide sufficient capacity and a through service to London.

An NPV of £32.865m is produced. This alternative has therefore been rejected.

9.3 Electrification between Tonbridge and Tunbridge Wells with DEMU shuttle Tunbridge Wells - Hastings until 1991 when replaced by Cl. 141 DMUs. This alternative perpetuates all the disadvantages inherent in 9.2 above together with the penalties imposed by the retention of DEMUs until their replacement in 1991.

An NPV of £29.019m is produced. This alternative has therefore been rejected.

9.4 Electrification between Tonbridge and Tunbridge Wells with DEMU shuttle Tunbridge Wells - Hastings until 1991, then electrification between these points. Although this alternative provides for the eventual electrification of the throughout route, the retention of the DEMU shuttle until 1991 results in continuing capacity and interchange problems.

This alternative produces an NPV of £32.495m and has therefore been rejected.

9.5 Structural clearances for standard stock, electrification and extensive singling (17.7 miles) of route.

This option would result in a less commercially attractive service and inhibit the growth of additional revenue. NPV of £40.544m is produced. This alternative has therefore been rejected.

9.6 Structural clearances for standard stock and introduction of push-pull service with diesel locomotive traction. The principal factor adversely affecting this alternative is the need, during the project life, for renewal of locomotives and coaches, with a consequent NPV of £9.943m. This alternative has therefore been rejected.

9.7 Other alternatives considered but not evaluated comprise:-

9.7.1 Run down the Hastings service with closure in 1987.

Closure of the Tonbridge - Hastings line is inconsistent with the Department of Transport's declared objective of maintaining the service over the 25 or 30 year period under consideration.

9.7.2 Construction of new narrow bodied stock.

No design exists for an 8 ft. wide DEMU and design capacity is known to be fully allocated for several years. Additionally, BREL does not have the capacity to produce such replacement DEMU vehicles within the requisite timescales.

The initial outlay would be of the order of £39m with no compensating revenue benefits. These factors render this option impractical and financially unattractive.

9.7.3 Bus bodies on Mk. 1 underframes with haulage by Class 33/2 diesel locomotives.

Insufficient Class 33/2 locomotives exist to maintain the required level of service.

9.7.4 The following sub-options following closure between Tunbridge Wells and St. Leonards have been examined

(i) Electrification to Tunbridge Wells

(ii) Reinstatement of Polegate Spur.

(iii) Additional electric services via Lewes.

As the option of closure (option 9.7.1) has been rejected these sub-options have not been pursued.

10. Associated Scheme.

10.1 Provision of a new station between Crowhurst and West St. Leonards is under consideration by the Local Authority, but this proposal is in the early stages of development, and no timescale has yet been established. No provision in this respect has been made in the electrification proposal.

10.2 Statutory procedures for the closure of the line between Grove Junction and Birchden Junction are being initiated and, if implemented before the latter stages of the works programme for this scheme, could result in savings in infrastructure costs of at least £0.5m. Should this closure be approved, the appropriate reduction in the amount authorised for the modernisation scheme will be proposed in the following progress report.

11. Financial Effect.

See Appendix B for the estimate of outlay, spread of expenditure and effect on revenue account statement.

12. Spread of Expenditure.

The desired spread of expenditure, based upon physical resources is:-

Total cost of project	1983	1984	1985	1986
£m	£m	£m	£m	£m
23.925	3.802	9.787	9.689	0.647

No investment provision has been made in the latest Rail Plan and Investment Programme.

13. Contract Work.

The major portion of the signalling, power supply and civil engineering work other than permanent way, would be carried out under contracts to the value of £13.253m.

14. Advance Authority.

In order to achieve completion in May 1986, certain installation work must commence in 1983 which requires some long lead materials to be ordered at least 3 months prior to financial authorisation. These materials, valued at £1,062,000 are all standard items comprising:- conductor rail, "iron men" and concrete troughing for electric traction and signalling cable routes. At the same time, it will be necessary to let a contract for installing the CM & EE cable route, in accordance with the planned programme, at an estimated value of £584,000 of which £58,000 could become liable in event of cancellation. Advance authority is therefore required for £1,646,000 by not later than the fourth Quarter 1982.

15. Timescales.

British Railways Board	November 1982
Department of Transport approval	December 1982
Start of substantial expenditure	May 1983
Commencement of running trials and testing for service introduction	January 1986
Completion of work and introduction of service	May 1986

16. Consultation.

16.1 Board Headquarters Officers have been consulted and support the project in principle.

16.2 Preliminary staff consultation has taken place.

17. Project Management.

17.1 The implementation of this project will be controlled by a Project Manager, to be appointed, using conventional techniques. It will be the subject of regular progress reports to the Planning and Investment Committee.

17.2 It is recommended that the Project Manager's delegated authority should be £25,000 for this project, and that individual variations authorised within this sum should not exceed £2,500.

18. Recommendations.

It is recommended that approval be given to:-

18.1 The fixed works described in the proposal at an estimated cost of £23,925,000 ± 10% Q3 1982 price levels.

18.2 The issue of an advance authorisation for £1,646,000 as described in para. 14 above.

18.3 The delegations of authority to the Project Manager as set out in 17.2 above.

General Manager,
(Southern Region).

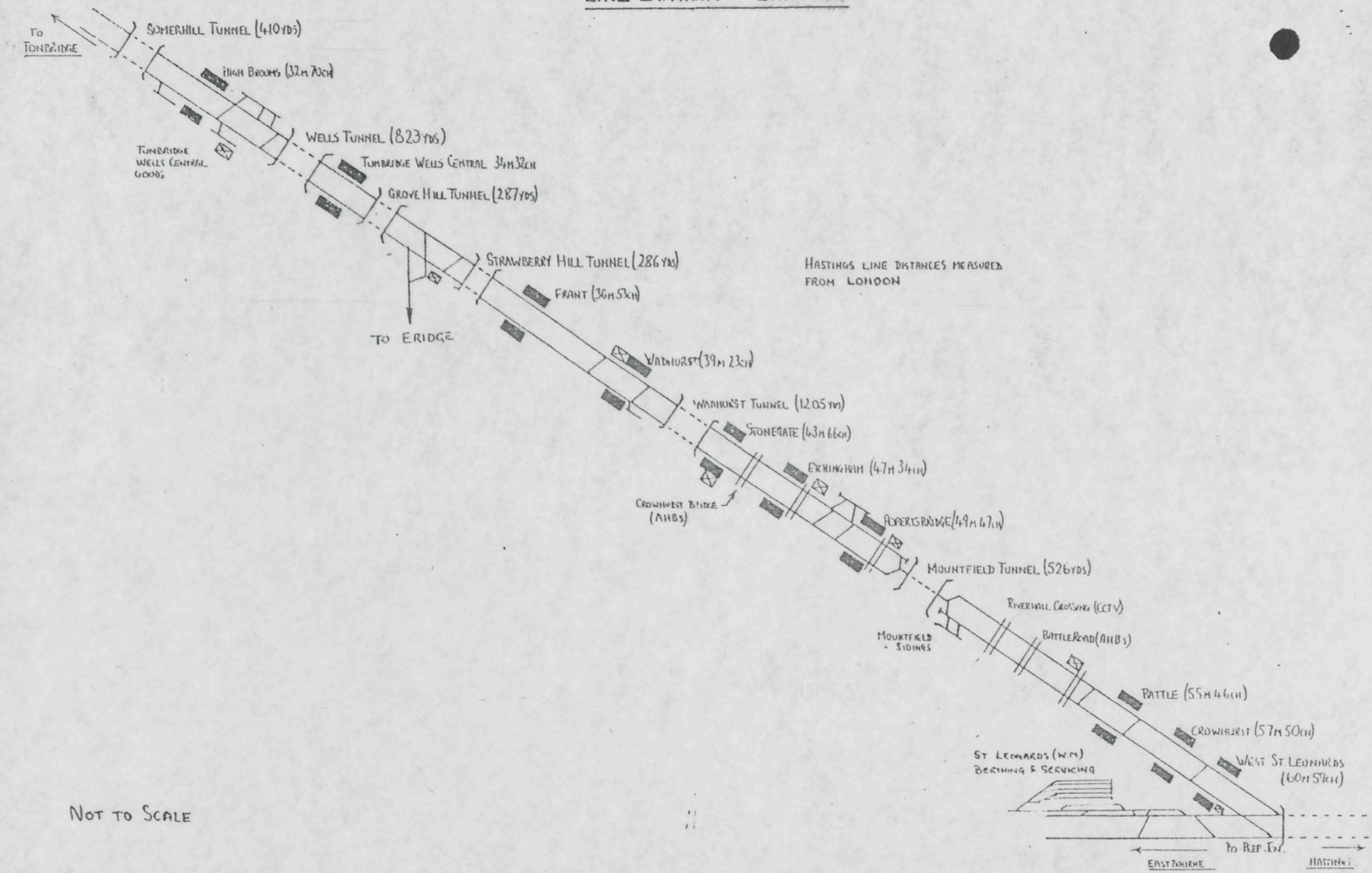
October 1982

1282k/0029K.

TONBRIDGE - HASTINGS / ERIDGE

LINE DIAGRAM - EXISTING

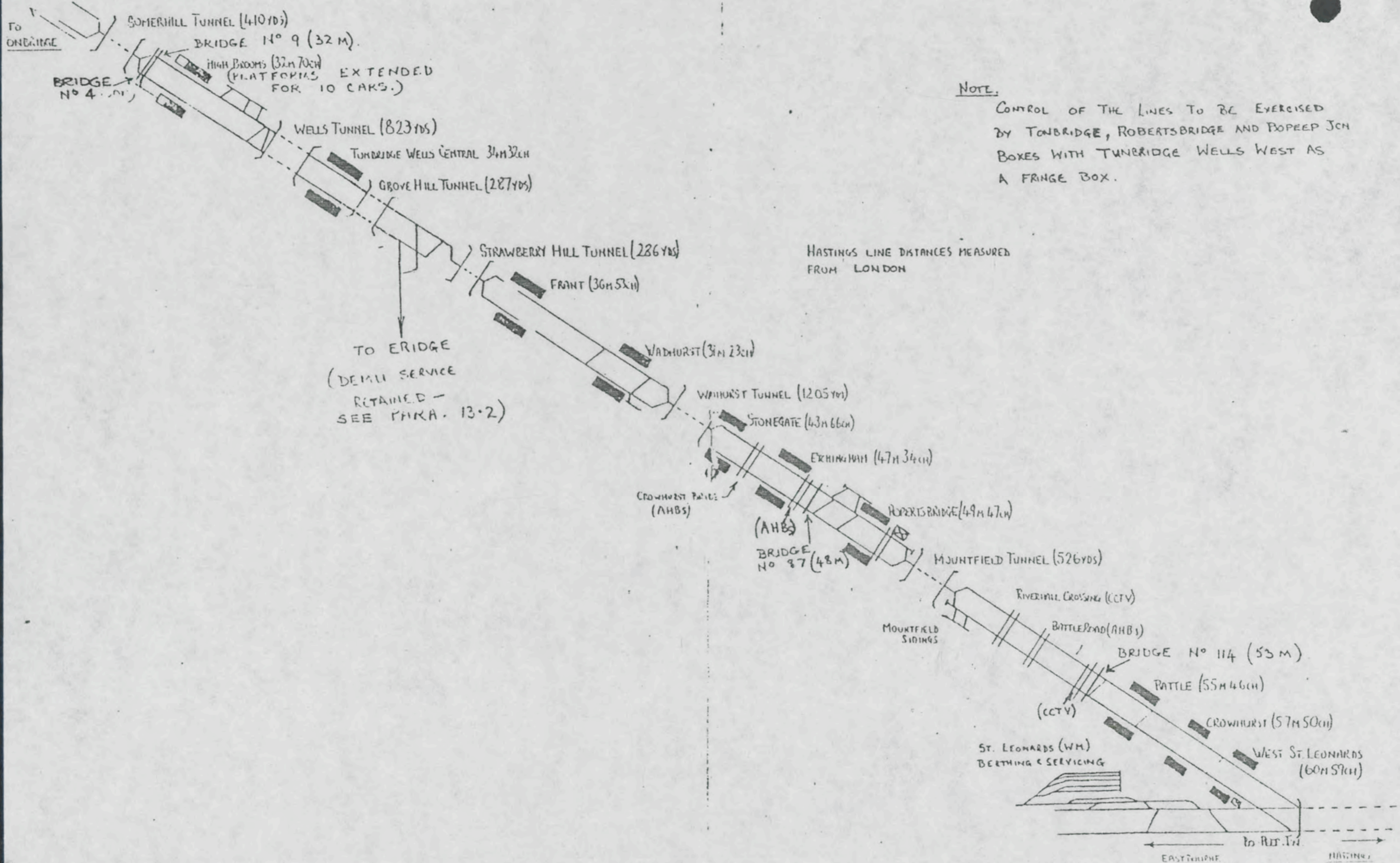
APPENDIX 'A'



NOT TO SCALE

APPENDIX 'A1'

TONBRIDGE - HASTINGS / ERIDGE
LINE DIAGRAM - PROPOSED



HASTINGS LINE DISTANCES MEASURED FROM LONDON

NOTE.
CONTROL OF THE LINES TO BE EXERCISED BY TONBRIDGE, ROBERTSBRIDGE AND BOPEEP JCN BOXES WITH TUNBRIDGE WELLS WEST AS A FRINGE BOX.

FINANCIAL APPRAISAL.

PROJECT : ROUTE CLEARANCE, RESIGNALLING AND ELECTRIFICATION OF THE LINE BETWEEN TONBRIDGE - ST. LEONARDS (BO-PEEP JUNCTION).

ESTIMATES OF OUTLAY (3rd Quarter 1982 price levels) ± 10%	£000	£000
REGIONAL ARCHITECT		
Relay Room and Signing		54
CHIEF CIVIL ENGINEER		
Permanent Way including Berthing	2,023	
Station Alterations	492	
Additional Fencing	264	
Refuges in Tunnels	22	
Clearances, Level Crossings etc.	255	
Singling through Tunnels	1,360	
Tunnel Alterations	1,121	
Bridge Alterations	1,095	
Conductor Rail and ETE	5,137	
Substations and TP Huts	861	
Works for CS & TE	221	
Temporary Depots	244	13,095
CHIEF MECHANICAL & ELECTRICAL ENGINEER.		
Conductor Rail (ETE only)	648	
Substations (Equipment only)	2,864	
HV & Pilot Cables	3,637	
Berthing	136	
Point Heaters, Power Supplies etc.	67	
Station and Depot Lighting	153	
Road Service Vehicles	18	
Rail Service Vehicles	114	7,637
CHIEF SIGNAL & TELECOMMUNICATIONS ENGINEER.		
Electrical Signalling	1,472	
Cables and Cable Routes	740	
Road Service Vehicles	26	
Telecommunications & Supervisory System	820	
Level Crossings	35	
Stage Works	11	
AWS	91	
New Depot	22	3,217
BR PROPERTY BOARD		
Land Acquisition	2	
Statutory Compensation	27	29
		24,032
Less value of recovered material		107
Net Outlay for authorisation		23,925

1282k/0029K.

ACCOUNTING ALLOCATION.

		£000	£000
Capital Account	- Depreciable Type Assets	-	
	- Way and Structure Type Assets	14,206	
	- Operational Land	2	
Working Expenses Accounts		9,717	23,925

SPREAD OF EXPENDITURE.

	1983 £000	1984 £000	1985 £000	1986 £000	Total £000
Modernisation Scheme	3,802	9,787	9,689	647	23,925

BUDGET PROVISION - No investment provision has been made in the latest Rail Plan and Investment Programme.

1282k/0029K.

EFFECT ON REVENUE ACCOUNT

Compared with the estimated position for year 1982, the effect on Revenue Account of the Proposal and Principal Alternative at 3 Quarter 1982 wage and price levels as follows :

	1983 £000	1984 £000	1985 £000	1986 £000	1987 £000	1988 £000	1989 £000	1990 £000	1991 £000	1992 £000	1993 £000	1994 £000	1995 £000
PROPOSAL													
Receipts Passenger	-	-	-	(B) 146	(B) 223	(B) 283	(B) 426	(B) 477	(B) 534	(B) 591	(B) 650	(B) 713	(B) 772
Maintenance - Rolling Stock	(W) 207	(W) 207	(W) 103	(B) 1136	(B) 1223	(B) 1223	(B) 1223	(B) 1223	(B) 1223	(B) 1223	(B) 1223	(B) 1223	(B) 1223
- Fixed Works	-	-	-	(W) 161	(W) 247	(W) 247	(W) 247	(W) 247	(W) 247	(W) 247	(W) 247	(W) 247	(W) 247
Diesel Fuel	-	-	-	(B) 601	(B) 902	(B) 902	(B) 902	(B) 902	(B) 902	(B) 902	(B) 902	(B) 902	(B) 902
Electric Current for Traction	-	-	-	(W) 606	(W) 909	(W) 909	(W) 909	(W) 909	(W) 909	(W) 909	(W) 909	(W) 909	(W) 909
Staff Costs - Traffic	-	-	-	(B) 97	(B) 146	(B) 146	(B) 146	(B) 146	(B) 146	(B) 146	(B) 146	(B) 146	(B) 146
	(W) 207	(W) 207	(W) 103	(B) 1213	(B) 1338	(B) 1398	(B) 1541	(B) 1592	(B) 1649	(B) 1706	(B) 1765	(B) 1828	(B) 1887
Amortisation - Fixed Works	-	(W) 74	(W) 240	(W) 419	(W) 426	(W) 426	(W) 426	(W) 426	(W) 426	(W) 426	(W) 426	(W) 426	(W) 426
Outlay as incurred	(W) 1332	(W) 4251	(W) 3720	(W) 414	-	-	-	-	-	-	-	-	-
	(W) 1539	(W) 4532	(W) 4063	(B) 380	(B) 912	(B) 972	(B) 1115	(B) 1166	(B) 1223	(B) 1280	(B) 1339	(B) 1402	(B) 1461
PRINCIPAL ALTERNATIVE LIFE EXTENSION OF DEMUS													
Receipts Passenger	-	-	-	-	-	-	-	-	(B) 116	(B) 132	(B) 149	(B) 170	(B) 193
Maintenance - Rolling Stock	(W) 1564	(W) 1471	(W) 1379	(W) 1242	(W) 1273	(B) 306	(B) 92	(B) 298	(B) 852	(W) 119	(W) 119	(W) 119	(W) 119
- Fixed Works	-	-	-	-	-	-	-	(W) 20	(W) 20	(W) 20	(W) 20	(W) 20	(W) 20
Diesel Fuel	-	-	-	-	-	-	-	-	-	(W) 301	(W) 301	(W) 301	(W) 301
Staff Costs - Traffic							(B) 146	(B) 146	(B) 146	(B) 146	(B) 146	(B) 146	(B) 146
	(W) 1564	(W) 1471	(W) 1379	(W) 1242	(W) 1273	(B) 306	(B) 238	(B) 424	(B) 1094	(W) 162	(W) 145	(W) 124	(W) 101
Amortisation - Fixed Works	-	-	-	-	-	-	-	(W) 60	(W) 60	(W) 60	(W) 60	(W) 60	(W) 60
Depreciation - Rolling Stock	-	-	-	-	-	-	-	-	-	(W) 1965	(W) 1965	(W) 1965	(W) 1965
Outlay as incurred	-	(W) 43	(W) 110	(W) 561	(W) 1200	(W) 927	-	-	-	-	-	-	-
	(W) 1564	(W) 1514	(W) 1489	(W) 1803	(W) 2473	(W) 621	(B) 238	(B) 364	(B) 1034	(W) 2187	(W) 2170	(W) 2149	(W) 2126
NET EFFECT PROPOSAL V PRINCIPAL ALTERNATIVE	(B) 25	(W) 3018	(W) 2574	(B) 2183	(B) 3385	(B) 1593	(B) 877	(B) 802	(B) 189	(B) 3467	(B) 3509	(B) 3551	(B) 3587

EFFECT ON GRANT

The year by year Effect on Revenue Account as shown above can be deemed to represent the effects on the total grant support of B.R.

PROFIT CONTRIBUTION

	1982 £000	1983 £000	1984 £000	1985 £000	1986 £000	1987 £000	1988 £000	1989 £000	1990 £000	1991 £000	1992 £000	1993 £000	1994 £000	1995 £000
NON INVESTMENT (See Note 1)														
Earnings	8304	8304	8304	8304	8304	8304	-	-	-	-	-	-	-	-
Train Working Expenses	5058	5058	5058	5058	5058	5058	-	-	-	-	-	-	-	-
Terminal Expenses	984	984	984	984	984	984	-	-	-	-	-	-	-	-
	6042	6042	6042	6042	6042	6042	-	-	-	-	-	-	-	-
Margin Before Interest	2262	2262	2262	2262	2262	2262	-	-	-	-	-	-	-	-
NON INVESTMENT (See Note 2)														
Earnings	-	-	-	-	-	-	4911	4911	4911	4911	4911	4911	4911	4911
Train Working Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terminal Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Margin Before Interest	-	-	-	-	-	-	4911	4911	4911	4911	4911	4911	4911	4911
PROPOSAL														
Earnings	8304	8304	8304	8304	8450	8527	8587	8730	8781	8838	8895	8954	9017	9076
Train Working Expenses	5058	5265	5265	5161	4013	3972	3972	3972	3972	3972	3972	3972	3972	3972
Terminal Expenses	984	984	984	994	1002	1003	1003	1003	1003	1003	1003	1003	1003	1003
	6042	6249	6249	6155	5015	4975	4975	4975	4975	4975	4975	4975	4975	4975
Margin Before Interest	2262	2055	2055	2149	3435	3552	3612	3755	3806	3863	3920	3979	4042	4101
PRINCIPAL ALTERNATIVE														
Earnings	8304	8304	8304	8304	8304	8304	8304	8304	8304	8420	8436	8453	8474	8497
Train Working Expenses	5058	6622	6529	6437	6300	6331	4752	4966	4840	4286	7523	7523	7523	7523
Terminal Expenses	984	984	984	984	984	984	984	838	838	838	838	838	838	838
	6042	7606	7513	7421	7284	7315	5736	5804	5678	5124	8361	8361	8361	8361
Margin Before Interest	2262	698	791	883	1020	989	2568	2500	2626	3296	75	92	113	136
COMPARISONS (B) BETTER OR (W) WORSE														
PROPOSAL V NON INVESTMENT	-	(W) 207	(W) 207	(W) 113	(B) 1173	(B) 1290	(W) 1299	(W) 1156	(W) 1105	(W) 1048	(W) 991	(W) 932	(W) 869	(W) 810
PROPOSAL V PRINCIPAL ALTERNATIVE	-	(B) 1357	(B) 1264	(B) 1266	(B) 2415	(B) 2563	(B) 1044	(B) 1255	(B) 1180	(B) 567	(B) 3845	(B) 3887	(B) 3929	(B) 3965

NOTE 1. Based upon 1982 PP&CCA dated January 1982 - Passenger Service - London-Hastings (via Tonbridge) and Freight Services-Mountfield-Northfleet (Freightliner, Speedlink, Parcels and Residual Freight have been excluded.)

NOTE 2. Consequent upon cessation of services on the Tonbridge-Hastings line this Profit Centre will be closed but it is anticipated that the earnings shown is the business retained and which will be transferred to other Profit Centres.

For CHIEF FINANCE OFFICER

John [illegible]

PROJECT APPRAISAL ASSISTANT

8-10-81

APPENDIX C.

SUMMARY OF DISCARDED ALTERNATIVES EVALUATED

DESCRIPTION	NPV £m
Continue the existing service by life extending Cl. 201/2/3 DEMUs.	15.591
Cl. 141 shuttle Tunbridge Wells - Hastings and electrification Tonbridge to Tunbridge Wells.	32.865
Electrification Tonbridge - Tunbridge Wells with DEMU shuttle Tunbridge Wells - Hastings until 1991 when replaced by Cl. 141 DMUs.	29.019
Electrification Tonbridge - Tunbridge Wells with DEMU shuttle Tunbridge Wells - Hastings until 1991, then electrification between these points.	32.495
Create structural clearances, electrification and more extensive line-singling.	40.544
Create structural clearances and introduce diesel locomotive push-pull service.	9.943

1282k/0029K.

APPENDIX D.

SIGNALBOXES - PROPOSED FOR CLOSURE.

Tunbridge Wells Central Goods

Grove Junction

Wadhurst

Stonegate

Etchingham

Battle

LEVEL CROSSINGS PROPOSED FOR MODERNISATION.

CROSSING	PROPOSAL
Etchingham	Automatic Half-Barrier, supervised by Robertsbridge
Battle (Marley Lane)	CCTV Controlled from Bo-Peep Junction

TRANSFER OF CONTROL/SUPERVISION OF EXISTING CROSSINGS

CROSSING	TYPE	TO
Crowhurst Bridge	Automatic Half-Barrier	Tonbridge

1282k/0029K.

APPENDIX E.

STATION ALTERATIONS.

General clearance work will be carried out to improve clearances on the line.

The station platforms at High Brooms will be extended for 10 cars.

The usual safeguards will be applied where trains operated over the route are longer than the existing platforms at stations between Grove Junction and Bo-Peep Junction.

These platform extensions will be constructed to a standard height of 915mm (3'0") above rail level and where existing platforms are less than 750mm (2'6") high they will be raised to 915mm (3'0") in conjunction with the extension work. Platforms between 750mm (2'6") and 915mm (3'0") high will be raised to the standard 915mm (3'0") above rail level as and when maintenance or renewal is required to maintain safety standards.

FOOTBRIDGE ALTERATIONS.

Provide new footbridges at Frant and Stonegate.

PLATFORM CLEARANCES.

Set back Up platform at West St. Leonards.

Partial setting back of both platforms at Tunbridge Wells Central.

APPENDIX F.

SUMMARY OF ALL ROLLING STOCK PERMITTED TO USE THE LINES AFTER IMPLEMENTATION

MULTIPLE UNIT STOCK		LOCO-HAULED STOCK	
CODE	CLASS	TYPE	CODE
TRAILER CORRIDOR		LOCO-HAULED VEHICLES	
4TC	491	Restaurant	RB
		Kitchen Cars	RMB
DIESEL-ELECTRIC		Open Stock	FO
			TSO
3T	204		
3H	205		
3R	206		
3D	207		
ELECTRIC		Corridor Stock	FK
			CK
4 Sub	405		BCK
4 Bep	410		SK
4 Cep	411		BSK
2 Hap	414		
4 EPB	415	Post Office Vehicles	POS
2 EPB	416		POT
2 Sap	418		
4 Big	420	Brake and	
4 Cig	421	Miscellaneous	NJA
4 Vep	423	Traffic Vans	NJV
4 Veg	427		NDV
4 Rep	430		NQV
	508		NFV
	(series I & II)		NOV
	510		NQV
MLV	419		NJV

(PROVISION OF CLEARANCES WILL ENCOMPASS REQUIREMENTS FOR MARK I, II & III VEHICLES)

LOCOMOTIVES.

Class 33
" 47
" 50
" 56
" 73/0
" 73/1
" 08
" 09

1282k/0029K.

PROVISION OF ROLLING STOCK FROM "INVERTED CASCADE".

86 EMU vehicles are required to operate and provide maintenance cover for the Hastings service. These can be provided by reallocating units within the Regional fleet to enhance that of the South Eastern Division by 7 class 414 and 18 class 423 units.

This is achieved through service revisions, reduced requirements for maintenance cover following completion of the class 411 refurbishing scheme, and reallocation of units after completion of the South Western suburban and Gatwick rolling stock schemes.

The effect is to retain in service class 414 units which would otherwise have been withdrawn from the Central and South Eastern Division. Sufficient class 414 vehicles have already been stripped of asbestos to satisfy all Regional requirements, including those for this proposal, after the end of 1987. 72 of the initial 86 class 414 vehicles retained will be replaced by class 423 units, as deliveries of new stock progress in accordance with the Board's building programme and Regional rolling stock strategy. None of these retained class 414 vehicles are to be refurbished.

No units are to be allocated to the Hastings service alone and it is possible only to identify those costs associated with an increase of 86 EMU vehicles in the South Eastern Division fleet. This has been built into the Regional Rolling Stock Strategy and, whilst the composition of the fleet will vary over the life of the project, the class 423 vehicles used have a life compatible with it and no units will be built or refurbished specifically for this service. For the purpose of evaluation, the replacement of the 7 class 414 units (14 vehicles) in 2003 is assumed.

APPENDIX H.

EFFECT ON JOURNEY TIMES.

Comparison of journey times DEMU/EMU Charing Cross - Hastings using CM & EE schedules updated for 90 mph line speed proposals.

	"FAST"		"SLOW"	
	DEMU	EMU	DEMU	EMU
Charing Cross-Tonbridge	39.50A	38.00	46.00D	42.00
Tonbridge-Hastings	50.50B	45.00C	63.00E	56.00
	90.00	83.00	109.00	98.00
	= -7.00		= -11.00	

	"FAST"		"SLOW"	
	DEMU	EMU	DEMU	EMU
Hastings-Tonbridge	48.50B	45.50C	63.00E	56.00
Tonbridge-Charing Cross	41.50A	38.50	49.00D	42.00
	90.00	84.00	112.00	98.00
	= -6.00		= -14.00	

All times include station allowances.

A Calls Waterloo (East) and Tonbridge

B Calls at Tunbridge Wells Central, Battle and St. Leonards (Warrior Square)

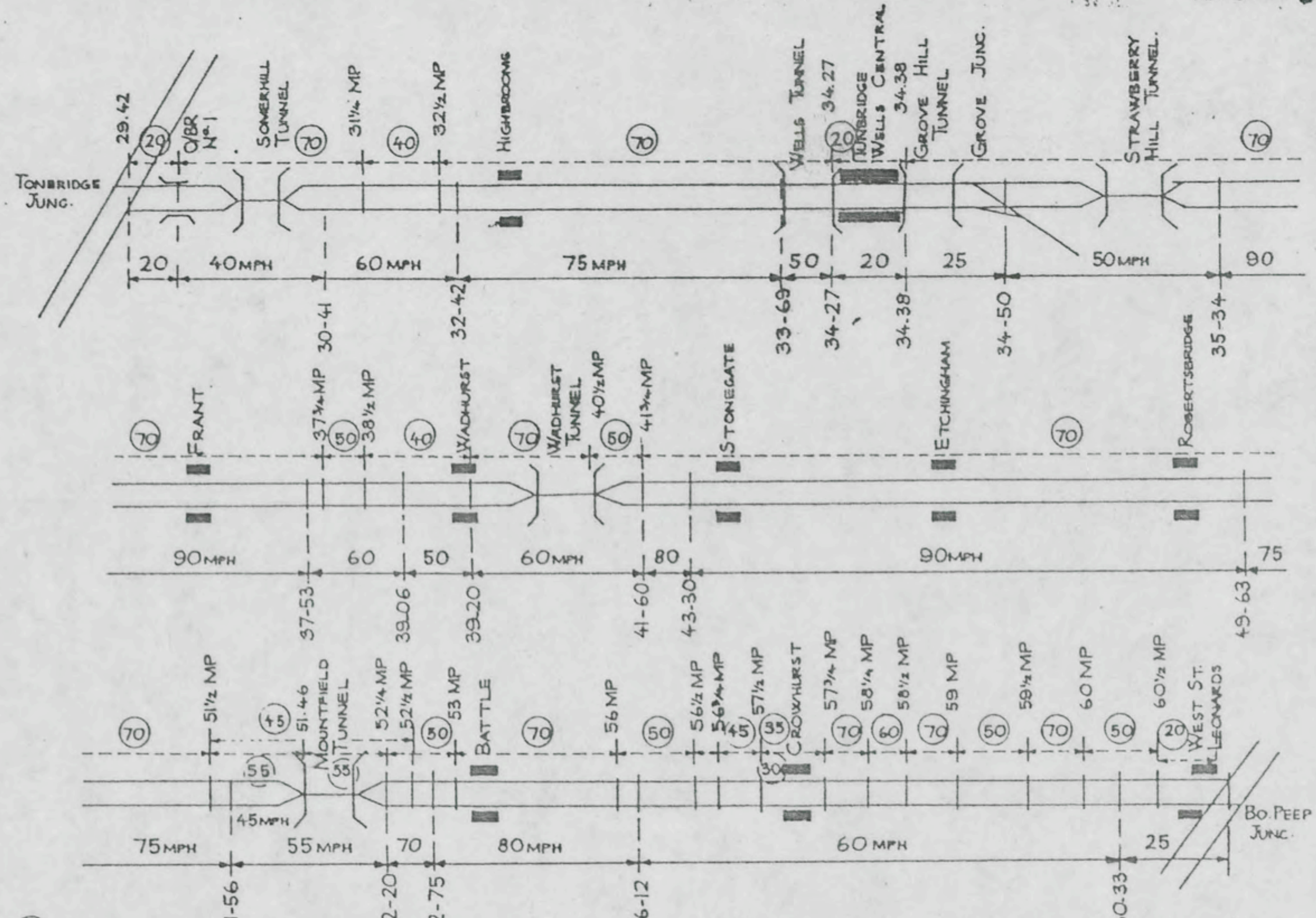
C Calls as B plus High Brooms

D Calls Waterloo (East), Orpington, Sevenoaks and Tonbridge

E Calls all stations

1282k/0029K.

APPENDIX 'I'



DOWN / UP - EXISTING SPEED

- PROPOSED SPEED.

NB: SPEEDS SHOWN ARE FOR BOTH TRACKS, EXCEPT WHERE INDICATED. LOCATIONS ARE IN MILES & CHAINS.

PROPOSED LINE SPEED IMPROVEMENTS

EFFECT ON MANPOWER.

STAFF	PROPOSAL FULL ELECTRIFICATION
TRAFFIC	
- Signalling	-17
- Station	No change
- Train Crew	No change
- Servicing	No change
CM & EE	
- Power Supply Maintenance	+8
- Rolling Stock Maintenance	-12
CCE	
- Maintenance Staff	+10
CS & TE	
- Maintenance Staff	No change
Net Effect on Manpower	-11

1282k/0029K.

APPENDIX 'K'.

PASSENGERS USING THE STATIONS ON LINE OF ROUTE

Station	Average daily number of passenger journeys		Number of Season Ticket Holders to or Via London
*Hastings	1,900		176
*St. Leonards (Warrior Square)	2,700		124
est St. Leonards	600		100
rowhurst	130		28
attle	750		168
obertsbridge	300		67
tchingham	750		197
tonegate	250		72
adhurst	1,000		344
rant	130		61
		8,510	
unbridge Wells Central	5,200		1,721
igh Brooms	1,350		297
Tonbridge	12,500	19,050	2,529
		27,560	

A proportion of these passengers travel on the Hastings, Tonbridge, London line.

- LAST -

282k/0029K.

THE TONBRIDGE-HASTINGS AND TUNBRIDGE WELLS-ERIDGE RAILWAYS

Minimum singling

Maximum singling

ECONOMIC APPRAISAL OF TONBRIDGE-HASTINGS ELECTRIFICATION C.

Background

1. The present Southern Region service between London (Charing Cross or Cannon Street) and Hastings diverges from the main line to Ashford and Dover at Tonbridge. Between that point and St. Leonards the line has very restricted clearances. This section was not electrified in the late 1950s with the remainder of the Kent Coast lines. Instead the service was provided from about that time with special narrow bodied diesel electric multiple units, DEMUs. No other BR passenger vehicles are able to use the line between Tunbridge Wells and Hastings. Between Tunbridge Wells Central and Tonbridge additional trains are provided by the Tonbridge to Eridge service, now the subject of a closure proposal. The capacity currently provided by the present Tonbridge-Hastings service is not sufficient by itself to carry the peak loads between Tonbridge and Tunbridge Wells.

2. Hastings line DEMUs have suffered badly from corrosion. If they are to continue in service until the early 1990s the Board say that extensive remedial works are required and, to cover all of the 122 vehicles involved, it would be necessary to commence this work shortly to avoid:

a. having too many vehicles out of service at the same time;
b. the risk of a rising incidence of failures and reduced availability.

Alternatively the clearances on the line could be eased and the line rendered suitable for existing BR rolling stock including, if traction current supplies were provided, standard SR electric stock.

The Board's Submission

3. In their submission the Board evaluated seven options:

1. Continue the existing service by life extending the present DEMUs. Replace with new stock of a similar type in 1992.
2. Class 141 lightweight DMU shuttle between Tunbridge Wells and Hastings with electrification from Tonbridge to Tunbridge Wells West.
3. Early electrification from Tonbridge to Tunbridge Wells West, with DEMU shuttle between Tunbridge Wells and Hastings until 1991, when the DEMUs would be replaced by Class 141 lightweight DMUs.

4. Early electrification from Tonbridge to Tunbridge Wells West with DEMU shuttle between Tunbridge Wells and Hastings until 1991 then electrification between these points.
5. Create structural clearances for standard stock and electrification, the major work being singling of the track through the tunnels.
6. Create structural clearances, electrification, and more extensive line singling.
7. Create structural clearances mainly involving singling of the track through the tunnels, and introduce a push-pull service, using diesel locomotives and conventional coaches.

Four further options were considered but were discarded for various reasons without any evaluation being presented.

8. Run down the Hastings service with closure in 1987.
9. Construct new narrow bodied stock by 1987.
10. Bus bodies on Mk I underframes with haulage by Class 33/2 diesel locomotives.
11. Sub-options involving closure between Tunbridge Wells and St. Leonards:
    i. Electrification to Tunbridge Wells
    ii. Reinstatement of the Polgate Spur
    iii. Increased electric service via Lewes

4. In their submission the Board made estimates of the financial impact of each of options 1 to 7 by calculating over a 30 year period from 1982 to 2011 the following:

a. Revenue attributable to the line including freight, car parks and parcels,
   less the costs of:
b. rolling stock capital costs,
c. fixed works including third rail electrification where appropriate,
d. maintenance and fuel for existing rolling stock, including any life extension work,
e. maintenance and fuel /power for replacement rolling stock,
f. maintenance of fixed works,
   with a credit for:
g. scrap value including re-usable spares of existing rolling stock.

It was not clear from their text however, that the net present values quoted actually incorporated all these elements.

5. We consider that the Board's evaluation and their presentation of it in their submission were seriously deficient and in some respects positively misleading. The main problems are as follows:

(i) In the case of those options (2 to 6) involving electrification of part or all of the line, no costs were included for EMUs (between 76 and 86 vehicles) because, it was argued, the vehicles would be provided by retaining 20 year old vehicles which would otherwise have been scrapped in 1987. Of these only 14 would have actually been used on this service, the remainder being used elsewhere in the Region. The only capital costs then included for EMUs in these options were for 14 vehicles in 2003. We must emphasise that rolling stock can be treated as free only if in the absence of electrification of Tonbridge-Hastings it would be scrapped prematurely. Normally it cannot be free at any time when new stock is being built. It is therefore difficult to reconcile the assumption that rolling stock is free with the continuation of a rolling programme, unless the rolling programme itself involves premature scrapping in the immediate future, which is justified by cost savings from a steady level of building rather than a building programme which is peaked. We cannot accept that premature scrapping will continue to 2011 or beyond, which is implied by the Board's assumption that no capital costs need to be included for 72 of the vehicles until that date. We also note that the Board's assessment, while assuming that stock which would otherwise be scrapped after 20 years is retained for 40 years, makes no allowance for rising maintenance costs and states that mid-life refurbishment would not be required.

(ii) The cost of option 1, replacement with new narrow bodied multiple units, is significantly inflated by the assumption that only the expensive class 210 DEMU rolling stock would be available. Its low carrying capacity leads to a larger fleet incurring higher capital, maintenance and fuel costs than appear to be justified. Cheaper DMUs are now being actively designed, but were not considered at all in the submission.

(iii) Similarly, option 7 involving standard clearance locomotives and coaches, appears to be an unnecessarily expensive diesel option. It is said to require 17 diesel locomotives to operate eight diagrams which seems extravagant given push-pull operation and availability which ought to reach 70%. The maintenance and fuel costs are also high.

(iv) Option 10 narrow bus bodies on Mark I bogies was rejected on the grounds that "the rolling stock is an untried concept" and that insufficient narrow bodied locomotives were available. In fact, a prototype coach is certainly under construction. Eight passenger locomotive diagrams are required, while at present three locomotives are used for freight. Twelve locomotives exist. This is certainly not quite enough to cover breakdowns and maintenance, but there is no evidence that consideration was given to the possibility of minor adjustments to the service or the methods of freight operation to make this a practical option. Had the option been evaluated, it should have indicated that a viable replacement for the existing rolling stock to work within the existing limited clearances was worthy of more detailed investigation.

(v) The methods of forecasting revenues under the various options were significantly out of line with those agreed for other electrification proposals. The result was, we believe, misleading for the purpose of estimating both capacity requirements in later years and the financial improvement attributable to service quality changes.

(vi) The submission did not identify which were the major components of the present values and did not draw sufficient attention to the uncertainties. Our attempt to show how the present values are built up has revealed some apparent inconsistencies in the estimates of costs for the different options.

(vii) No account was taken of rising fuel prices or of residual values at the end of the appraisal period.

(viii) The submission did not specifically relate the service patterns to the provisional objectives of the sector.

(ix) Finally the "revenue minus costs" method of presenting the financial evaluation combined with the treatment of electric rolling stock as basically free, tended to give the misleading impression of an investment making a high return, with a large financial benefit in relation to the capital costs included.

We should add that most of the problems listed became evident only when we attempted to isolate the major components of the benefit and the key assumptions. They were therefore not obvious in the submission approved by Board members and sent to the Department.

The Department's Evaluation

6. In view of the weaknesses in the Board's submission we felt it necessary to put together our own evaluation of those options costed by the Board together with other options which seemed to us worthy of at least outline consideration. Our basic approach has been to estimate for each option the present value of future capital and operating costs of those items which were likely to vary between options. In the first instance the objective was to identify minimum cost solutions, but we recognise that some options which may be more expensive provide a better quality of service. We have therefore made tentative estimates of how each option could change the present levels of revenue, so that we can consider whether differences in revenue would be sufficient to off set differences in costs.

7. Our basic assumption is that broadly the current level of service should continue. The present load factors are in line with the provisional objectives for the sector, and we see no reason to expect significant underlying growth in demand.

8. In costing the options set out below we have made extensive use of the Board's working documents made available at meetings, held after we received the submission. Where possible we have corrected for the criticisms made in paragraph 5 above. Our methodology is more fully described in annex 1.

9. In Table 1 we have set out a brief description of each of the options which we have evaluated. To avoid confusion we have used letters rather than the option numbers used by the Board. A detailed description in the order shown is at annex 2 of this paper. One point which we must emphasise here is that many of the costs of options G and H, both of which involve narrow-bodied rolling stock not evaluated by the Board, have involved guesswork on our part, and must therefore be regarded as notional. This does not mean that the actual costs would inevitably be higher. In many respects our costings are conservative; for example, we have assumed that the narrow-bodied multiple unit vehicle based on the Class 150 would cost the same to maintain and would consume as much fuel as a vehicle based on the Class 210.

TABLE 1

Evaluations of Options for the Tonbridge-Hastings Service

	Present value of costs (£M)	Present value of revenue impact (£M)
A. Closure between Tunbridge Wells Central and Hastings	Not evaluated	
B. Electrification with minimal single track	69	2 to 3
C. Electrification with maximum single track	63	Small overall decline
D. Electrification between Tonbridge and Tunbridge Wells West with Class 141 shuttle service from Tunbridge Wells to Hastings	67	Small overall decline
E. Life extension of existing sets and replacement with similar stock in 1992. Based on class 210 design	73	Small increase no disruption
F. Locomotive hauled Push-Pull Service from 1986	86	Small increase
G. Life extension of existing units and replacement by new narrow bodies diesel multiple units in 1992. Based on class 150 design.	63	Small increase no disruption
H. Replacement with New Coaches consisting of bus bodies on Mark I frames. Hauled by class 33/2 narrow bodied lcocomotives	63	Small increase no disruption

Notes:
1. The costs cover only those costs likely to differ between options, not all costs associated with the service.
2. The revenue effects represent effects on current revenue levels.
3. All figures are present values in 1982 at 1982 price levels.

10. It is evident from our estimates of costs that there exists a wide range of options for providing a continuing service on the line. We can safely rule out options E and F, the diesel options evaluated by the Board, as being significantly more expensive than the others. Option D, the best of the shuttle options, can also be ruled out, because it provides a poorer quality of service than other options without offering a significant saving in costs. The choice would appear to lie between electrification as proposed by the Board (B) which, though relatively expensive, does provide a better service, electrification with maximum single track (C), and a continuing diesel service, probably within existing clearances, (G or H) which has not been evaluated by the Board.

11. We now have to consider whether the rankings based on those costs which we have been able to consider might be altered by other factors, and in particular by the differing effects of the options on revenue. We have started by reviewing the evidence which is available to indicate the revenue improvement over the present quality of service we might expect from option B. Journey speeds would be raised by between 6 and 11 per cent, depending on the station at which the journey commenced and the time of day. We doubt whether a journey time improvement of this magnitude excluding any "image effects" could raise revenue by more than 2½%. If we applied to all travel, both commuting and off-peak, the journey time elasticity agreed by the Board to be appropriate to Inter-City services the revenue improvement would be only about 4%. For a short period there could be an additional revenue improvement equivalent to an annual average of up to 50% of the journey time effect and attributable to the improved image of an electric service. In the same period over which we have estimated the costs the present value of the revenue improvements might amount to £2 to £3m. The Board have suggested that they would be able to increase revenue further by raising prices on this service following electrification. However selective real pricing on Southern Region at the moment is only applied to one or two stations with a particularly good service, and prices on the Hastings-Tonbridge line are not currently below those on electric services. We therefore assume no selective real pricing.

12. Option C with maximum single track would offer the same time-tabled journey time improvements as the minimum singling option for those 60% of users who travel between Tunbridge Wells and intermediate points to London. For the remainder there would be little overall change in journey time though peak frequencies would be somewhat irregular. In practice we accept the Board's view that this performance would not be achieved. The siting of the single line sections is not ideal, being dictated by the location of tunnels and other

structures in order to save capital costs. The result is very low tolerances to late running of more than a few minutes and a risk of an overall worsening of the service. However, the journey time improvements if achieved, would give a revenue benefit of the order of £1M in present value terms. This means that the loss in revenue attributable to unreliability and the loss of 3 peak trains between Tunbridge Wells and Hastings would have to be £4 to £5M in present value terms before the Board's preferred minimum singling option could be said to offer the same financial performance as maximum singling. The sum of £4 to £5M is equivalent to £0.3 - 0.4M, which is about 4 or 5% of the existing revenue (or 5% to 7% of the current level of direct expenses). Once the potential for saving direct expenses is taken into account the loss in revenue attributable to unreliability and reduced frequency would need to be around 10% before minimum singling would perform as well in financial terms as maximum singling.

13. The issue to be faced in choosing between the electrification options is therefore whether, with maximum singling, the service could be as reliable as the present service, and, if not, whether the loss of reliability could be enough to reduce revenue levels by as much as perhaps 10%. Although the Board do mention the problem of unreliability in the maximum singling option and reduce the revenue by 3% compared with a continuation of the present service to take account of it they have not offered any description of the likely impact on the service by showing, for example, what proportion of trains they would expect to be on time, five minutes late and ten minutes late and comparing this with the present position.

14. At this point it is necessary to rely virtually entirely on personal, subjective judgements. In our view the reliability problems associated with maximum singling would need to be serious before the more expensive minimum singling option could be justified in financial terms. However, there does seem to us to be a possibility that the problems could be serious. If a train in one direction is more than about three minutes late during the peak it is almost certain to affect the timing of a number of other trains which will be forced to wait for access to a single line section. Once a train is perhaps 5 minutes late trains in the other direction will be allowed to proceed onto the single track section with the result that the first train will rapidly become 10 to 15 minutes late. Given that there are four separate sections of single track the problem would rapidly escalate. In view of this we feel that a decision to support this option is not justifiable without a more detailed examination of the likely operating performance of the service.

15. Now we must consider how the diesel options would compare with the electrification options above. The service offered should be broadly comparable with the present service; at least there should be no major improvement in or loss of revenue. Indeed for the first few years after investment the service would have new rolling stock, whereas the electric options use twenty year old stock. Additionally there would be no disruption to the service during fixed works and electrification, which could involve closures in the Tunbridge Wells area for several months. In view of the above we believe that the diesel options appear £3 to 4M better than the Board's preferred scheme, and as good as the maximum singling option if the latter loses any revenue because of unreliability. The major uncertainties are:

a. the costs, which for the moment are largely notional;

b. when the rolling stock will be available;

c. the exact form which the rolling stock will take.

The diesel options would necessitate some additional capacity, currently provided by the Eridge service, between Tonbridge and Tunbridge Wells, which has not been costed. Additionally, if it were accepted that, because of benefits from a steady rate of building, the EMU rolling programme will involve premature replacement of EMUs for the five years from 1985 to 1990, the free use of surplus rolling stock for this period would broadly bridge the gap between the electrificatio and diesel options. On the other hand it would be dangerous to assume that until the forthcoming case for a rolling programme has been considered. (In particular a diesel building programme may obviate any need for using BREL capacity to build EMUs). There must remain some doubt as to whether further consideration of these notional diesel options would offer a real expectation of financial benefits. On the other hand there might be a potential saving of £3 to £4 in present value terms.

16. The only decision which could be made immediately is to agree to the scheme proposed by the Board. The risk is that this could result in a loss of £4m or £5m in present value terms in comparison with the maximum singling electrification option or a loss of £3m or £4m in comparison with possible cheap diesel options not evaluated by the Board. A present value of £3m is equivalent to just over £200,000 a year, £5m is eqivalent to about £350,000 a year. The present revenue from this service is about £8M a year. The minimum singling option would generate additional benefits to travellers, but the risk is that each additional passenger mile generated could involve a subsidy of anything between five and twenty pence a passenger mile.

ECB 9 February 1983

28 MAR 1983

CONFIDENTIAL

10 DOWNING STREET

From the Private Secretary

14 March 1983

Dear Richard,

HASTINGS-TONBRIDGE RAIL SERVICES

The Prime Minister has seen your Secretary of State's minute of 10 March about renewing the service between Hastings and Tonbridge.

The Prime Minister would be grateful for a sight of the information which formed the basis for your Secretary of State's conclusions on this matter: the investment appraisal, the costs, the passenger numbers and so on. Mrs. Thatcher is not convinced by the argument that this service would make a poor test case for the innovation and experiment which the Government wishes to see in the management of the railways. She does not understand the need for a speedy decision on the form of modernisation of this service.

I am sending a copy of this letter to Margaret O'Mara (HM Treasury).

Yours sincerely,

Michael Scholar

Richard Bird, Esq.,
Department of Transport.

I agree – ~~[illegible]~~ no figures no saving no alt. We simply cannot take decisions on this sort of basis
MT

Prime Minister

This minute seems to me to be an inadequate basis for a decision. David Howell has offered to let you have more information on the investment appraisal on this project, what exactly it involves, who it benefits, why the form of modernisation needs to be settled quickly (see below), and so on. I suggest you take up this offer. Agree?

WR 4/3

Prime Minister

HASTINGS-TONBRIDGE RAIL SERVICES

1. The Railways Board have put to me proposals for renewing the service (predominantly commuter) between Hastings and Tonbridge. I thought you should know the decision I shall be announcing shortly.

2. As you may know, this is a line with peculiarly narrow bridges and tunnels, and the special rolling stock for it is wearing out. The Railways Board's appraisal of the alternatives for maintaining the service (whose financial performance is about the average for the London commuter services) shows the inadequacies which have been strongly criticised in the reports of Sir David Serpell's Committee, and points sharply to the need for improvement. However, my Department's investigation of the case has convinced me that the scheme put forward by the Board for electrification on the third rail system is a sound and reasonable way to continue the service. The plan is to use ordinary S.R. rolling stock but running on a single line through the narrow tunnels. I have considered whether this might make a good test case for the innovations and experiments I would like to see being introduced. But this ? is ruled out by the need for the form of modernisation to be settled quickly and the early stage in the Government's post-Serpell thinking on these wider possibilities. ?

3. Approval for the electrification scheme will be very warmly welcomed locally, and by our colleagues who represent the constituencies affected, who have pressed very strongly for an early decision in favour of electrification.

4. On a broader front, it is right to recognise that the Railways Board have continued to make very useful progress. They cut back their manpower numbers by over 12,000 during 1982; they have, as pledged, sold off practically all their hotels; and it is now clear that they can keep within their EFL for 1982/83, having offset all the costs of the strikes. They are still bogged down with Lord McCarthy's tribunal on single manning of the Bedford/St Pancras service, and they are certainly not out of the wood there. The Board so far have been resolute. Sir Peter Parker has secured the unions' agreement to start a review of their negotiation machinery, and that is a useful step.

5. Approval of this scheme, which fills in a small gap in the Southern Region's third rail system, gives no commitment whatever to the Board's plans for main line electrification. It is a limited scheme, costing £23.9 million at 1982 prices over 4 years and will of course be paid for entirely within BR's EFL. I have concluded that the right course is to make a quick announcement of approval, while pursuing with the Board the clear need to improve their investment appraisal procedures.

6. I am copying this to Geoffrey Howe.

DH

DAVID HOWELL
10 March 1983

2F

Transport

FOR THE INFORMATION OF THE PRESS

Please Note Embargo: Not for publication, broadcast or use on club tapes before 11.00 a.m. BST on Wednesday 12 May 1982

HOUSE OF COMMONS TRANSPORT COMMITTEE

RAILWAY ELECTRIFICATION

1. The Second Report from the Transport Committee in Session 1981-82, on Main Line Railway Electrification will be published at 11.00 a.m. on Wednesday 12 May 1982 as House of Commons Paper No.317-I. Mr Tom Bradley, MP, the Chairman of the Committee, will take the chair at a press conference to be held at 12 noon on Wednesday 12 May in Committee Room No.17 (on the Upper Committee Corridor at the House of Commons).

2. The Report follows an inquiry conducted during the winter of 1981-82, during which the Committee took evidence, in private, from the Railways Board, officials of the Department of Transport, the Railway Industry Association, the main railway unions, and the Secretary of State for Transport. All the evidence given by these witnesses, together with other papers submitted in connection with the inquiry, is published in Volume II of the Report (House of Commons Paper 317-II).

3. Volume I (House of Commons Paper 317-I) contains the Committee's Report, an Appendix prepared by the Committee's Specialist Adviser (Dr Stephen Glaister, Cassell Reader in Economics at the London School of Economics), and the Minutes of Proceedings of the Committee relating to the Report.

4. A Summary of the contents of the Report, and of its main conclusions and recommendations, is attached.

All enquiries to the Committee Office on 01-219 6101 or 01-219 6264

Please Note Embargo: Not for publication, broadcast or use on club tapes before 11.00 a.m. BST on Wednesday 12 May 1982

Transport Committee Report on Main Line Railway Electrification

(Second Report from the Transport Committee, Session 1981-82, HC 317-I)

SUMMARY OF CONTENTS, CONCLUSIONS AND RECOMMENDATIONS

Part I (paras.1-18) (Introduction) explains the background to and purpose of the inquiry, and comments on the challenge facing British Railways in the light of its present financial position and of recent industrial disputes.

(1) The Committee acknowledge that the Government were acting in accordance with established practice in rejecting their request to see, on a strictly confidential basis, the report on main line railway electrification prepared by the Central Policy Review Staff, but regret that they therefore felt unable to inform the Committee of the advice received from their officials on this matter, which has prevented the Committee from obtaining a direct explanation of the factors which influenced the Government's response to the Electrification Review (paragraph 8).

(2) The Railways Board and the unions must accept that neither Parliament nor the public can be expected to look favourably on major new investment so long as present revenue is being lost, capital assets wasted, and customers inconvenienced, by disputes of the kind experienced in recent months. Although the first authorisations for further electrification should not be delayed because of these disputes, it will be right for the Government to require positive evidence that agreement can be reached on significant productivity improvements before subsequent authorisations are given for later electrification schemes (paragraph 18).

Part II (paras.19-51) explains the background to and findings of the joint BR/Department of Transport Review of Main Line Railway Electrification, outlines the Government's response to the Review, and comments on the consequences of delays in decisions on further railway electrification.

(3) Although the Committee accept that it is essential for the Government to be confident that expenditure on electrification would be an appropriate use of resources before firmly committing itself, they believe

it is unfortunate that some of the further considerations now under study by BR and the Department of Transport were not raised by the Department at an earlier stage (paragraph 42).

(4) The possible loss of proven skills and experience in the design and erection of overhead catenary systems would be detrimental both to any future programme of electrification approved by the Government and to the export competitiveness of the UK's railway equipment industry (paragraph 50).

(5) In fairness to both the railway equipment industry and to the Railways Board, the Government has an obligation to react speedily to the electrification submissions brought forward by the Board. If the case for electrification is made to the satisfaction of the Government and the criteria it has established, the Government should be prepared to approve at least one major scheme with all urgency in order to avoid the additional costs which further delay would inevitably impose on a programme of electrification (paragraph 51).

Part III (paras.52-95) contains the Committee's own observations on the joint Review of Main Line Railway Electrification, including comments on appraisal methodology, the financial position of the inter-city and freight businesses, traffic volumes, productivity, and energy prices.

(6) It is unfortunate that so little progress seems to have been made with the studies recommended by the Leitch Committee on comparability between road and rail appraisal methods (paragraph 58). In the case of main line railway electrification, however, the indications are that the use of a cost-benefit framework would not in fact have demonstrated a substantially higher rate of return than the financial return actually calculated (paragraph 59).

(7) The revised railway traffic forecasts and the changes in service levels which the Railway Board now intend to implement do not appear to invalidate the general case for electrification put forward in the Electrification Review, although the benefits from all the electrification options are likely to be reduced (paragraph 74).

(8) Regardless of the dispute over flexible rostering, it is essential for significant progress to be made in the current productivity negotiations between the Railways Board and the unions, including those involving changes in the working practices of train crews (paragraph 81).

(9) The Committee conclude that the Electrification Review has established a prima facie case for some electrification, although it has not established what

size of commitment would be justified nor exactly which schemes should be started in the near future (paragraph 93).

(10) The Committee's endorsement of the general findings of the Electrification Review does not lead them to favour in particular any one of the options set out in Review. But, given the general case in favour of electrification, there are clearly advantages in making an early start with further electrification work, thus providing continuity following the completion of the Bedford-St.Pancras scheme (paragraph 94).

Part IV (paras.96-114) comments on the export advantages to the UK railway equipment industry of a major programme of railway electrification and on the possible consequences of a decision not to continue with further electrification in the UK.

(11) The evidence submitted to the Committee strongly suggests that there is a large and expanding world market for railway electrification equipment, and that a domestic programme of electrification will contribute towards the competitiveness of the UK industry within that market. The Committee accept the view that the disbandment of the existing electrification team would represent a serious set-back to the industry's export prospects (paragraph 113).

(12) The Committee strongly endorse the Secretary of State's view that, in reaching decisions on individual electrification schemes where the assessment of the direct financial return is marginal, consideration should also be given to exports and the health of the industry generally. The Secretary of State should therefore keep fully in mind the potential benefit to exports when he comes to consider British Rail's electrification proposals (paragraph 114).

(Part V (paras.115-137) discusses the method of approval for future main line electrification schemes.

(13) In its role of banker to the industry, the Government must inevitably consider developments in productivity when drawing up the Railway's Board's financial targets and spending limits. The Government's position in regard to electrification should be seen in this light (paragraph 120).

(14) In relation to both electrification, and the many other pressing aspects of railway modernisation, it is essential for all involved in the future of the railway industry to accept the challenge they now face in a spirit of cooperation rather than conflict (paragraph 121). Although recent disputes are

indicative of the great difficulties involved in changing railway working practices, the productivity improvements of the last year do indicate that significant progress has been, and can be, achieved (paragraph 122).

(15) The Government is right to look for a significant improvement in the financial position of the railways' freight and inter-city businesses. The approval of further electrification schemes must therefore be seen in the light of BR's progress towards the target of commercial viability by 1985, and the pace at which electrification is to proceed must inevitably be linked with the indications which the Board is able to give that the target is being achieved (paragraph 126).

(16) The Government's review of the railways' finances should identify a coherent strategy for renewal and modernisation which realistically reflects both the business prospects of the railways and the level of resources which the Government believes it can make available. If this level of resources is not sufficient to maintain the rail network in its present size and shape, this should be made clear and plans developed accordingly. Meanwhile, prior to the completion of the financial review, the Government must consider whether additional resources should be made available for any electrification schemes which are approved (paragraph 137).

Part VI (paras.138-149) sets out the Committee's main conclusions and recommendations on future main line railway electrification.

(17) It is now incumbent on the Government to come to a speedy decision on the proposals for electrification submitted by the Railways Board (paragraph 138), and the need for a rapid decision is underlined by the imminent loss of the existing electrification team (paragraph 139).

(18) Although the case for electrification has been somewhat weakened by economic and industrial factors over the past two years, the basic finding of the Electrification Review, that further main line electrification can be financially justified, remains valid (paragraph 140).

(19) Although the Committee accept the Review's argument in favour of a commitment to a rolling programme of electrification, they believe that the Government is right to expect that schemes should be subject to detailed appraisal as they are brought forward for implementation, even though they are initially included in the programme on the basis of outline appraisal only (paragraph 143).

(20) A programme conducted on this basis should provide an adequate planning background for BR and its contractors, but such a commitment by Government to the principle of further electrification is quite meaningless if it is not also supported by an acknowledgement of the need for adequate financial provision (paragraph 143).

(21) The Committee do not believe that the achievement of fully commercial operation of the inter-city and freight businesses by 1985 should be regarded as an overriding constraint on the approval of further electrification schemes, since electrification could be financially justifiable even if the commercial businesses remain in deficit for somewhat longer than the Government is currently hoping (paragraph 144).

(22) Although much progress has already been made, the Committee believe that it is essential that negotiations on productivity between the unions and the Railways Board should reach a successful conclusion, since improvements in efficiency are essential to the case for further investment (paragraph 145).

(23) The Committee recommend that, subject to a satisfactory submission by the Railways Board, the Government should give early authorisation to the electrification of the East Coast Main Line. The Committee also recommend that, in view of the financial constraints under which the Board is currently operating, the Government should review the Board's external financing limit and investment ceiling so that additional resources are specifically made available for this project (paragraph 147).

(24) Although the speed of implementation of the electrification programme will depend on the overall level of investment funds available to the Railways Board and on their other investment priorities, the Committee believe that the Government and the Board should seek to ensure continuity of work for the contracting industry throughout the period of the programme (paragraph 148).

(25) Finally, the Committee recommend that the Government's review of British Rail's finances should be pursued with the utmost urgency, with a view to developing a coherent financial strategy for the whole of the railway system (paragraph 149).

----ooOoo----

AD

Transport

10 DOWNING STREET

From the Private Secretary

4 December, 1981.

Electrification of Rail Services to Norwich

Many thanks for your letter of 2 December.

As I told your office on the telephone this morning, the Prime Minister is content that approval should now be given for this electrificatio as proposed in your Secretary of State's minute to her of 20 November.

I am sending copies of this letter to Terry Mathews (Chief Secretary's Offie), and David Wright (Cabinet Office).

M. C. SCHOLAR

R.A.J. Mayer, Esq.,
Department of Transport.

CONFIDENTIAL

(1)

10 DOWNING STREET

Prime Minister

Alan Walters has worked into this cost/benefit analysis and is satisfied that it has been done properly.

Agree that approval be given for this electrification?

Yes

MT

MCS 3/12

CONFIDENTIAL

(1)

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

Prime Minister

I have asked Alan Walters for his quick comments : but they will not be quick enough to meet the deadline set in this letter.

Agree I tell Mr Howell's office that they must wait until you've had a chance to look properly at the information you asked for?

MCS 2/12

Michael Scholar Esq
Private Secretary to the
Prime Minister
10 Downing Street
LONDON SW1

2 December 1981

Dear Michael,

ELECTRIFICATION OF RAIL SERVICES TO NORWICH

Thank you for your letter of 30 November.

I enclose a note by the Department, which Mr Howell has approved. I hope this gives a satisfactory answer to the Prime Minister's question how the real return of 19% for Anglia electrification has been calculated.

Mr Howell is seeing Sir Peter Parker later today to discuss with him the measures the Board will need to take to meet the very harsh EFL for 1982/83, and the handling of matters with the unions in order to secure the changes on railway productivity etc. which will be necessary. Mr Howell feels it is now very important that we should let Sir Peter Parker have a decision very soon now. He would like to be able to tell him tomorrow morning, before the British Rail Board's meeting to discuss their 1982/83 finances.

I am sending a copy of this letter to Terry Matthews (Chief Secretary's Office) and David Wright (Cabinet Office).

Yours Sincerely,

Anthony Mayer

R A J MAYER
Private Secretary

CONFIDENTIAL

COLCHESTER TO NORWICH ELECTRIFICATION

	£m 1980 Prices Present values discounted at 7%
Capital Costs	
Electrification	
Colchester-Ipswich	7
Harwich-Manningtree	3.8
Ipswich to Norwich	13
Associated depots	4.1
Total	27.9
Benefits	
Revenue improvement (from 15% improvement in journey times, elasticity 0.8*)	40
Reductions in rolling stock procurement (electric locomotives instead of diesel locomotives in mid 1990s)	2.5
Savings in train working expenses - maintenance, fuel etc	10.5
	53
Net present value	25.1
Internal Real Rate of Return	19%

* i.e. a 10% reduction in journey time will give an 8% improvement in revenue.

CONFIDENTIAL

1. The rail services to East Anglia are already electrified as far as Colchester. Beyond that, the trains are hauled by diesel traction, and in many services are hauled by diesel traction throughout. Continuing the services in this particularly expensive way would eventually require replacement of diesel stock, but little of this in the next decade.

2. Electrification beyond Colchester will allow more productive use of electric stock, which BR already own, and the diesel stock will in the main be eliminated.

3. BR's proposal is therefore to electrify the lines but without building additional rolling stock.

4. Electric services will be quicker and more reliable and will attract more traffic. The returns from electrification are mainly in increased revenue. The effect on revenue of improving journey times is well established.

5. The Board's proposals covered also electrification to Cambridge from Bishops Stortford and from Royston. In order to isolate the financial consequences the Department has required an incremental analysis so that the electrification beyond Colchester can be separately assessed.

6. The Board's assessments have been rigorously examined in detail by the Department's economists who identified areas of appraisal optimism and have corrected for them. The Department's assessment has been scrutinised by the Treasury.

7. The costs of the proposal (1980 prices) discounted at 7% in real terms are £27.9m. The net present value of the benefits, discounted at 7%, exceed this by £25.1m, on the Department's assessment. This gives an approximate real rate of return of 19% on the investment.

-2 DE

CONFIDENTIAL

c. AA
A
SV

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

Mr Scholar
Alan Walters thinks that this project is satisfactory, though I know John Vereker has reservations. A.W. thinks we should allow D/Tp to proceed. BG. 3/12

Michael Scholar Esq
Private Secretary to the
Prime Minister
10 Downing Street
LONDON SW1

2 December 1981

Dear Michael,

ELECTRIFICATION OF RAIL SERVICES TO NORWICH

Thank you for your letter of 30 November.

I enclose a note by the Department, which Mr Howell has approved. I hope this gives a satisfactory answer to the Prime Minister's question how the real return of 19% for Anglia electrification has been calculated.

Mr Howell is seeing Sir Peter Parker later today to discuss with him the measures the Board will need to take to meet the very harsh EFL for 1982/83, and the handling of matters with the unions in order to secure the changes on railway productivity etc. which will be necessary. Mr Howell feels it is now very important that we should let Sir Peter Parker have a decision very soon now. He would like to be able to tell him tomorrow morning, before the British Rail Board's meeting to discuss their 1982/83 finances.

I am sending a copy of this letter to Terry Ma thews (Chief Secretary's Office) and David Wright (Cabinet Office).

Yours sincerely,

Anthony Mayer

R A J MAYER
Private Secretary

CONFIDENTIAL

COLCHESTER TO NORWICH ELECTRIFICATION

	£m 1980 Prices Present values discounted at 7%
Capital Costs	
Electrification	
Colchester-Ipswich	7
Harwich-Manningtree	3.8
Ipswich to Norwich	13
Associated depots	4.1
Total	27.9
Benefits	
Revenue improvement (from 15% improvement in journey times, elasticity 0.8*)	40
Reductions in rolling stock procurement (electric locomotives instead of diesel locomotives in mid 1990s)	2.5
Savings in train working expenses - maintenance, fuel etc	10.5
	53
Net present value	25.1
Internal Real Rate of Return	19%

* i.e. a 10% reduction in journey time will give an 8% improvement in revenue.

CONFIDENTIAL

1. The rail services to East Anglia are already electrified as far as Colchester. Beyond that, the trains are hauled by diesel traction, and in many services are hauled by diesel traction throughout. Continuing the services in this particularly expensive way would eventually require replacement of diesel stock, but little of this in the next decade.

2. Electrification beyond Colchester will allow more productive use of electric stock, which BR already own, and the diesel stock will in the main be eliminated.

3. BR's proposal is therefore to electrify the lines but without building additional rolling stock.

4. Electric services will be quicker and more reliable and will attract more traffic. The returns from electrification are mainly in increased revenue. The effect on revenue of improving journey times is well established.

5. The Board's proposals covered also electrification to Cambridge from Bishops Stortford and from Royston. In order to isolate the financial consequences the Department has required an incremental analysis so that the electrification beyond Colchester can be separately assessed.

6. The Board's assessments have been rigorously examined in detail by the Department's economists who identified areas of appraisal optimism and have corrected for them. The Department's assessment has been scrutinised by the Treasury.

7. The costs of the proposal (1980 prices) discounted at 7% in real terms are £27.9m. The net present value of the benefits, discounted at 7%, exceed this by £25.1m, on the Department's assessment. This gives an approximate real rate of return of 19% on the investment.

CONFIDENTIAL

bc. A. Duguid

B/F

10 DOWNING STREET

From the Private Secretary 30 November 1981

Electrification of rail services to Norwich

The Prime Minister was grateful for your Secretary of State's minute of 20 November.

She has asked how the real return of 19%, which is referred to in your Secretary of State's second paragraph, has been arrived at.

I am sending a copy of this letter to Terry Matthews (Chief Secretary's Office), and David Wright (Cabinet Office).

M. C. SCHOLAR

Anthony Mayer, Esq.,
Department of Transport.

CONFIDENTIAL

AW
AD
JV

①

CONFIDENTIAL

Prime Minister

Agree that approval be given for this electrification?
(The Policy Unit and the Treasury offer no objection)
MCS 25/11

Prime Minister

See query note

In view of past discussions you will wish to be aware of the move I now think it necessary to make in the complicated and difficult situation we face on the railways. We are about to impose on the Board an External Financing Limit for 1982/83 substantially tougher than anything they have thought possible, and to help Sir Peter Parker to achieve this, I must give him all the backing I can in his difficult dealings with his unions; substantially further progress there, must be cardinal to his success in meeting our requirements.

It is in this context that I have considered the project for electrifying the services to Norwich. Here we have a project which on any economic test must be acceptable, with a real rate of return of 19%. It has already been submitted separately to Norman Fowler as a project in its own right, before we came to consider the more general proposals for main line electrification and whatever we decided on it therefore carries no commitment to any wider change or is any precedent for it. Moreover, although the project has come in early, it involves no expenditure until 1984. (I shall need better justification from the Board for the other limb of their proposal, which is to extend the electrified services from Royston and from Bishops Stortford to Cambridge). The worth of the Norwich scheme would of course need to be confirmed before final commitment nearer the time.

How is this 19% calculated?

CONFIDENTIAL

CONFIDENTIAL

The Board are able to report good progress in demanning this year. At the start of the year they budgeted to reduce the number of men employed on the railway by some 3,800. By the time of the pay negotiations in mid-year, they were expecting to achieve between 5,000 and 6,000. They are about to pass the 7,000 mark and Sir Peter Parker is confident of doing better than that by the end of 1981. In addition, the numbers employed in BREL have been cut by over a thousand. This is very good progress, and it it vital that the Board should keep up the momentum into next year.

At the same time the Board have been reporting very good progress in reducing the number of complemented posts. Their Corporate Plan envisaged a reduction of over 8,000 by the end of 1981, towards the target of 38,000 by 1985. The achievement will be very substantially better - when Sir Peter Parker saw me recently he told me that he hoped that they would get as far as 14,000 by the year end. At the same time the separate question of the changes in working practices, on which the extra three per cent was accepted in last August's pay deal, is being negotiated - with some progress but also with considerable inter-union difficulty, NUR being cooperative but ASLEF obstructing. I can forsee some very tough passages before the unions are brought to fulfil their commitments and the extra three per cent is paid. But meanwhile I believe that some signs of recognition of the accelerated demanning already being achieved is vital to our success in keeping up the pressure on all fronts for continued change next year and getting the Board through its difficulties.

CONFIDENTIAL

CONFIDENTIAL

I have concluded - and the Chief Secretary, whom I have consulted, accepts my judgement - that to help Sir Peter Parker forward when he needs it in picking his way through all these negotiations, he should in concert with me and with my prior agreement be able to select the time for an announcement that we have given the approval he seeks to the electrification of the line to Norwich. I judge that this is now an essential card that we must put into his hand, if he is to continue to keep the support of those elements in the unions who are prepared to move with his plans for the necessary changes in the railway and to prevail over those who continue to resist.

I am sending a copy of this to the Chief Secretary and to Sir Robert Armstrong.

DH

DAVID HOWELL
20 November 1981

CONFIDENTIAL

3F

Transport 2

PRIME MINISTER

cc Mr Gow

I attach a copy of Mr. Fowler's statement on electrification.

He had quite a lively reception. Albert Booth wanted to know why the three year joint study between Department of Transport and BR had been ignored. British Rail could not usefully undertake further work without Government decisions on the series of issues identified in that report. The Minister's decision gave BR no credit for its significant reductions in labour force in recent years, and its improved productivity. The Government was offering nothing for rural and commuter services. British Rail was being offered a few lines of excellence at the price of collapse elsewhere. The announcement was a blow to BR, a blow to the supply industries and a blow to the regions which would have benefited from the work. Mr. Fowler said in reply that Mr. Booth would probably have reached the same decisions if he had been Secretary of State. He was simply asking British Rail to meet the target set in its own corporate review.

Robert Adley, the first Government backbencher to speak, was disappointed, in view of the massive BR staff reduction, and BR's achievement in gathering a higher proportion of its costs from fares than any other European network. For the Liberals, Stephen Ross also found the statement desperately disappointing. From the Government's side, Peter Emery and Roger Moate then came to Mr. Fowler's rescue, followed by a number of backbenchers who recognised that BR's finances were in bad shape as a result of recent trends, and that BR was still grossly overmanned. Jock Bruce-Gardyne congratulated Mr. Fowler on insisting on evidence of productivity before investing. He quoted what he claimed to be BR figures showing that an average freight crew covered 11 miles per day. Mr. Fowler preferred his figure of some freight drivers doing 30 miles a day.

Opposition backbenchers were heavily critical. Peter Snape declared that "at least Beeching was honest about his intentions". Harry Cowans wished to remind Mr. Fowler that "investment begets productivity, not the other way round". Alex Lyon, Leslie Spriggs, and Les Huckfield found the statement totally negative. But the

/Opposition

Opposition seemed to lose their way, with Mr. English claiming that profitable inter-city services like that to Nottingham were subsidising commuter services in the wealthier South East, and Alan McKay seeing electrification as potentially the biggest single factor in pulling the economy round.

Mr. Fowler made frequent reference to his conviction that Sir Peter Parker would welcome these proposals. Sir Peter, sitting conspicuously in the public gallery, gave nothing away.

MAP

22 June 1981

BRITISH RAIL (ELECTRIFICATION)

The Government has completed its examination of the report on main line electrification. For this, we have reviewed the prospects for the freight and inter-city businesses of the railway which could benefit from electrification, in order to judge the strength of their case for further major investment. I had earlier met rail management and unions in the Rail Council, to hear their arguments for further investment in the railway and particularly in electrification, and to discuss the pressing need for increases in efficiency and productivity in railway operations, and I am seeing them again later today.

This examination has had to take place at a time when the current financial position of the British Railways Board gives serious cause for concern. The trading position of the Board has worsened during the year, and immediate substantial economy measures are now required. The Government for its part will continue to support the efforts of the Board to meet the difficulties it has to face. But the Government will expect the industry's management and unions to play a full part in bringing about the necessary improvements.

As far as the businesses are concerned, our aim is that as much freight as can economically do so should go by rail. But the future of the rail freight business depends crucially on reduction in its costs. If the efforts of the Board to eliminate uneconomic capacity, and to secure new agreements on working practices, do not produce their results quickly, and costs are in consequence not substantially reduced, then the rail freight business will continue to shrink. Only if these cost reductions are achieved will there be enough freight traffic on the railway to contribute significantly to the case for electrification. These are matters entirely in the hands of the industry, but the Government is bound to take account of progress on them in its further decisions on future investment.

The Government's policy is that subsidy should go only to socially necessary passenger services such as rural and commuter services. The inter-city rail business, which could benefit from electrification, should be fully commercial. So far, in spite of large investment, the inter-city business has not made progress towards earning an adequate return on the assets employed. Immediate steps must therefore be taken to match the capacity offered closer to profitable demand. Given the necessary measures, services comprising the majority of inter-city business should be able to support new investment and win traffic on a commercial basis. I am accordingly asking the Railways Board to bring forward plans for an inter-city business that will achieve a fully commercial performance by 1985, and to start on the necessary changes immediately.

Given the necessary will in all parts of the industry these measures can succeed. There is no alternative if there is to be a healthy future for the large commercial railway businesses, which will benefit their customers and those who work in them, and justify a selective programme of main-line electrification. The Government is not prepared to give an unconditional commitment to the electrification of an extensive network and progress on electrification will depend on the achievement of the changes necessary to secure manpower reductions and improvements in productivity.

I am therefore inviting British Rail to prepare and submit a ten-year programme of schemes for electrification only of those potentially profitable main-line routes where it is clear that the benefits could justify the investment. These should be presented together with the new commercial plans that are now required for the businesses. The approval of each successive electrification project will be conditional on the profitability of the investment in question and on the achievement of necessary improvements in productivity.

O/O c.c. Press

CONFIDENTIAL

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

Prime Minister 1
Content?
MM 19/6

Mike Pattison Esq
Private Secretary to
the Prime Minister
10 Downing Street
LONDON
SW1

19 June 1981

Spoken to Transport on the lines below
TL 22/6

Dear Mike

RAILWAY ELECTRIFICATION

My Secretary of State was asked to agree with the Prime Minister and the Chancellor of the Exchequer the terms of the announcement which he is to make on Monday of the Government's decision about railway electrification. Attached for the Prime Minister's consideration is a draft which my Secretary of State is ready to use and which incorporates the suggestions by the Chancellor of the Exchequer.

In two places, sidelined, the thoughts suggested by the Chancellor for inclusion are expressed not in the precise words which he proposed but in the exact terms of the minutes recording the Prime Minister's summing up of the discussion in 'E' Committee.

I am sending copies of this letter and its enclosure to John Wiggins, David Heyhoe, Murdo Maclean and David Wright.

Yours sincerely

C R Edwards

C R EDWARDS
Private Secretary

The first sentence of para 6 reads strangely after the last sentence of para 5. Have added an 'only' which makes the point clearer. Is the Chancellor content? MP

CONFIDENTIAL

DRAFT ORAL STATEMENT TO BE MADE ON MONDAY 22 JUNE 1981

1. The Government has completed its examination of the report on main line electrification. For this, we have reviewed the prospects for the freight and inter-city businesses of the railway which would benefit from electrification, in order to judge the strength of their case for further major investment. I had earlier met rail management and unions in the Rail Council, to hear their arguments for further investment in the railway and particularly in electrification, and to discuss the pressing need for increases in efficiency and productivity in railway operations, and I am seeing them again later today.

2. This examination has had to take place at a time when the current financial position of the British Railways Board gives serious cause for concern. The trading position of the Board has worsened during the year, and immediate substantial economy measures are now required, demanding full co-operation of the industry. The Government for its part will as hitherto support the efforts of the Board to meet the difficulties it has to face. But the industry's management and unions must play a full and responsible part in bringing about the necessary improvements. We will not be willing to underwrite failure.

3. As much freight as can economically do so should go by rail. The future of the rail freight business depends crucially on reduction in its costs. If the efforts of the Board to eliminate uneconomic capacity, and to secure new agreements on working practices, do not bear early fruit, and costs are in consequence not substantially reduced, then the rail freight business will

continue to shrink. Only if costs are reduced quickly enough and on a sufficient scale will there be enough freight traffic on the railway to contribute significantly to the case for electrification. These are matters entirely in the hands of the industry, but the Government is bound to take account of progress on them in its further decisions on future investment.

4. Subsidy should go only to socially necessary services such as rural and commuter services. The Inter-City rail business, which would largely benefit from electrification, should be fully commercial. That distinction is the basis of Government policy. So far, in spite of large investment, the inter-city business has not made progress towards earning an adequate return on the assets employed. Immediate steps must therefore be taken to match the capacity offered closer to the worthwhile demand. Given the necessary measures, services comprising the majority of inter-city business should be able to support new investment and win traffic on a commercial basis. I am accordingly asking the Railways Board to bring forward plans for an inter-city business that will achieve a fully commercial performance by 1985 and to start on the necessary changes immediately.

5. Given the necessary will in all parts of the industry these measures can succeed. Indeed, there is no alternative. They must succeed in order to guarantee a healthy future for the large commercial railway businesses, to the benefit of their customers and of those who work in them, and to justify a selective programme of main-line electrification. The Government is not prepared to give a blanket commitment to the electrification of an extensive netowrk.

6. I am therefore inviting British Rail to prepare and submit a ten-year programme of schemes for electrification only of those potentially profitable main-line routes where it is clear that the benefits could justify the investment. These should be presented together with the new commercial plans for the businesses that are now required. The approval of each successive electrification project

will be conditional on the profitability of the investment in question and on the achievement of necessary improvements in efficiency and productivity.

Prime Minister 2

WW 19/6

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

Mike Pattison Esq
Private Secretary
10 Downing Street
LONDON SW1

19 June 1981

Also no estimate takes into account the loss of jobs caused by increasing the charges on electricity industries or notable industries to finance extra spending. This makes it

Dear Mike

EMPLOYMENT EFFECTS OF RAILWAY ELECTRIFICATION

The Prime Minister asked for an estimate of the employment that might be generated by a programme of railway electrification.

A programme of the largest size considered in the Electrification Review, involving annual expenditure averaging £32m. a year, is estimated by the railway equipment industry to create directly between 1,200 and 2,000 extra jobs in the private sector - mostly on construction work, and another 800 on construction work to be employed by BR themselves. These figures exclude any employment generated indirectly among sub-contractors to the construction companies.

These estimates assume that the investment would be a net increase in public expenditure and the PSBR - if they were not, they would be offset by reductions in employment elsewhere in the economy. In the longer term, the benefits of electrification to BR depend upon reductions in its own employment from the lower maintenance needs of electric rolling stock.

Yours sincerely

Alice Baker

MRS E A BAKER
Private Secretary

imperative that the spending be financed within existing EFLs and asset disposals. MP

19 JUN 198[illegible]

cc A-Walters
A-Duguid

Prime Minister
Transport

Treasury Chambers, Parliament Street, SW1P 3AG
01-233 3000

PRIME MINISTER

BRITISH RAIL

In E Committee later today we are due to discuss policy towards British Rail's commercial businesses on the basis of the Review which the CPRS have completed. Norman Fowler suggests that our discussion should be followed by an early statement from him which would "point the way forward".

2. The CPRS Review provides a very helpful analysis of the problems of the commercial businesses and puts forward some sensible prescriptions for the medium term, including the handling of the electrification issue. However, the picture painted is a gloomy one with serious financial implications over the next few years. In this context Norman's proposed statement gives me considerable cause for concern.

3. It does not use either the electrification card or British Rail's present serious financial position to put maximum pressure on BR for the changes which we all know are needed. Although the words used do not amount to a specific commitment to electrification, they will be seen as such and they give the Government nothing in exchange. For example, there is no explicit link between defined progress in cutting costs and improving productivity and the approval of electrification schemes. Peter Parker's remarks yesterday about BR having to axe 14,000 jobs over the next two years in order to persuade

the Government to pump more money into the system, shows that he is prepared to recognise this link, a fact we should exploit to the maximum. Moreover, the statement contains no indication of the real seriousness of the Board's current financial position and the need for urgent action to counter this. Given the Board's poor record and its heavy dependence on Exchequer support - the Government cannot afford to do other than make the position absolutely clear to both management and unions.

4. I believe that our first priority should be to consider how we handle the most urgent problems of BR policy. I have in mind:-

(i) action on their immediate financial position - the expected overshoot of the 1981-82 EFL, the higher financing requirement for 1982-83. the looming threat of "bankruptcy" in the sense of impropriety in continued lending from the NLF, and the first breach of the basic cash ceiling discipline for PSO grant;

(ii) our attitude towards further deterioration in the financial outlook if the Board were to implement a recommendation from the Railway National Staff Tribunal in excess of their current 7 per cent offer and the impact of this on pay negotiations in the next round;

(iii) whether we are willing to face industrial action either over pay or over the reductions in capacity proposed by the CPRS or as a result of an attempt to make some progress on changes in working practices.

(iv) the re-appointment of Sir Peter Parker as Chairman of the British Railways Board.

The damage which has been done to our position by the NCB deal in the spring makes it all the more important that we should be clear about our approach to BR before moving ahead on any particular front. The present papers do not enable us to reach a view on these more immediate issues. I think that we should do so as soon as possible.

5. I recognise that this may pose a timing problem. If it is inevitable that some sort of statement is made before the NUR Conference, it must take a much more cautious line on electrification and certainly avoid giving away the principle, and at the same time spell out more clearly the changes which we want to see implemented.

6. I am copying this letter to the other members of E, Norman Fowler and Sir Robert Armstrong.

P.S. Jenkins

for G.H.

17 June 1981

(Approved by the Chancellor and signed in his absence)

17 JUN 1981

Ref. A05087

PRIME MINISTER

British Rail: Commercial Businesses and Electrification Proposals
E(81) 63 and 64

BACKGROUND

At their meeting on 14 April, the Committee agreed to defer consideration of the Secretary of State for Transport's proposals for a major rail electrification programme until the Central Policy Review Staff had examined the prospects of British Rail's inter-City and freight businesses in relation to the report on electrification (E(81) 15th Meeting).

2. The CPRS report (E(81) 63) was prepared with the help of the Department of Transport and of Coopers and Lybrand; they were asked not to consult British Rail. They conclude that, on present plans, Inter-City is most unlikely to meet its present commercial target and that the freight services will make continuing losses at least until 1985. Their recommendations to deal with this situation are in paragraph 3 of the summary covering their report. In paragraph 4 of that summary they recommend that, while there are benefits to be had from some selective electrification, the Government should not be committed to an extensive electrification network programme but that British Rail should be invited to submit proposals for approval on a route by route basis covering the 10 years ahead. Their proposals, and the options they have examined, are set out in more detail in section 6 of their report.

3. The Secretary of State for Transport, in E(81) 64, accepts these conclusions. The Committee may, however, feel that his claim that the CPRS report is entirely in line with his own approach does not give sufficient credit to the very serious problems facing the commercial businesses, which the CPRS have identified, or to the fact that a route by route approach is rather more cautious than his own recommendation in April for recognising 'that the right future for the main line railway is an electrified one, with commitments to that staged according to productivity improvements and better results' (paragraph 19(iii) of E(81) 41).

4. The Secretary of State for Transport warns that because of falling traffic there is a threat of £80-100 million to British Rail's External Financing Limit of £920 million in the current year, which could be made worse if there were an unfavourable outcome to the current arbitration over British Rail's offer of 7 per cent pay and the union's claim for 13 per cent - each percentage point costs about £15 million.

5. He further warns, in his paragraph 3, of the increasing possibility of a strike over cuts in services. You will recall that the Civil Contingencies Unit have already assessed the consequences of industrial action by rail workers. The Home Secretary, in his cover note to their report (E(81) 49), warned that the two key areas would be the London commuter service and movements of coal to power stations. He advised that, in the light of current stocks and of the time of year, coal movements were the less important of the two but that the effect of a rail strike would be to reduce power stations endurance for next winter; and that the effect on commuters would be more immediately serious.

6. In the light of this situation, the Secretary of State for Transport reccommends that later this month, and before the Rail Union Conference, he should make a statement bringing out the reality of the position on Inter-City and freight businesses and making clear that progress with electrification must depend on productivity and will be on a route by route basis. He has attached a draft of his statement as an Annex to E(81) 64.

7. I understand that, while Treasury Ministers will probably support the CPRS' recommendations, they will wish to emphasise the very serious short term problems faced by British Rail - over pay (depending on the outcome of the arbitration proceedings); the prospective increase in the EFL for 1981-82; the problem of keeping British Rail's financing within the limits assumed in the Public Expenditure White Paper for the later years; and the status of their borrowing (if the state of their commercial businesses is so bad that it is uncertain that they can service loans from the National Loans Fund, the question arises of the propriety of continuing to make advances from the NLF). Treasury Ministers will probably want to see a strengthening of the draft statement and might also question whether it should be made at this stage.

HANDLING

8. After Mr Ibbs and the Secretary of State for Transport have spoken to their papers you might ask the Chancellor of the Exchequer to comment. If there seems to be broad agreement on the CPRS' proposals, a long discussion may not be necessary - on the understanding, that is, that the Committee will have to return later to the separate issues of pay, the EFL, investment and financing in the later years, and to the further proposals from British Rail following the CPRS' recommendations.

9. The main questions are:-

(i) Is the CPRS' recommended approach to the Inter-City and freight businesses and to electrification acceptable?

(ii) If so, is the Secretary of State for Transport's draft statement annexed to E(81) 64 acceptable?
The Committee may question whether paragraph 5 of the draft brings out sufficiently sharply the points made in paragraph 4 of the Secretary of State's cover note where he emphasises that electrification decisions will be on a route by route basis and subject to individual authorisation. You may feel that the last sentence of paragraph 5 of the statement carries too much the flavour of a generalised approval.

(iii) Subject to any redrafting, should the statement be made this month?
The Secretary of State for Transport will press for this. It is known that the Government has been considering for a long time the proposals on electrification and there is increasing pressure for the outcome to be known. A tough statement now could help to put the unions on warning that strikes and pressure for excessive pay settlements will be damaging to the industry's commercial prospects and, therefore, to the case for electrification.

CONCLUSIONS

10. In the light of the discussion you will wish to record conclusions on:-

(i) The CPRS' recommendations in paragraph 3 and 4 of the summary note in E(81) 63.

(ii) The draft statement annexed to the Secretary of State for Transport's paper, E(81) 64.

You might invite the Secretary of State for Transport to circulate, for clearance in correspondence by the Committee, a revised draft taking account of the points made in discussion.

RTA

ROBERT ARMSTRONG

16 June 1981

Qa 05392 15 June 1981

To: MR LANKESTER

From: J R IBBS

BRITISH RAIL

1. I have already circulated the CPRS report which is to be discussed at E on Wednesday 17 June. I am pleased to see that in his paper E(81)64 Mr Fowler has accepted our recommendations. I feel I should emphasise that this represents a major change from views and proposals that existed before our study. For example, there has been a downward step change in the perceived financial prospects for BR and there is now a willingness to consider radical changes of policy to cope with this. Also, further electrification will now have to be justified rigorously scheme by scheme. There are, however, two matters relating to BR which go beyond our remit and which I should like to draw to the Prime Minister's attention.

2. The first relates to the measurement of commercial viability. It is clear from our work that, because of the difficulties in allocating costs, what truly constitutes commercial viability is not yet adequately defined in the complex situation where several sectors of the railway make common use of track, signalling and administration. Coopers & Lybrand, who worked with us as consultants, have gone some way towards refining the method of determining commercial viability but further development is needed. Until commercial viability is properly defined, we shall never really know how well BR is doing. It is important that this aspect should be pursued further by the Department of Transport and BR and I propose to write to Mr Fowler suggesting this.

3. The second matter relates to the cash requirement for BR as a whole. It is clear from our work that the "commercial" sector (Intercity and freight) has in practice been partly subsidised by the PSO Grant. Closer definition of objectives and tighter

monitoring of how this aid is used are clearly needed. If, as we recommend, the commercial sector is reduced to a core that genuinely has a commercial future, a consequence will be that the non-commercial sector will be larger. Efficiency improvement and reduction in some of the services should make possible some cut in costs, although BR's recent record on productivity improvement does not engender confidence. Based on our findings, my personal belief is that the cost of maintaining the social railway is likely to increase unless some substantial fundamental cuts are made in it. I appreciate the political difficulty in closing uneconomic lines. However, compared with a great number of the other commitments for public funds, many of these lines command extremely low priority by any economic test and are used by very few people. Infact I believe some reduction in the extent of the railway is ultimately inevitable: - the sooner this happens, the better. It seems therefore, important to avoid unnecessary fresh commitments to maintaining the network as it is.

4. The work done by the consultants, Coopers & Lybrand, provided an important part of the basis for our recommendations. Without their assistance we could not have gone into the subject in such depth in the time available. Although I doubt whether the Prime Minister will wish to have this degree of detail, I am enclosing for your information a copy of the Coopers & Lybrand report. I am also sending copies to the Chancellor of the Exchequer, the Secretary of State for Transport and Alan Walters.

5. I am sending a copy of this Minute and of the Coopers & Lybrand report to Sir Robert Armstrong.

JR

APPOINTMENTS IN CONFIDENCE

Top copy on Transport British Rail fares etc

JL Transport 15

HMT LPC CO

10 DOWNING STREET

From the Private Secretary

15 June 1981

Blind copies to J. Hoskyns D. Wolfson A. Walters

Sir Peter Parker and British Rail

The Prime Minister is aware that your Department and the CSD are trying to establish a basis for the renewal of Sir Peter Parker's contract.

As you know, the CPRS report seriously questions full acceptance of British Rail's electrification proposals. Without prejudging discussion of the report, the Prime Minister is concerned that the Government should not find itself in a position where, shortly after extending Sir Peter's contract on terms which imply satisfaction with his work and confidence in the contribution he still has to make, there is then disagreement (which would quickly become public knowledge) between the Government and Sir Peter over British Rail's long-term plans in general and the electrification proposals in particular. She would therefore like a report on the state of the negotiations, with special regard to likely developments when the Government responds to British Rail's investment proposals.

I am sending a copy of this letter to John Wiggins (HM Treasury), Jim Buckley (Lord President's Office) and David Wright (Cabinet Office).

MLR

Copy in Appointments.

Anthony Mayer, Esq.,
Department of Transport.

Transport

10 DOWNING STREET

DR. RICKARDS
CPRS

Attached are a few comments on your draft paper.

9 June 1981 ALAN WALTERS

cc Mr. Hoskyns
Mr. Wolfson
Mr. Duguid
Mr. Lankester

COMMENTS ON CPRS DRAFT ON ELECTRIFICATION OF BRITISH RAIL

Generally I agree with the draft. There are, I think, one or two points where it might be strengthened.

Page 20 para 5

I think we can nail the fallacy about network benefits rather neatly. If what they say is true, then the greater the electrification, the higher the rate of return. And the marginal rate of return clearly exceeds the average as we go from Option 1 to Option 5. This must be so since the average return gets higher. Then it must be true that the optimal policy would clearly be one which is bigger, and very likely to be much bigger, than Option 5. Clearly the marginal rate of return lies above the average rate of return until the average rate starts declining. On the logic of their argument and the nature of their numbers it is likely that the average rate of return for a much larger electrification programme would be very considerably greater than 11%. We must ask British Rail and the Department of Transport that, if they believe their numbers, why they did not propose an even considerably larger programme of electrification than Option 5? They are denying us an enormous rate of return implied by their figuring.

Of course, one may take the view that there is no pot of gold at the end of the rainbow. But if that view is taken then the whole methodology and numerical results are immediately discredited. The only way they could justify their results and show that Option 5 is the best policy is to demonstrate that just beyond Option 5 there is an enormous jump, and I mean absolutely enormous jump, in the marginal rate of return on electrification. There would have to be a tremendous discontinuity. As I recollect from my reading of the electrification report, this is demonstrably not so.

I think this would enable you to say in your conclusions that there is very considerable doubt about the increase in the rate of return generated as we proceed from the small to the large options. This, I think, would strengthen the argument that we proceed bit by bit.

9 June 1981

ALAN WALTERS

10 DOWNING STREET

DR. RICKARDS

SOME FURTHER NOTES ON THE FIRST DRAFT OF CPRS REVIEW OF BRITISH RAIL'S COMMERCIAL BUSINESS AND ELECTRIFICATION PROPOSALS

Among the options you do not specify one which takes the form of increasing Inter-City passenger fares. If we accept the electrification report's assumption of an elasticity of minus .65 then it would be possible for the Inter-City services to be commercially viable simply by increasing the fares. They would carry fewer passengers but provided carrying fewer passengers did not increase total costs, net revenue must increase. (I find it difficult to believe that anyone could argue that carrying fewer passengers increases, rather than decreases, total costs.)

This is, on the British Rail/DoT electrification report, a perfectly feasible way of ensuring commercial viability. It can also be represented as a solution where "those who benefit pay". There is always the alternative option of a coach service at a small fraction of the fare of the Inter-City. Would it not be possible to put this suggestion in Option 1, then you could simply increase fares so that you meet the 25% target?

9 June 1981

ALAN WALTERS

cc Mr. Hoskyns
Mr. Wolfson
Mr. Duguid
Mr. Lankester

BF 1/6/81

BF when BR electrification comes back to E.

TL

13/5

Transport

CHIEF SECRETARY TO THE TREASURY

Treasury Chambers, Parliament Street, SW1P 3AG

T Lankester Esq
10 Downing Street
London SW1

12 May 1981

Dear Tim,

BRITISH RAIL: BACKGROUND BRIEFING

I understand that the Prime Minister expressed an interest in seeing the factual briefing on BR which was prepared for the Chief Secretary's use at a constituency meeting on 9 May. I attach copies of the briefing.

You will appreciate that, while the Department of Transport were consulted in its preparation, this was an internal piece of briefing prepared for the Chief Secretary's use on a particular, constituency, occasion. Should the Prime Minister want to make a public statement about BR, the Department of Transport would of course need to provide the material. We would be grateful if enquiries to that Department were made without reference to our briefing, which we would prefer was not passed on to them, but as freestanding enquiries.

Yours ever

Terry Mathews

T F MATHEWS

Private Secretary

CHIEF SECRETARY

cc Mr Burgner
Mrs Case
Mrs Parker-Brown

BRITISH RAIL : BRIEFING FOR CONSTITUENCY MEETING ON 9 MAY 1981

I promised to let you have one or two further pieces of information following our talk this morning.

Line Closures:

2. Since 1975, the first year of the existing PSO grant system, BR have closed 294 miles of track. Much of this track however was used only for freight operations where purely commercial considerations apply. Other closures were in areas where BR operates under the auspices of a local authority (Passenger Transport Executives) where closures would be related to local authority decisions on grant levels. Closures affecting the national passenger network covered by the PSO have therefore been very small, and overall the system is in fact larger by 13 passenger route miles than in 1975.

Costs and Productivity:

3. The Board publish each year in their Accounts a set of performance indicators which give some indication of trends in costs and productivity. I attach a copy of this year's set. The position or ɔsts is complicated by problems of definition and allocation. Line 5 suggests that rail costs in the passenger business have increased from £2.10 per passenger mile to £2.23 now (with a peak of £2.30 in 1979). But it is more revealing to look at the real increases in the Board's revenue (lines 2 and 4 reproduced below) which have been needed to meet the overall real increases in costs which are suggested by many of the other indicators (lines 15, 16, 18 and 19 for example):

	1976	1977	1978	1979	1980
Average fare per passenger mile (1976 prices)	2.84	3.24	3.66	4.00	4.82
PSO grant per passenger mile (excluding replacement allowance from 1978 onwards)	1.83	1.77	1.59	1.69	1.74

4. Similar problems of definition arise with any one set of figures for labour productivity. Line 20, on one particular definition, suggests some improvement in recent years:

	1976	1977	1978	1979	1980
Passenger miles/net tonne miles per member of staff employed	137.2	140.9	144.7	147.8	142.9

But the conclusions reached by the recent study of BR commuter services conducted by the Monopolies and Mergers Commission provide a picture of the overall situation which can be quoted authoratitive

"Since 1970 the rate of change [in productivity] has been very much slower with a manpower reduction of 14% against a fall in traffic units of 9%, giving a net productivity gain of only 5%. There has been virtually no change in manpower over the last 3 years but a marginal increase in traffic. .... Improvements in manpower productivity...... in the last 2 years [ie. up to 1980] has practically ceased."

R J Broadbent

R J BROADBENT
8 May 1981

Other information: Statistics

5E

Railways
Performance indicators years 1976–1980

		1976	1977	1978	1979	1980
1. Passenger miles per loaded passenger train mile		93	94	97	102	97
2. Average fare per passenger mile	pence	2·84	3·24	3·66	4·00	4·82
3. PSO "contract" payments per passenger mile (at 1976 price levels)	pence	1·83	1·77	1·59	1·69	1·74
4. PSO "contract" payments as a percentage of Gross Domestic Product at Factor cost	%	0·29	0·29	0·26	0·29	0·30
5. Passenger business direct costs per loaded passenger train mile (at 1976 price levels)	£	2·10	2·07	2·15	2·30	2·23
6. Average wagon load (all traffics including Freightliner and NCL)	tonnes	22·47	22·99	24·52	25·20	25·83
7. Freight revenue per wagon (at 1976 price levels)	£	1,495	1,613	1,719	1,844	1,818
8. Net tonne miles per loaded freight train mile		307	324	331	343	338
9. Loaded train miles per train crew member		6,471	6,602	6,647	6,536	6,700
10. Loaded train miles per route mile	000's	21·8	21·8	22·1	22·0	22·4
11. Train running and terminal costs per loaded train mile (at 1976 price levels)	£	3·02	3·00	3·01	3·12	3·00
12. Passenger trains arriving on time, or less than 5 minutes late, as a percentage of total passenger trains	%	93	93	91	87	89
13. Passenger trains cancelled as a percentage of current timetable services	%	0·8	1·1	1·5	3·1	1·4
14. Train catering services cancelled/reduced as a percentage of advertised catering services	%					4·7
15. Track maintenance costs per track mile (at 1976 price levels)	£	4,181	4,036	4,188	4,645	4,552
16. Signalling renewal and maintenance costs per track mile (at 1976 price levels)	£	2,246	2,395	2,855	3,140	3,176

Notes

Items 3 and 4 include payments by Passenger Transport Executives. The 1978, 1979 and 1980 payments exclude Special Replacement Allowance of £50m, £57m and £69m respectively. Public Service Obligation payments have been amended for subsequent adjustments.

Item 7 wagons include privately owned vehicles.

Item 9 includes departmental (internal user) train miles. The indicator *does not* represent the average mileage worked by train drivers, as each train has a minimum of two train crew and frequently more (for example, traction trainees, trainee guards and sleeping car attendants).

Item 14 data not available prior to 1980.

Item 16 includes expenditure of a capital nature chargeable to revenue e.g. renewals which are subject to year by year level of Government cash limit.

5E

Performance indicators years 1976–1980 continued

		1976	1977	1978	1979	1980
17. Signalling operating costs per track mile (at 1976 price levels)	£	2,424	2,325	2,383	2,330	2,200
18. Total rolling stock maintenance costs (Rail and Rail workshops) per £ of total Rail operating expenditure	pence	18·0	18·2	17·9	18·8	18·5
19. Total administration costs per loaded train mile (at 1976 price levels)	pence	77·4	74·8	75·5	81·3	83·3
20. Passenger miles/net tonne miles per member of staff employed (Rail and Rail workshops)	000's	137·2	140·9	144·7	147·8	142·9
21. Revenue per £1,000 of paybill costs (Rail and Rail workshops)	£	1,163	1,294	1,346	1,297	1,237

Notes

Item 18 total Rail operating expenditure for 1978, 1979 and 1980 includes Special Replacement Allowance.

Item 20 staff numbers for 1976 and 1977 are adjusted to include Corporate and Common Services etc. and include staff wholly or partly employed on capital work or for outside parties.

Item 21 paybill costs are Gross Paybill Costs (including amounts charged to capital and third parties).

Mrs Case
Mrs Parker-Brown

CHIEF SECRETARY cc Mr Broadbent

BRITISH RAIL : BRIEFING FOR MEETING IN CONSTITUENCY ON 9 MAY 1981

You asked for some background briefing on the Government's financial support for British Rail for your meeting on 9 May 1981 to discuss with BR's regional management the threatened closure of the Eske Valley branch line between Whitby and Middlesbrough.

CENTRAL GOVERNMENT GRANT

2. The Government pays the British Railways Board (BRB) a Public Service Obligation (PSO) Grant to compensate them for the losses incurred in maintaining, at the direction of the Secretary of State for Transport, the railway passenger system at a level broadly comparable with that provided in 1974.

3. The grant payable each year is calculated on the basis of the estimated cost of operating the system: from this total is deducted estimates of revenue, payments by Passenger Transport Executives (PTEs) and local authorities towards the costs of services to meet local needs and contribution from the freight and parcels sectors; the remainder represents the net requirement for compensation. The grant claim for 1981 (calendar year) has been settled at £664.3m, which includes £80.3m as a separate special replacement allowance (introduced in 1978) towards the renewal of the assets of the passenger railway business. The following figures show that total Central Government support for BR's passenger business has increased in real terms since 1975-76, and particularly since 1978 with the introduction of the replacement allowance.

	Estimated Outturn Prices	1980 Survey Prices £m
1975-76	302	513
1976-77	316	469
1977-78	378	476
1978-79	467	483
1979-80	586	523
1980-81	696	532
1981-82	725	553

4. The grant is paid as a global sum, rather than as separate amounts relating to specific services, regions or sections of the system because of the difficulty in allocating the joint costs, particularly the track and infrastructure between separate parts of the system.

INVESTMENT

5. The Borad's investment programme has remained broadly constant in recent years, although the last two years have seen reductions as rising costs placed increasing pressure on the Board's EFL:

	£m 1980 Survey Prices	
1975-76	398	
1976-77	362	
1977-78	355	
1978-79	409	
1979-80	381	
1980-81	289	) These figures exclude
1981-82	291	) continuous welded rail

EXTERNAL FINANCING

6. Before 1980-81, the Board met the external financing limits set for them. In 1980-81, the original EFL of £750 million had to be increased to £790 million in the light of deteriorating business results which the Board could not entirely offset by their own efforts.

	Limit (Estimated outturn prices)	Outturn £m
1976-77	640	501
1977-78	685	585
1978-79	646	620
1979-80	715	714
1980-81	750 (increased to £790m in September 1980)	790

1981-82 AND LATER YEARS

7. The Board's EFL for 1981-82 is £920m (at outturn prices), an increase in real terms on their EFL for 1980-81. It is made up of £780m grant and £140m borrowing of which £53m is available only to meet the costs of closing their loss-making parcels business. Investment in fixed assets is projected to be £382m. The figures underlying the White Paper for the later years show a sharply reducing level of external finance and grant for the Board although the White Paper also stresses the uncertainties surrounding these. As you know Mr Fowler sought an increase in these figures, but in discussion at E it was there agreed that a decision should not be taken in isolation from the main expenditure round. We are however considering with Department of Transport officials what guidance could be given to BRB in the preparation of their 1982 budget. There has been no public statement about the future position beyond the uncertainties mentioned in the White Paper.

CONFIDENTIAL

CURRENT COSTS

8. The Board have made poor progress in the last few years in achieving productivity gains - most of the cut of 34,000 jobs over the last decade was made before 1974 - and have little idea how the improvements now planned can be achieved. Unit costs have risen since 1977 and means of reversing that trend have yet to be identified.

BRANCH LINE CLOSURES

9. BRB must adhere to a statutory closure procedure if they wish to close a passenger line. This involves publication of their proposals, then if there are any objections they are made to the appropriate Transport Users Consultative Committee (TUCC), who normally hold a public hearing before reporting to the Secretary of State on the hardship likely to be caused by the proposed closure and on ways of alleviating this hardship. The final decision in cases where there are objections is for the Secretary of State to take on the basis of the TUCC report and of wider social and economic considerations.

ESKE VALLEY BRANCH LINE

10. The Board have not yet made any proposals for the closure of this line. I attach a note* on this line prepared by the Department of Transport.

TM

for MRS H PARKER-BROWN
PE 2

7 May 1981

*Map only, plus information that the Darlington/Middlesborough-Whitby passenger services meet only one-third of their direct costs.

CONFIDENTIAL

E A Anguid

Transport

SECRETARY OF STATE FOR TRANSPORT

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

J R Ibbs Esq
Cabinet Office
70 Whitehall
LONDON SW1A 2AS

10 May 1981

R 11/5

Dear Mr Ibbs

Thank you for your letter of 29 April about the CPRS review of British Rail's commercial businesses. The pressures on me to make clear the Government's position on electrification will build up very rapidly in the coming weeks. But I accept that there is a lot of ground to cover and will fall in with your suggested timetable of completion by early June. I understand that reasonable progress is being made.

I am sending a copy of this letter to the Prime Minister, the Chief Secretary, Sir Robert Armstrong and Professor Walters.

Yours ever

Norman Fowler

NORMAN FOWLER

CONFIDENTIAL

cc AD

1. Transport

CONFIDENTIAL

CABINET OFFICE

Central Policy Review Staff

70 Whitehall, London SW1A 2AS Telephone 01-233 7765

From: J. R. Ibbs

Qa 05339 1 May 1981

R.

Dear Chief Secretary,

BRITISH RAIL: CPRS STUDY

Thank you for your letter of 27 April. You ask that, in our study, we should look at possible changes in the level of output. We recognise that this is an important aspect and it will be included (both under the heading of 'business changes' in cii and also 'options' in d of our specification).

I shall be pleased to keep the Treasury informed and understand that my officials have already been in touch with yours.

I am sending a copy of this letter to the recipients of yours.

Yours sincerely,

J R Ibbs

The Rt Hon Leon Brittan QC MP
H M Treasury
SW1

CONFIDENTIAL

CABINET OFFICE

Central Policy Review Staff

With the compliments of

J. R. Ibbs

12

70 Whitehall, London SW1A 2AS

Telephone 01-233 7765

CABINET OFFICE
Central Policy Review Staff
70 Whitehall, London SW1A 2AS Telephone 01-233 7765

From: J. R. Ibbs

Qa 05336 ....
CONFIDENTIAL

12

29 April 1981

Dear Secretary of State,

Thank you for your letter dated 28 April.

Our study of British Rail's commercial businesses has already started. We have had initial meetings with your officials and have commissioned help from consultants. We have drawn up plans for the study on an extremely tight timetable which depends on extensive and rapid assistance from your Department. The questions we are investigating are complex and the minimum time needed if we are to come up with worthwhile conclusions that are reasonably soundly based is 6 weeks. This means we should be able to report in early June. I realise that this does not meet your request but I cannot, in good faith, offer an earlier completion date. However, as we shall be working closely with your officials you should obtain an early indication of the general direction of our findings as the study proceeds.

I confirm that we shall not make a direct approach to British Rail but shall rely on your officials to obtain any information that is needed which is not already available in your Department.

I am sending a copy of this letter to the Prime Minister, the Chief Secretary, Sir Robert Armstrong and Professor Walters.

Yours sincerely,

J R Ibbs

The Rt Hon Norman Fowler MP
Department of Transport
2 Marsham Street
S W 1

CONFIDENTIAL

29 APR 1981

CONFIDENTIAL Transport

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

SECRETARY OF STATE FOR TRANSPORT

J R Ibbs Esq
Cabinet Office
70 Whitehall
LONDON
SW1

R 29/4

28 April 1981

Dear Mr Ibbs.

Thank you for your letter of 16 April enclosing a copy of the specification which has been drawn up for the study of British Rail's commercial businesses. I am quite content with this specification, but I must ask that the study is completed by the end of May. I am going to come under increasing pressure to make clear the Government's position on electrification. My officials will be ready to give CPRS every assistance they can offer so that the May deadline can be met. I would also like to confirm that the review is to be internal to Government - in other words that the CPRS are not going to approach British Rail.

I am sending a copy of this letter to the Prime Minister, the Chief Secretary, Sir Robert Armstrong and Professor Walters.

Yours ever
Norman Fowler.

NORMAN FOWLER

CONFIDENTIAL

CONFIDENTIAL

Transport

CHIEF SECRETARY TO THE TREASURY

Treasury Chambers, Parliament Street, SW1P 3AG

J R Ibbs Esq
Central Policy Review Staff
Cabinet Office
70 Whitehall
London SW1

27 April 1981

Dear Robin,

BRITISH RAIL: STUDY OF COMMERCIAL BUSINESS IN RELATION TO PROPOSALS FOR ELECTRIFICATION

Thank you for sending me a copy of your letter of 16 April to Norman Fowler. The outline of your proposed study seems well suited to meet the concerns expressed in our discussions in E. There is one point, however, which I would like to be sure it is intended to cover in the work you described. This concerns the level of output of the railways. In examining ways in which the commercial businesses might achieve viability in the foreseeable future, I hope the effects of quite major changes in output - that is, service frequencies and speed - will be fully considered. The appropriate level of output will, of course, also arise in the event that the study suggests a redefinition of the "commercial" sector.

Perhaps you could ensure that my officials are kept in touch with the study. It would be useful if they could receive papers and be given an opportunity to comment on the main issues involved.

I am copying this letter to the Prime Minister, members of E Committee, Norman Fowler, Sir Robert Armstrong and Professor Walters.

Yours,
Leon

LEON BRITTAN

CONFIDENTIAL

TK(O|R)

to see

MJS

FL 21/4

CABINET OFFICE

Central Policy Review Staff

From: **J. R. Ibbs**

70 Whitehall, London SW1A 2AS

Telephone 01-233 7765

CABINET OFFICE
Central Policy Review Staff
70 Whitehall, London SW1A 2AS Telephone 01-233 7765

From: J. R. Ibbs

Qa 05327
CONFIDENTIAL

16 April 1981

Dear Secretary of State,

British Rail Study of Commercial Business in Relation to Proposals for Electrification

E(81)15th Mtg 14/4/81

Following the remit given to the CPRS at E Committee, I enclose a copy of the specification that has been drawn up for the study of the British Rail commercial business. This has been discussed with your officials. Because of our present work load, we intend to employ outside consultants to assist with appropriate parts of the study and we shall aim to report as soon as we can,

I am sending a copy of this letter to the Prime Minister, other members of E Committee, Sir Robert Armstrong and Professor Walters.

Yours sincerely,

J R Ibbs

The Rt Hon Norman Fowler MP
Department of Transport
2 Marsham Street
S W 1

Enc

CONFIDENTIAL

BRITISH RAIL

CPRS ELECTRIFICATION AND COMMERCIAL BUSINESSES INVESTIGATION

The CPRS has been invited by the Secretary of State for Transport to examine 'the prospect of the commercial business ... in relation to the electrification report'. The following is an outline specification:-

(a) To define the boundaries of the 'commercial businesses' of BR in terms of eg:

(i) Inter-City passenger
(ii) freight and parcels

and to establish variable and shared cost and revenue structures, and as far as practical and helpful breaking down passenger flows into routes or groups of routes.

(b) To establish a basis for assessing 'commercial viability' of the 'commercial' businesses, eg contribution to joint cost/profit/rate of return etc.

(c) To determine the extent to which the 'commercial businesses' (as defined) meet the defined viability criteria

(i) now
(ii) in the forseeable future - either in whole or part and based on traffic, fare and cost change forecasts, and business changes, including efficiency improvements.

(d) To establish options available if the businesses fail to meet the defined viability criteria, eg redefine the 'commercial' sector.

(e) To establish to what extent the benefits from electrification, as well as giving an adequate rate of return to the incremental investment, improve the financial performance of the commercial businesses. How would the changes analysed above affect the benefits arising from additional electrification?

Transport

MR. LANKESTER

Here are my notes on the rebuttal of the arguments put forward by Humphrey Cole and by the Treasury.

I am sending copies to Robert Armstrong, Robin Ibbs, Peter Le Cheminant, John Hoskyns, David Wolfson, Andrew Duguid and Norman Strauss.

AAW

7 April 1981

NOTE ON POINTS BY HUMPHREY COLE AND THE TREASURY - ELECTRIFICATION OF BRITISH RAILWAYS

Mr. Cole's paper, I believe, does concede one of the main points I was trying to make. The BR Review effectively assumed that the size of the railway network and broadly the size of the railway services would remain the same whatever the financial outturn. This leads to a "Alice Through the Looking Glass" type of economics. For example the worse the performance of labour productivity the greater the profits from electrification. Thus if labour productivity fell catastrophically, say to half or 25% of its present value, then the profits from electrification would increase enormously.

But surely then the Government of the day would not continue to pour resources annually into BR's coffers. They would surely look at a considerable reduction in the railway network and services. This the Review never considers. There is more or less complete divorce between the financial outturn and the size of the railway. And surely one thing we have learned over the past few years is that it is wrong to allow nationalised industries to continue at their existing size and drain the Exchequer dry.

Humphrey Cole ignores this point completely. He says that "even if British Rail fail to achieve their commercial objectives analysis is correct in showing that it will be worth investing in order to operate a predominantly electric railway". But that is clearly absurd. It is always possible that commercial conditions will develop so that no electrification is worthwhile and indeed we may have to abandon some existing electrified lines.

Mr. Cole's memorandum treats the closure of railways as a political decision. It clearly is. But such decisions must depend, or perhaps they should depend, enormously on the commercial prospects of railways. And although I agree with him that political risks are impossible to quantify, I do not think commercial risks are so difficult to evaluate.

DETAILED NOTES ON MR. COLE'S COMMENTS

The Basic Approach

Since the whole point of getting an initial decision on electrification early was in order to profit from the prior decisions, it is difficult to see how the extensive programme of electrification would not inhibit further closure. And certainly it would tend to induce greater subsidies to keep open such "modern services".

The Importance of the Revenue Forecasts

This again shows that it would be an improvement in the case for electrification if railways made very substantial losses. In fact the larger the loss the better the case for electrification.

Trends in Demand Passenger Traffic

I understood that the 1% exogenous growth had been extracted from a regression equation covering the 70s. This was the residual element. But since the equation did not model motoring costs, and we know that they increased quite dramatically because of the increase in the price of petrol, one would expect that there would be a modest growth rate in rail traffic. Similarly, the period 1966/80 has seen substantial electrification and improvement. But the 1% growth is exogenous to these improvements. In an analysis that we did for the World Bank it was found that Great Britain was one of the four countries (the others were USA, Brazil and Yugoslavia) in which there had been an actual fall in railway passenger travel over the period 1966-76.* I am also not convinced that we can ignore the deregulation of airlines and the deregulation of coaches. The former has not yet been accomplished and the latter has only been with us for a few months. Coaches have become more frequent and much more comfortable as well as being cheaper, over time. However I do not deny the possibility that additional regulations and fare control might be introduced by a future government which would validate Cole's argument that the coach encroachment is a once and for all phenomenon.

---

*Christopher R. Willoughby "The Railway Problem" draft The World Bank, February 1981.

Freight Forecasts

My main worry is that freight has fallen quite dramatically over the last 30 years and I cannot see why it should come not merely to a stop but even rise and remain constant for 30 years. Virtually all railway projects which I have been concerned with and those which I have examined ex post have over-estimated, and usually considerably over-estimated, the freight traffic to be expected. In the Review's case I believe they were compelled to adopt lower freight forecasts as standard because of the revelations of the 1979/80 depression. I should have thought it would have been just prudent to examine what would happen if there was a rate of decline of railway traffic considerably less than that which had been experienced over the past 30 years; that is why I suggested a terminal value of 100 million tonnes. Again I must recall the rosy future for freight traffic that was envisioned some 27 years ago with the railway modernisation programme. Those over-estimates were again consistent with those we have seen in many countries. Thus I am fairly certain that the estimate of 175 billion tonnes is far too large.

Fares Elasticity

Mr. Cole has not sought to answer my criticism here. Put simply if the fares elasticity is minus .65 or minus .8 or minus .5 (all of which are tried in the "sensitivity tests") then there is no reason why the railways should not be earning fat profits on their Inter City. Even with non-Inter-City their elasticity would give the same results, so again there is no reason why the railways should not be earning very substantial profits. On the Inter City services it cannot be claimed that the fares cannot be put up because of the injury that would be done to the poor, etc. There are virtually always coach services which are substitutes for Inter City, so those who did not wish to pay the higher rail fares need not. Nowadays they'll find a comfortable coach. It is interesting Mr. Cole now admits there is a higher figure of minus .8 fares elasticity.

I should also say I find it quite inconsistent with work that has been done on consumer budgets where the fares elasticity for transport generally tends to be considerably greater than one.

For example in Patterns in Household and Demand and Saving by Lluch Powell and Williams, the price elasticity is reckoned to be minus 1.33 for the United Kingdom for transport as a whole. Thus one would expect that an individual mode of transport and in particular Inter City where there are many close substitutes, would have an elasticity which in absolute terms would exceed 1.3. I therefore remain unconvinced that the fares elasticity is, as the Review suggests, substantially below an absolute value of unity.

Productivity

While I am perfectly certain that the calculations do show that a worse trend in productivity will make electrification so much more profitable, it is, as I remarked above, rather worrying. There is a lot more which needs to be taken into account rather than a simple calculation of reductions in cost. It is also worth noting that the assumptions about productivity which were incorporated in the Review are optimistic by historical standards, but are also optimistic by any comparison with European railways as Willoughby remarks on page 96. European railways working costs per traffic unit have tended at best to remain stable in real terms since productivity increases were offset or more than offset by real wage increases. It seems to me rather optimistic to assume that we have high productivity and increases and a considerable discipline on the wage increments for our labour force. I doubt if the unions would let us get away with that.

Fuel Costs

I remain rather bemused by all these figures. The history of forecasts of fuel prices has been a record of continuous failure. Even over a short horizon like a year or two the mistakes, as we have seen, have been very large indeed. And I do not find it difficult to imagine that the price of electricity might rise very considerably above the price of fuel oil, if those prices reflect the marginal cost of production. It is not at all difficult to imagine that some government of the day persists in keeping open highly uneconomic mines and requiring the Electricity Generating Board to buy that coal. And there is no reason why the development of technology in the oil industry should not bring that price down. There are many scenarios which cannot see a few years ahead let alone 30 years.

Concluding Remarks

Finally I cannot see why the commitment to extensive electrification is required at this point. It seems to me that all the Government needs to do is to commit itself to the proposition that if electrification were shown to be profitable on particular routes and lines, then it will be allowed to go ahead. This will be done at the appropriate stage of development of the railways. Provided that the railways can justify electrification adequately then the government of the day would let it proceed. What objection can there be to that sort of programme?

7 April 1981

ELECTRIFICATION OF BRITISH RAILWAYS
COMMENTS ON THE TREASURY PAPER

Optimistic Assumptions

I am pleased to see that the Treasury does agree that the standard assumptions in the Review are "somewhat optimistic". However the Treasury claims that the sensitivity analysis, allowing less optimistic assumptions was sufficient to show a case for main line electrification. I still continue to argue that the assumptions about traffic levels and freight traffic are still optimistic even though they are below the standard assumptions of the Review. But the Treasury agrees that the prospects of achieving these will need to be reviewed in light of "the Board's previous and current record". I agree.

The Energy Prices

I think the Treasury's view about the Railway Board's record might reasonably be applied to the forecasts of energy prices. So far as I am aware over the last 10 years forecasts of energy prices have been hopelessly wrong. Ministers should take this into account, as the Treasury suggested in the case of the British Rail Board.

Financial Viability of British Rail

The Treasury note clearly does not accept the forecast that British Rail can deliver what they promise in the way of very large improvements in productivity. And it is at least dubious about the profit on freight traffic by 1986. I think I am a little more doubtful than even the Treasury, but I am glad that they share some of my concern.

The Rate of Discount, Capital Rationing and Priorities

I argued that the 7% rate of discount was inappropriate under capital rationing conditions, especially where the stringency of capital rationing was such that the marginal project would earn a rate in excess of 7%. The Treasury recognise that this is a complex technical problem, but a very important one with wide manifestations. I would be happy to become engaged in a discussion of my propositions.

CONFIDENTIAL

Treasury Chambers, Parliament Street, SW1P 3AG

T P Lankester Esq
10 Downing Street
London SW1

6 April 1981

Dear Tim,

BRITISH RAIL ELECTRIFICATION

In your letter of 3 April you said that the Prime Minister had asked for comments from Treasury and Department of Transport on the paper produced by Professor Walters on the British Rail (BR) Electrification Review. I enclose a note by Treasury Officials commenting on his paper.

The Treasury was, of course, represented on the Review Steering Committee and we have agreed with the Department of Transport that their reply will cover the detailed points raised by Professor Walters. The Treasury Officials' comments are therefore confined to the wider issues touched on in his paper, in particular the integrity of the investment appraisal exercise underlying the Review and the question of the basic profitability of the commercial services which it assumes. Their comments also cover the question of the appropriate rate of discount raised in the annex to the paper.

I am copying this letter to Anthony Mayer (Department of Transport), David Wright (Cabinet Office) and Robin Ibbs (CPRS).

Yours ever

Terry Mathews

T F MATHEWS

CONFIDENTIAL

CONFIDENTIAL

BRITISH RAIL ELECTRIFICATION

The basic point underlying Professor Walters analysis is the uncertainty which exists about whether or not British Rail's (commercial) businesses have a commercial future. The Electrficiation Review was not intended to address this issue. This is made clear in paragraph 34. It is therefore wholly concerned to demonstrate the financial benefits of re-equipping parts of the existing businesses with electric as opposed to diesel traction. However, paragraph 8 (i) of the Chairmen's submission draws attention to the major underlying assumption that the commercial businesses will develop in a way which will justify further substantial investment.

2. In its own terms the Review appears to us to provide a sound analysis. The Department of Transport will be commenting on the individual points raised by Professor Walters about particular assumptions. It is probably the case that the "standard" assumptions in the Review are somewhat optimistic, reflecting in part its status as a joint study with British Rail and in part the time at which it was started. All the main assumptions in the Study were subject to sensitivity analysis, allowing less optimistic assumptions about traffic levels and costs to be tested. Stringent combinations of these continue to show a case for mainline electrification, although the importance of securing cost reductions made possible by electrification becomes critical with lower traffic levels. In taking a decision as to whether to go ahead with electrification, Ministers will need to take a view about the prospects for achieving these: a view which is bound to be coloured by the Board's previous and current record.

4. The assumptions in the study about energy costs were based on the best advice available within Government at the time. The results of taking more recent forecasts are set out in the appendix to the Secretary of State's paper for E (E(81)44) and imply a larger financial benefit from electrification than that associated with the standard forecasts used in the Review.

5. The Review does not however provide a <u>sufficient</u> economic justification for investment in electrification, although it shows a good economic return in the sense that losses will be lower than they would be without the investment. Treasury officials have

therefore pressed for the papers on British Rail policy, which are to be discussed in E Committee this week, to contain an assessment of whether the Freight and Inter-City rail services will cover the costs of the rail system which can be attributed to them, including the costs of investment in electrification.

6. Some evidence on this is included in the Department's appraisal of the Railway's 1980 Corporate Plan, circulated as E(81)43. Paragraphs 32 and 33 of that appraisal suggested that by 1985 Inter-City will not be making the contribution of 25 per cent to joint costs which has been taken as a "commercial" remit and that the Board have yet to identify the necessary measures, including a reduction in the scale of activity, to achieve this. The Minister's paper (E(81)41) envisages subsidies to the Inter-City businesses lasting for the rest of the decade. The position on Freight is better, although there too a commercial return will not be earned in 1986. The forecasts in both cases assume that the Board can deliver very large improvements in productivity, as well as make significant reductions in service levels.

7. Finally, in the annex to his note, Professor Walters raises the general question of whether the 7 per cent discount rate used, with Treasury agreement in the Electrification Review, is the appropriate discount rate for public sector projects in conditions of capital rationing.

8. So far as the Electrification Reivew itself is concerned the use of a 7 per cent discount rate was in line with existing policy. The 1978 White Paper on the Nationalised Industries (Cmnd 7131) specified that a 5 per cent real rate of return should be achieved on the new investment of the industries as a whole. This was to ensure broadly the same return as achieved by firms in the private sector. Within this constraint the Government left the choice of project appraisal rates to individual industries, after consultation with their sponsor Departments. For British Rail, it was agreed that a 7 per cent rate would be appropriate, in part to secure consistency as between investment in the railways and other non-trading public sector transport investment, eg, in roads, where the Government laid down in April 1978 that a rate of 7 per cent should be used.

9. The question of the appropriate approach to investment appraisal under conditions of capital rationing is a matter of extensive debate. We would welcome an opportunity to discuss this further with Professor Walters. The question is a general one, going beyond this particular investment appraisal. If there were to be a change it would have to be applied to all public sector investment, that in other nationalised industries eg, telecommunications. Professor Walters' suggestion implies very considerable and lasting capital rationing. If decisions were taken on this basis, it would restrict profitable infrastructure investment in the public sector with consequential higher costs for private sector users.

cc A Walters

Prime Minister

MAIN LINE ELECTRIFICATION OF BRITISH RAILWAYS

I attach a note by the Department's Chief Economic Adviser, Humphrey Cole, on Mr Walters' paper on this subject. It does not cover the issue of the appropriate rate of return for a programme of this kind, which will I understand be dealt with in a note from the Treasury. Treasury economists have seen and are generally content with the analysis in the annex to this note.

I should add one point. Mr Walters raises the issue of a much more concentrated rail network. This of course is a prospect which both you and I have publicly rejected. I really do not see how we could change our stance on this. Having said that let me add I would welcome a further look by CPRS at the figuring in the review and its relation to the prospects for the Inter City and freight businesses. I think this would be potentially a very valuable exercise.

I am sending a copy of this minute to Leon Brittan and David Howell. Copies also go to Sir Robert Armstrong, Mr Ibbs and Mr Walters.

Norman

NORMAN FOWLER

6 April 1981

MAIN LINE ELECTRIFICATION OF BRITISH RAILWAYS

NOTE ON MR WALTERS' PAPER BY HUMPHREY COLE, CHIEF ECONOMIC ADVISER, DTp

There are 3 distinct economic issues that arise from Mr Walters' note. These are:

(1) Is the assessment by BR/DTp a reasonably unbiased one of the costs and benefits of electrifying much of the main line system as compared with its continued operation by diesel power?

(2) Are the commercial prospects for inter-city and freight such that any major investment should not be undertaken without examining the case for reducing the network substantially?

(3) What minimum rate of return should such an investment be expected to earn?

2. The third point is being commented on by the Treasury who, with the Department of Energy, took part in the study.

3. The first point is not the key one. As the attached annex of detailed points shows the net return from electrification is not very sensitive to the main queries Mr Walters raises. Because the main gains from electrification come from cost savings, results are fairly robust to substantial changes in revenue assumptions, as long as the main line system remains around its present size. Even if British Railways fail to achieve their commercial objectives, the analysis in the Review is correct in showing that it will in the long run be worth investing in order to operate a predominantly electric rather than a predominantly diesel railway. This assumes that the 7% discount rate is the right one. It has been tested for robustness against developments that are substantially less favourable than the central ones used in the Review.

4. The second point is more difficult. If British Rail fails to achieve its commercial objectives for the inter-city and freight railways, the cost-saving gains from electrification will still be largely achieved unless the then Government's reaction to BR's failure

would be to close some of the 52% of the network now proposed for electrification. (That network does not include the branch line rural railways where the subsidy is highest; the economic, but not the political call for closure is strongest for these lines.)

5. It would only make economic sense not to electrify on the proposed scale if the likelihood of such closure decisions was substantial. The risks of wasted investment from electrifying lines that were subsequently closed would have to be set against the risks from forgoing the economies achievable by their electrification. Since the former risks are essentially political ones, they would be impossible to quantify. But the scale of the risks can be reduced by ordering the programme of electrification so that, as far as is consonant with efficient operation, the priority is given to electrifying the lines about whose future there can be no room for doubt.

DETAILED NOTES ON MR WALTERS POINTS

Price Base

All figures are in 1980 Survey Prices. Using this price base the Net Present Values (NPVs) are:

Option III slow -£200m
Option III fast -£240m
Option V fast -£305m

The Basic Approach

The issue analysed was simply "whether the railway would do better with electric than diesel traction". Nevertheless it is misleading to suggest that a strategic decision would "inhibit further slimming down of the railway network for many years". Even in the largest option only 52% of BR's route miles would be electrified, and that stage would not be reached at the earliest until the year 2000.

The Profitability of the Railway

The report does not make any estimates of the overall profitability of the railway, but the results do suggest that, by the time of completion, Option V would improve the Board's net cash flow by £125m.

The importance of Revenue Forecasts

Mr Walters criticises the revenue forecasts as over optimistic. But the main benefits from electrification are cost savings, £600m, as against revenue gains of £170m. The cost savings alone would justify eletrification. The 1% per annum real pricing is not a major factor improving the case for electrification, rather it <u>weakens</u> the case by reducing the volume of traffic to be carried. The 6% premium fare for the better quality of the electric service does contribute to the case for electrification, the premium fare is only 6%, not 12%, when there is a switch from HST to APT.

Trends in Demand: Passenger Traffic

The 1% exogenous growth has been applied to Inter-City only, not to all passenger traffic. The growth rate for passenger volume is slightly lower than experience over the period 1966-80 would suggest. We have no reason to regard the trends as dubious, nor would we expect competition to railways to grow more rapidly than in the past. Motoring costs have been broadly stable in real terms over the last decade and are unlikely to fall in the future. Air competition is only significant for rail flows between London and Scotland, served by two lines, one of which is already electrified. The competition from coaches has increased because of deregulation. This is a once and for all effect which may have reduced Inter-City rail travel by 5%. The sensitivity test in the Report showed that even with a 22% fall in traffic, before allowing for the effect of rising prices, the rate of return to electrification is still 9%.

Freight Forecasts

The principal difficulty in constructing forecasts of freight traffic is in identifying the volumes which it would be profitable to carry, mainly by trainload operations. This cannot be discovered by examining past trends, which reflect the deliberate policy of shedding wagonload traffic. Given the composition of traffic towards which the Board has been working it is felt unlikely that total carryings will drop below 150m tonnes. The effect of carrying only 150m tonnes was examined in the Review and reduced the NPV of Option V fast by about £35m. Using 100m tonnes as suggested by Professor Walters, would imply carrying only coal.

Option III is justified by the benefits to the passenger business alone.

Fares Elasticity

The figure of 0.65 was based on statistical work in the Department of Transport. More recent work (over the last three months) does suggest a higher figure of 0.8, the figure used in sensitivity tests. Using this elasticity reduced the NPV of Option V fast by £25m, using 1 would reduce the NPV by £50-60m.

Journey Time Elasticity

The figure used is soundly based on experience since the early 1960s and recent backchecks on the effects of HSTs have confirmed its continuing validity.

Productivity

Tough assumptions about productivity were incorporated, because weaker assumptions would improve the case for electrification, but would worsen the railways' finances. BR's productivity record has been relatively poor in the 1970s, but in the 1960s the last major change in traction was followed by a 95% improvement in productivity over a decade.

Fuel Costs

The low oil/high electricity price combination was regarded by the Department of Energy as not feasible, because the cost of electricity can be no higher than the cost of generating it by oil. Because of the relationship between oil and coal prices the high oil/low electricity price combination was also considered not feasible and was not tested. If fuel prices were not to increase at all above the levels actually paid by BR in 1980 the NPV of Option C fast would be £185m, giving a return of about 9%. The standard fuel price forecasts in the Review raise the NPV to £305m. The Department of Energy's latest view of prospects for fuel prices would raise the NPVs to:

Option III slow - £260m
Option III fast - £300m
Option V fast - £380m

Delay

Paragraph 17 of the Chairmen's preface states:

> "A rough assessment that we have made suggests that a delay of four years for any of the larger programmes would reduce the net present values by £60-120m".

The modelling showed that a delay of four years would give rise to difficulties in matching electrification to the need to replace existing rolling stock, with the result that a number of diesels would need to be constructed for relatively short working lives.

Costs

A backcheck was undertaken on the Great Northern electrification scheme. It did not cover the capital costs. It showed that the submission had significantly underestimated the maintenance costs of the new rolling stock. The maintenance cost figures used in the Electrification Review are in line with the outturn figures on Great Northern. Latest indications from BR are that the capital costs of the electrification infrastructure between Bedford and St Pancras are turning out to be lower than in the submission on that scheme.

The total bid for investment in electrification is £775m. We do not recognise, the figure of £5bn, which must come from the Board's recent statement of 'Rail Policy', which does not reflect Departmental policy.

Australian Electrification

The Australian report states that improved speeds are not a priority in Australian conditions and that maximum passenger speeds are limited by track conditions. Nevertheless Table 1 of the Executive Summary Report suggested that electric freight trains would travel 19% faster on average than diesels.

Main Line Electrification

Top copy filed on Transport: BR Fares Etc Sept 79

Ref: A04647

PRIME MINISTER

Railway Policy

E(81) 41 - 45

BACKGROUND

The Secretary of State for Transport's main proposals are in E(81) 41 which is supported by two background papers - E(81) 43 covering his Department's appraisal of British Rail's (BR) Corporate Plan, and E(81) 44 summarising the main issues on electrification. In E(81) 42 he makes some subsidiary proposals for placing orders for BR rolling stock with Metro Cammell. The CPRS in E(81) 45, raise some fundamental questions on the proposed approach and in particular on the size of the network assumed.

2. BR published their Corporate Plan in December 1980. They propose a major programme of renewals and of electrification, with Government financing topped up by a combination of productivity improvements - manpower down from 191,000 now to 153,000 by 1985 - and revenue from increased traffic. The Department of Transport have appraised BR's proposals and substantially modified them. The Secretary of State recommends, nevertheless, that the present network, the rural and commuter services, and the Inter-city and freight services should be kept going, and he endorses a substantial programme of renewals and electrification. He emphasises the need for maximising productivity improvements and tightening the system of financial controls on BR. He would make the start of a major programme of electrification schemes contingent on the signing of the new productivity agreements envisaged in the Corporate Plan. His proposals are summarised in paragraph 19 of E(81) 41.

3. If accepted, the Secretary of State's proposals would bring substantial increases over the provision for BR in the Public Expenditure White Paper, Cmnd. 8175, and a very substantial on-going commitment. The main figures, taken from his tables, are -

			£m 1980 Survey Prices		
	1981-82	82-83	83-84	84-85	85-86
Cmnd 8175	701	579	570		
*Proposed	701	695	628	603	579
Difference:		+116	+ 58		
* Of Which electrification	5	10	25	30	40

4. These figures allow for the electrification 'Option III fast' described in E(81) 44; that is, for net investment of £572 million completed by 1995 after which there would be a positive cash flow. This is held to show an 11 per cent real rate of return compared with maintaining a diesel railway. The geographical coverage of Option III is set out in paragraph 4 of E(81) 44.

5. The figures do not provide for the additional £25 million which would be needed in each of 1983-84 and 1984-85 if, as proposed in E(81) 42, Metro Cammell were to be invited to supply BR's requirement for a new generation of diesel engined multiple units. The purpose of giving them this order would be to make good a prospective gap in their order book, as London Transport's orders fall off, and to inject competition for the longer term with BR's own manufacturing subsidiary, British Rail Engineering Limited (BREL). Metro Cammell employ around 1,500 men on this work in Birmingham.

6. The Secretary of State points out, in paragraph 15 of E(81) 41, that not all of the costs need count as public expenditure if arrangements could be made for private sector finance. This Department are looking at this with Morgan Grenfell but for the moment there is nothing more than a general aspiration on offer.

7. These papers present very major issues, not only for the present public expenditure period but for the future of the railways to the end of the century. BR have mounted an effective public relations campaign to win support for their modernisation and electrification plans, and they will no doubt continue to lobby for an early and favourable response from the Government. The unions will also be looking for long term commitments, but I suspect that their current pay

claim is more likely to be dominated by the need to reconcile their hopes for a settlement in line with workers in the energy industries with the constraints of BR's 1981-82 External Financing Limit. Despite the impending pay negotiations, therefore, I can see no reason why the Committee should not, if it so wishes, take time to probe the details and call for an examination of alternatives.

8. As the CPRS, in E(81) 45, and Alan Walters have pointed out, the papers take a great deal for granted in that they start from the assumption that the present network and services are largely inviolate, and they offer no insight into the impact of competition from road transport, particularly following the de-regulation of bus services, and from air services. The CPRS appears to be right in holding that the prior question is what size and form the railway system should have in the future because the answer to that question conditions the rest, including the place of electrification in the future system. On this approach the Committee might want more information on the prospects and options for BR's main services: the non-commercial rural and commuter networks; and the commercial inter-city and freight services.

9. If you are to call for appraisal of some more radical alternatives, you will need first to consider the assumption made by the Secretary of State, in paragraph 10 of E(81) 41, that 'We must keep our commitment (made both before the Election and after it) to avoid any major programme of closures and continue substantially the whole of the passenger network.' The Manifesto called for increased productivity by BR but said noting on the size of the network. The main commitment on the latter was given by the Secretary of State following a report in the Guardian in November 1979 that 41 passenger services and 900 miles of line might be axed. I attach a copy of the press statement which the Secretary of State then issued. You will wish to decide whether this rules out any substantial re-appraisal of the passenger network or whether some such appraisal is necessary in the light of the very heavy demands for financing now put forward by BR.

10. For the commuter services, both in London and for the other major conurbations, it is no doubt realistic to assume that they should continue over broadly the present networks. If so, the questioning will centre on how services can be improved by productivity changes and what are the options for

the Secretary of State intends that fare increases should be less than BR's assumption of 2½ per cent annually in real terms up to 1985.

11. For the so called commercial services - inter-city and freight - the question is how far they can indeed be operated commercially against competition from road and air. This leads on to the question of the role for electrification and the options for it. You will note the conclusion, in paragraph 7 of E(81) 44, that the economic appraisal of electrification shows that even with a very large fall in passenger traffic the programme should pass the test of a real rate of retrun of at least 7 per cent.

12. Before reaching final decisions I suggest that the Committee might want a fuller assessment of how realistic are the possibilities for meeting some of the financing requirements for BR's main rail activities - as distinct from hotels, shipping etc. - from private sector finance. They will also probably want more information on Metro Cammell and BREL before reaching any conclusions on the proposed order for Metro Cammell and the consequent additional financing involved.

HANDLING

13. After the Secretary of State for Transport has introduced his papers you might invite the Chancellor of the Exchequer and then Mr Ibbs to give their reactions. The Secretaries of State for Industry and for Trade will want to comment on the implications for manufacturing industry, including export prospects, and for the consumer. The Secretaries for Scotland and Wales will also want to comment, and particularly so if there is any thought of another look at the possibility of closing lines.

14. The first question before the Committee is whether they agree with the Secretary of State for Transport that the problem should be seen in terms of how best to improve and finance BR's present network and services or whether they first want to look more carefully at the prospects for each of those services, including the possibility of reductions in the network. You will need to consider in particular the extent to which the Government is committed to the present network - see paragraph 9 above. If further work is to be commissioned you might like to draw on questions raised in paragraphs 8 to 12 above and in the CPRS' paper, E(81) 45.

15. You will wish to ask the Secretary of State for Transport for his views on when the Committee ought to reach decisions and how this fits in with the 1981 Public Expenditure Review. You might also ask him to bring out in any further papers the extent to which the Government would be committed by decisions reached this year - you will no doubt want to ensure that, though there might be a broad strategic framework, firm commitments to investment would not be given prematurely but would be taken in the light of progress on productivity agreements and constant updating of traffic and profit forecasts.

CONCLUSIONS

16. The Secretary of State for Transport has invited the Committee to approve the policies summarised in paragraphs 18 and 19 of his main paper, E(81) 41 and to consider the possible order for Metro Cammell outlined in E(81) 42.

17. In the light of the discussion you will wish either to endorse these proposals or to commission further work. If there is to be further work in the light of the Committee's dicussion, and perhaps looking at some more radical alternatives, you will wish to instruct which other Departments should be involved - to as a minimum it would be sensible to include the Treasury and the CPRS with other Departments being consulted as necessary. The Committee could consider any further papers after Easter as soon as the Secretary of State for Transport is ready.

Robert Armstrong

6 April 1981

Transport

Press Notice

319

9 November 1979

MINISTER CONFIRMS NO RAIL CUTS

Norman Fowler, Minister of Transport, has written to Sir Peter Parker the Chairman of British Rail, to make clear to the Railways Board his position on any plan for a programme of rail passenger closures. The Minister's letter reads as follows:

"I thought I should write to you immediately following the stories in "The Guardian" yesterday and today about the Board's Corporate Review to make it quite clear that it is my firm policy that there should be no substantial cuts in the passenger rail network. This is the view which I have consistently expressed, both while in Opposition and more recently, and which I reiterated yesterday in the House during Question Time. Since under the present statutory procedures proposed passenger service closures to which there are objections would be referred to me for decision, I thought it only right to make it absolutely clear to you and your colleagues that this is the policy which I intend to pursue.

"I shall want to talk with you about the Corporate Review that you sent me on 25 October. But you will understand that the option of closing 40 passenger services is one that the Government have rejected."

Commenting on his letter today, Mr Fowler said: "In view of further comments in The Guardian, I wish to reiterate in the plainest terms I can that, as I told the House of Commons on Wednesday, I have no list of passenger services for closure such as was printed in The Guardian, and that there have been no secret talks between my officials and the Railways Board to discuss any such list of closures. The Guardian allegation was very specific. It said that my Department and British Rail had drawn up detailed plans to close 900 miles of railway line and 41 passenger train services, which were listed. That report, as I told the House, is totally false."

Telephone No: 01-212 0431
Night Calls (6.30 pm to 8.00 am)
Weekends and Holidays:
01-212 7071

CONFIDENTIAL

VLS

FILE

cc HMT
CO
CPRS
BC D/N

10 DOWNING STREET

From the Private Secretary

3 April 1981

Dear Anthony,

I enclose a paper and some further notes by Alan Walters on the British Rail Electrification Review. The Prime Minister would be grateful for your Department's and the Treasury's comments on these papers, in advance of the E Committee discussion next Wednesday. Please could you ensure that these comments are with us by close of play on Monday evening.

I am sending a copy of this letter to John Wiggins (HM Treasury), David Wright (Cabinet Office) and Robin Ibbs (CPRS).

Yours sincerely,

T. P. LANKESTER.

Anthony Mayer, Esq.,
Department of Transport.

CONFIDENTIAL

PRIME MINISTER

cc. Mr. Walters
Mr. Wolfson
Mr. Duguid

I mentioned that Alan Walters had prepared some penetrating and highly critical comments on the British Rail Electrification Review. As you agreed at this morning's meeting with Robert Armstrong, I have sent these over to the Department of Transport and to the Treasury (though not his note on his meeting with British Rail and the Department) asking for their comments by Monday evening. We have arranged an internal briefing meeting with Alan, Robert Armstrong, Peter Le Cheminant and Robin Ibbs for Tuesday afternoon. (We have also arranged a meeting with the same group on the energy price options on Tuesday morning.)

TL

3 April 1981

Transport

MR. WHITMORE

Robert Armstrong and I had a brief word on Alan Walters' paper on the Electrification Review with the Prime Minister this morning. We decided that, rather than circulate the papers to E, it would be better to send them just to Transport and the Treasury and get their comments - so that Alan can then, if necessary, produce a counter-blast for the Prime Minister. We are to discuss the papers at an internal briefing meeting - without Ministers - on Tuesday afternoon.

3 April 1981

10 DOWNING STREET

Tim

You mentioned Alan Walters' note on Britain's [illegible] for E.

This came up briefly at Dep Secs this morning. Robert Armstrong was inclined to think that the note might best take the form of a minute from AW to the Prime Minister which is circulated to E under cover of a note by the Secretaries. I agree.

Can you pursue this with Robert yourself, once the Prime Minister has agreed that colleagues should have the paper. [illegible]

MR. LANKESTER

I attach:

i. Memo for Prime Minister on British Rail's Electrification Review.

ii. Some Further Notes on Electrification Review.

iii. Notes on a meeting with British Rail and Department of Transport.

AW

1 April 1981

CONFIDENTIAL

PRIME MINISTER

MAIN LINE ELECTRIFICATION OF BRITISH RAIL

1. The attached paper is a critique of the Department of Transport/British Rail Review. It is not a convincing Review. Could the critique be sent to Norman Fowler and E Committee? When I last heard, Norman Fowler had not made up his mind on the issue.

2. It is alarming to find a Review of this kind supported both by Department of Transport and the British Rail Board which has not been subject to considerable scrutiny and examination. The Review had a Steering Group which included representatives from the Treasury and the Department of Energy. Thus the Review has the implicit support of both Treasury and Energy (from the Treasury I understand that they do not intend to dispute the general findings).

3. There is a danger that proposals like this could be "rail-roaded" through the decision-making procedure. The pressure of the spending departments and the Corporations is clearly considerable and they are probably convinced of their case. What is alarming is the asymetry between the powerful case made for spending and the much weaker forces that will check such steam-roller effects. Some structural change is required to put the balance right.

AW

1 April 1981

CONFIDENTIAL

CONFIDENTIAL

MAIN LINE ELECTRIFICATION OF BRITISH RAILWAYS

I STRATEGY

The Issue

In this Review BR/Department of Transport suggest that a strategic decision in principle needs to be taken whether the main Inter City network should be electrified at a net additional cost of £775 million (as part of total claim of £5Bn) at 1980 survey prices spread over 20 years. The Review does not tell us the cost of deferring any such strategic decision. In fact the Review says that delaying the start of the programme would not affect significantly the financial results.

The Findings of the Review

The Review purports to show that investment in all electrification options would be profitable, earning a return of between seven and eleven per cent, with the most ambitious electrification programme earning the highest rate. All these electrification options are compared with the maintenance of the existing system (including the various investments approved). The Review does not examine the electrification options relative to what many experts regard as the more relevant alternative - namely a smaller, more concentrated and more efficient network. There is no thought that it might be much better and cheaper by road or air. The Review takes the existing size of the railways as a given inviolable constraint. In spite of the fact that British Rail is at present running at a substantial loss, the Review supposes that all options, including the do nothing option, will be generating very handsome profits over the next 30years. This surprising financial performance is largely the consequence of a supposedly rapidly increasing demand for rail passenger travel.

II DEMAND

Passenger Assumptions and their Plausibility

The critical elasticity assumption that gives rise to the high profits is:

A 10 per cent increase in Inter City fares will reduce traffic by 6.5% and increase revenue by 3.5%.

Thus increases in fares to whatever level will always increase total revenue. Clearly if true the Inter City - and indeed British Rail - deficit could be eliminated at a stroke. The railways would be a 'money machine' not a public sink. And in the sensitivity tests this basic presumption, that increases, however large, in fares would always raise total revenue, is retained. However, British Rail could produce no systematic study to support this figure.

The other key assumption is that:

A 10 per cent decrease in journey time will increase passenger traffic by 8.5%.

Unlike the above, this value cannot be shown to be obviously flawed and there is some evidence in its favour - although it should be viewed sceptically.

The main reason for questioning both elasticities is the omission from the Review of any assessment of the progress of competitors, mainly air and road. Increased motorisation, the potential of competitive bus fares and air fares and their schedule improvements, and the deregulation of buses and airlines, have all proved to be important in eroding rail traffic. They are not mentioned.

Yet the Review assumes that there will be an exogenous increase in rail passenger traffic of one per cent per annum for more than 30 years, even with unchanged speeds. The basis for this finding is the residual trend of traffic from 1966 to 1980. Again it seems optimistic to project a rather dubious trend in the 1970s, which was much affected by the tenfold increase in oil prices, for another thirty years.

Fares and Profits

The presumed increasing passenger demand and the assumptions on elasticity enable British Rail to push up its real fares steeply and so become profitable. The Review anticipates:-

i. 1% increase in real fares each year for 30 years;

plus

ii. 6% increase for electrification;

plus

iii. 6% increase for HST/APT.

Thus Inter City fares will increase by between 37 and 50 per cent in real terms over the 30-year period.

It is important to note that it is these traffic and fare increases that largely give rise to the financial return. Electrification adds only marginally (about 15% in preferred option VF case) to the net profitability. Thus these traffic and fare increases are critical to the viability of the present rail system, whatever is done about electrification.

Freight Demand

The essential assumption is the quantity of freigh of BR will not continue its long term trend decline of 2 per cent per annum from 1969-79, but will increase from its present (1980) level value of about 152 million tonnes to 175 from 1989 to 2010. The real freight rates are constant (at 1980 values) for the thirty years. The Review does not consider the competitive lorry real costs (and rates) which have fallen considerably over the past years and how, if it continues, this will affect rail freight. Freight quantities were revised downwards in mid Review. It does appear that freight demand might be still too optimistic and values of 100 million tonnes or less should have been considered. Or alternatively lower freight rates should have been evaluated.

III COSTS

Wages and Productivity

The Review assumes that productivity gains will outstrip the increases in unit labour costs. Although the robustness of this assumption is not strictly relevant for the electrification decision, any shortfall will affect the EFL and so restrict investible funds. More important, any shortfall in the presumed productivity gains will drastically affect the profitability of all options. The Review supposes that the increases in productivity of railway labour will be the same as that in the rest of the economy. This has not been the case in the past and the Review recognises that "there is no guarantee that such a level [it must mean growth rate] of productivity will in practice be achieved" (p.54). The Review did not report the sensitivity effects on BR profits nor did it consider the feedback and compounding effects of lower growth on demand for traffic.

Fuel Costs and Savings

The standard assumption is that from 1978 to 2010 the price of electricity increases by only 50% but the price of diesel almost trebles. It is claimed that, in the light of more recent Department of Energy studies, the potential for divergence is growing. There is no explanation for this divergence in the prices of different forms of energy. And such a large difference persisting for so many years is clearly inconsistent with recent history. In its sensitivity analysis the Review does not analyse the case where the price of diesel oil increases even slightly more (ie 10%) than electricity - presumably because the case for electrification, even with the optimistic assumptions about traffic and fares, would have been much eroded.

The fragility of the figures forecast is illustrated by the fact that by 1980, the forecast price of electricity in 1980 was already 18 per cent too low. If errors of 18% can be made one year or so ahead it seems likely that considerably larger errors can be made over a thirty year period. [It is believed that also the 1980 diesel price was forecast some 25% too high, but we are still awaiting Department of Energy figures.]

These assumed trends and the errors so far tend to bias the decision towards electrification. It is necessary also to warn that neither the level nor the relativities of fuel prices can be foreseen over a thirty-year, or even a ten-year, horizon. But investment in electrification is irreversible. The money is sunk.

Hardware Costs

Although there has been no time to assess the accuracy of the costs of electrification, it is known that considerable failures were encountered with some recent electrifications - particularly the Great Northern line. It is not known whether there has been an allowance for future errors in the figures.

Export Potential for Eelctric Traction

The Review argues that the further electrification of British Rail would enable private industry to compete more effectively for orders from abroad. It is now understood that BR regard this point as merely a pour boire and not to be taken as substantive evidence.

Conclusions

The case for widespread electrification is not plausible since it is based upon assumptions which are not credible. The forecast profitability is unlikely to be achieved. There may well be good arguments for electrification of particular routes. But such cases cannot be adduced from the Review.

A strategic decision to go ahead with the high electrification programme would commit resources and would inhibit further slimming down of the railway network for many years.

Further Action

E Committee might wish to express its doubts and pass it on the the Chief Secretary's review of public expenditure. However, since the conclusions of the Review have such considerable support, it may be thought wise to have it examined further in some detail by an independent authority (or committee).

A feasible programme would be to institute an internal report by a small committee with CPRS, Treasury and others who are not parti pris. This group could then go on to examine the BR Corporate Plan 1981-5 in the light of the Electrification Review.

CONFIDENTIAL

SOME FURTHER NOTES ON THE ELECTRIFICATION REVIEW

The Rate of Discount

It is surprising to see a rate of discount of 7%. Presumably a value of 7% was chosen in order, so to speak, not to penalise projects which have very long lives. But the real issue is: is it appropriate for general decision-making about expenditure by public authorities?

I would have suggested that it is not appropriate. The present situation is one of quite severe capital rationing. In principle under conditions of capital rationing the appropriate rate of discount is that of the marginal project. Clearly the marginal product will have a rather high rate of return. I would have guessed that somewhere in the region of 15% would be appropriate. As a technical matter than it would be best if the electrification programme were reviewed with a 15%, or at least a 12% discount rate. At this rate, of course, the programme would not be viable.

I suspect that British Rail's answer would be to say that they anticipate the restrictions on public investment gradually falling over theis 30 year period and consequently it is sensible to look forward with a rate at the steady state value of the marginal project in this 30 year period; this ould then avoid the distortions due to our present limited means. Perhaps so. However most of us take the view that our present difficulties are largely due to the over-expansion of public expenditure which was sanctioned on somewhat similar lines. Growth begets growth, etc. And it would be most unwise to take a strategic decision which by its very nature would be largely irreversible, under conditions of hope for quite considerable growth and expansion of public spending in a period as much as 30 years ahead.

CONFIDENTIAL

The Speed of Diesel versus Electric Trains

The Review assumes on p.40 para 8 that the electric locomotives will travel more than 10% faster than the diesel trains. This is certainly inconsistent with the assumptions which were made in Travers Morgan Australian study.

NOTES ON THE MEETING WITH BRITISH RAIL AND MINISTRY OF TRANSPORT, 27 MARCH 1981

Need for a Strategic Decision

British Rail pointed out that they had made a rough assessment at a delay of 4 years for the larger programmes which reduced their present value by £60 million to £120 million. But they have not examined the disadvantages (or presumably the advantages) of deferment and in fact they could not say that delaying the start of the electrification programme would affect significantly the financial results. They were clearly concerned with keeping continuity of work for their skilled construction teams.

A Case for a Smaller Network

Neither British Rail nor the Department of Transport had considered as a possibility the much smaller network of British Rail services which was mooted as being desirable in the early 1970s. Indeed, they were very vague about those plans and appeared to have largely forgotten them. Few people round the table could recall any of their contents. I requested, however, that they send me these plans. They remarked that they were in the archives and would be difficult to get out.

I think it is very important to resuscitate once more the concept of a railway network which is much more concentrated and very much smaller than the existing one. The fact that they had not tested their electrification, or indeed their diesel programme, against a smaller network, seems to me a crucial omission.

The Assumptions about Profitability, Fares and Traffic

i. The increase in fares for electrification and APT/HSD of six per cent each was apparently based on the "normal practice" of British Rail in increasing their fares for what they regard as quality improvements. But apparently they did take account of the fact that that increase in fare, taken by itself, will reduce traffic.

ii. On the assumption that there is to be an exogenous increase of traffic of one per cent over the next 30 plus years, I could really get no convincing answer. The result was apparently based on an extrapolation from the end of the 1960s over the past 10years or so. But it would have been as easy to fit a constant, or even a declining trend for this period. I adduce therefore there is no statistical basis for the endogenous trend.

iii. The fare elasticity of minus .65 and the time of trip elasticity of .85 were said to be based on experience. British Rail admitted, however, that they had no study that they could give me which established these values. Furthermore they argued that, contrary to experience in all other countries of which I have knowledge, as incomes increase the fares elasticity would decline - so that there would be better opportunities for raising fares and making additional profits. I pointed out that experience showed the contrary was true. That as motorisation increased with incomes the fare elasticity of rail tended to increase.

The low fare elasticity is, of course, also a cornerstone of their fares policy and the proposition that railways will be in substantial profit. This also is the rationalisation for the assumption that real fares will increase one per cent per annum.

I pointed out that if the fares elasticity was minus .65 then there was no problem of the railways recovering its deficit and indeed earning fat profits which could be used to either finance their investment programme or to support other public spending. For some reason this struck them all as being rather odd. But no explanation was vouchsafed and my arguments were not discredited by any rebuttal.

iv. The British Rail had clearly gone through the process of writing down assumptions about freight traffic. They now hoped to stabilise at 170 million tons per annum which is in excess of 1975, 1977, 1979 and 1980 which was 152 million tons. This looks a little optimistic to me since the railways lost about 20 per cent of its traffic over the decade 1969-1979 and it seems likely that they will continue to lose at something like this rate.

The Assumptions about Fuel Costs

Perhaps the most surprising information in the session was that the energy price for costs had been considerably revised. In table 39 on page 51 the electricity prices for 1980 are shown as the same as those for 1978. Now it had been agreed that prices had actually gone up 18 per cent from 1978-1980. One might well imagine that if they can be wrong to the extent of 18 per cent in one or two years ahead, it is conceivable that they could be more wrong ten, twenty or thirty years ahead.

Apparently British Rail, DoT group were still awaiting the price of diesel oil in 1980. It will be recalled that from 1978-1980 the Review had forecast a 45 per cent increase. From other data I adduced that there was only about a 10 per cent increase, net of tax, in the price of gasoline. The discrepancy remains to be explained, or explained away. The order of magnitude of the effect due to the change in fuel prices was put to me as follows. That at present it was efficient to electrify for about 40-45 locomotive journeys with current fuel prices, whereas for the fuel prices which were expected to rule in 2010 it was efficient to electrify for 10 locomotives.

Financial Results

British Rail were very pleased with the fact that they could obtain a financial return of 7-11 per cent in real terms but this is a small wave in a generally deep ocean. The presumption about the ability to increase revenues by increasing fares is built into all the options including the diesel option No. 1. The first issue really is whether this is realistic. To give an idea of the magnitude of this, the net present value of passenger revenue, under the diesel option, is 10.35 billion, under the standard passenger assumptions. Whereas the improvements in net present value from electrification, in total, comes to only 308 million, that is to say about 3 per cent, for the high electrification fast option. Indeed the whole programme hinges on the argument that the British Rail high fares strategy will work, that is to say there will be no large erosion of traffic and they will be able to raise fares by 50 per cent in real terms by the beginning of the 21st century.

Similarly it is clear that the assumptions about improving productivity of railway labour are also critical for the success of the main profitable strategy.

CONFIDENTIAL

cc MR. LANKESTER
MR. IBBS
[illegible]
MR. DUGUID

Transport

MR. HOSKYNS

RAILWAY ELECTRIFICATION

The state of play on this is apparently that there is a hiatus until a paper on the future of British Rail, mainly a review of their corporate plan 1981/85, goes to E Committee towards the end of March. E Committee will be asked to decide broadly on the future of British Rail. If they decide there is a shining future then the issue of electrification would be debated, and I suspect overwhelmingly approved.

It has all been rather cleverly done. The British Rail and D/Transport carried out a joint study, but they ensured that on the Steering Group were represented the Treasury and the Department of Energy. The Treasury therefore are parti pris. I spoke to Mrs. Case who said that the Treasury were not involved in any further review of the case for electrification. In fact so far as I can see the only critique will come either from CPRS or us. It seems that Michael Posner has rather cleverly used the technique used by Kaldor for this proposal.

As you know, I am very doubtful indeed if there is anything like a positive case for further electrification and I am quite convinced that the British Rail/DoT assumptions are extraordinarily optimistic. I think that an independent review should be mounted. Probably CPRS is the best unit to do it, although I would be very willing to help.

5 March 1981

CONFIDENTIAL

Department of Transport

Room S19/12
2 Marsham Street London SW1P 3EB

Telex 22801 Direct line 01-212 7220
Switchboard 01-212 3434

D R Davis Esq
Energy Policy Division (Branch 1)
Department of Energy
Thames House South
Millbank
London
SW1P 4OJ

10 February 1981

ELECTRIFICATION REVIEW : PUBLICATION OF THE FINAL REPORT

I wrote to you on 3 February to tell you that we were planning to publish the report last Thursday. Subsequently, Mr Wadsworth telephoned to say that publication had been postponed. We are now aiming for 2.30 pm on Wednesday 11 February, announcing publication by means of a written answer and a joint Department/Board Press Notice. I am attaching advance copies of the latter for your information. John Palmer and Michael Posner will be holding a Press briefing that afternoon.

2. I am sending copies of this letter with enclosures to recipients of my letter of 3 February.

A T BAKER

ISSUED JOINTLY BY THE DEPARTMENT OF TRANSPORT
AND THE BRITISH RAILWAYS BOARD

EMBARGO: Not for publication, broadcast or use on club tapes until 14.30 hrs on Wednesday, 11 February, 1981.

31

11 February 1981

RAILWAY ELECTRIFICATION
REPORT PUBLISHED

A review of the case for a programme of main line electrification is published today. It was carried out jointly by the Department of Transport and British Rail.

It concludes that a substantial programme of main line electrification, covering services carrying up to 83 per cent of passenger traffic and up to 68 per cent of freight traffic, would be financially worthwhile. It would yield a real rate of return of around 11%. It would not affect total energy use, but it would cut oil consumption.

The cost of constructing the overhead wiring and other fixed works(£250m to £720m, at 1978 prices, depending on the extent of electrification) and then maintaining them would be more than covered by the lower operating and maintenance costs of electric as opposed to diesel traction and by the increased earnings due to greater speed and passenger appeal. A large part of the benefit is due to the fact that oil prices are expected to rise faster than electricity prices, but maintenance economies are very important and there are reductions in train crew costs.

There would be two other advantages from a programme of electrification. It would reduce dependence on oil; and the regular home orders for the UK railway manufacturing industry could help it win more export orders.

The report stresses that electrification would primarily benefit the main commercial businesses of the railway - Inter-City and freight. The study has assessed the advantages arising from an electrified main-line system over a diesel system but it was outside the scope of the work to evaluate the future commercial prospects of these businesses.

NOTE TO EDITORS
A summary of the Report is attached.

REVIEW OF MAIN LINE ELECTRIFICATION
FINAL REPORT

The joint Department of Transport/British Rail review of the case for an electrificatio programme was set up in 1978. The steering group included representatives from the Treasury and the Department of Energy; other government Departments contributed. A wide range of outside organisations were also consulted. An interim report was published in September 1979. The final report concludes that a substantial programme of main line electrification, covering services carrying 83 per cent of passenger traffic and 68 per cent of freight traffic would be financially worthwhile. It would yield a real rate of return of about 11 per cent.

The Options Evaluated

The review examines the financial returns which could be earned by investment in each of three distinct electrification options. These are then compared with a base case (Option I), which assumes only limited further electrification including St Pancras to Bedford, and certain lines in East Anglia, the North West and around Glasgow. In the base case 52per cent of passenger traffic and 23 per cent of freight traffic would be electrically hauled - much the same as today. The three electrification options are:

i. the smallest option (Option II) which could be completed in about 15 years. It would extend electrification up the East Coast Main Line to Leeds and Newcastle, to Sheffield on the Midland Main Line, and from York to Birmingham. In Scotland, Edinburgh to Glasgow and Edinburgh to Carstairs (on the West Coast Main Line) would be electrified. 62 per cent of passenger and 38 per cent of freight traffic would then be hauled electrically;

ii. the medium option (Option III) would extend electrification to include London to Bristol, South Wales and Plymouth; Birmingham to Taunton; Newcastle to Edinburgh; and Liverpool to Leeds. This would mean that 75 per cent of passenger traffic and 54 per cent of freight traffic would be hauled electrically;

iii. the largest option (Option V) would include, in addition, Edinburgh to Aberdeen and Doncaster to Hull; Plymouth to Penzance; and Crewe to Holyhead. Its completion would mean that 83 per cent of passenger and 68 per cent of freight traffic would be hauled electrically.

The following table sets out the route and track mileage included in the different options.

TABLE 1

ELECTRIFIED MILEAGE IN EACH OPTION (excluding sidings)

	Route miles	% of present network	Single track miles	% of present network	% of passenger and freight loaded train mileage electrically hauled	
					P	F
Option I: Base	2,580	23	6,390	29	52	23
II: Modest	3,460	31	8,770	40	62	38
III: Medium	4,620	42	11,450	52	75	54
V: Large	5,750	52	13,610	62	83	68
Total British Rail network at 1.7.80	11,006		21,892			

Different rates of construction would affect the flow of costs and benefits and, therefore, the returns from electrification. So two rates of progress (slow and fast) were examined for the larger options; these would allow completion of the medium option in either 15 or 25 years, and of the largest option in either 20 or 30 years.

Financial Results

For electrification to be financially justified, the increase in earnings and the reduction in train operating costs and in traction and rolling stock capital costs must exceed the extra cost of constructing and maintaining the overhead wiring and other fixed costs.

On the revenue side, it was assumed that the shorter journey times made possible by the introduction of electric traction would increase passenger traffic and earnings. Real fare rises were assumed. Freight and parcels revenue was assumed to be unaffected.

On the costs side, there are the costs of constructing and maintaining the fixed electrification works. Extra investment would be required in fixed works of between £20m and £40m a year (at 1978 prices) over 15 to 30 years depending on the extent and rate of electrification. (Most of this work would be carried out by the private sector.) Set against that is the fact that electric vehicles run faster, require less frequent and simpler maintenance and return to the depot less often. Less traction and rolling stock and less train crew are therefore needed. Maintenance and fuel costs are also lower, since oil is expected to become increasingly expensive compared to electricity.

The report compares the forecast costs and receipts over 30 years on the basis of the various electrification options and compares these with the continuation of broadly the present system. The projected annual costs and revenues of each option are calculated and discounted at a rate of 7 per cent (the standard rate used in rail and road investment projects). The advantage of the electrification options over the present largely diesel railway is then expressed in terms of its Net Present Value (NPV).

Table 5 from the report, which is reproduced below, shows how the benefits are gained from the different electrification options.

TABLE 5

NPVs OF ELECTRIFICATION OPTIONS COMPARED WITH OPTION I, SUMMARISED BY REVENUE AND COST CATEGORY

(£m, 1978 money values, discounted at 7%)

	NPV of Option I	Better/worse (−) than Option I				
		Option II	Option IIIS	Option IIIF	Option VS	Option VF
Passenger Revenue	10,353	57	102	123	114	141
Working Expenses						
Oil	1,356	187	340	411	395	486
Electricity	695	−111	−198	−245	−231	−294
Crew	2,049	13	21	28	39	50
Traction & rolling stock maintenance	3,093	72	130	166	158	201
Fixed works maintenance	7	−26	−40	−47	−48	−58
Total	7,200	134	254	313	312	386
Investment						
Traction & rolling stock	1,286	13	27	25	40	54
Fixed Works	32	−134	−213	−261	−258	−326
Total	1,317	−121	−186	−236	−218	−271
NPV Grand Total	1,835	70	169	200	208	255

NOTE:—Totals are affected by rounding.

All the electrification options show a surplus of benefits over costs, with Net Present Values ranging from £70m to £255m (at 1978 prices), and internal rates of return ranging from 9.9 per cent to 11.1 per cent. The fast options rank higher than the slow options and the larger options rank higher than the smaller options, but the larger and faster options do make larger cash flow demands in the early years.

Where possible, known costs have been used in the analysis. Inevitably, with a study of this type, a number of important assumptions have to be made. The most important assumptions are:-

a. the competitive position of the railways will enable them to make real fares increases;

b. while labour costs are assumed to move in line with Gross Domestic Product, corresponding gains in productivity will secure that this does not raise the unit cost of output;

c. oil prices are expected to rise faster than electricity prices.

'Sensitivity'tests have been carried out on the cost assumptions and forecast traffic levels. These tests did not overturn the financial case for an electrification programme and also showed that, if favourable chances continue, the results could be better.

Wider Effects

The report looks also at the wider economic and social effects of electrification which could not be quantified financially but could nevertheless be important.

Electrification would save up to 120 million gallons of oil a year - equivalent to ½ pe cent of total national oil consumption or one and a half per cent of oil consumption for transport purposes. It would not reduce total energy consumption but it would give greater flexibility in the use of basic fuels.

It would bring substantial regular orders for the UK railway manufacturing industry; this would assist the industry to reduce unit costs and encourage investment in researc and development, thus enhancing its competitiveness in export markets.

As well as making railways cleaner, electrification would probably reduce the noise nuisance and make them safer, particularly to the railway work force. On the other hand, the presence of overhead wiring would make the railways more dangerous to trespassers. The wiring would also intrude slightly on the landscape in some areas.

Press Inquiries: DEPARTMENT OF TRANSPORT
01-212 0431

Night Calls (6.30 pm - 8.00 am)
Weekends and Holidays: 01-212 70

BRITISH RAILWAYS BOARD
01-262 3232 Ext 7016 or 7819

Transport

Please return to C/F when finished with

Department of Transport

Room S19/10
2 Marsham Street London SW1P 3EB

Telex 22801 Direct line 01-212 7220
Switchboard 01-212 3434

D R Davis Esq
Energy Policy Division (Branch 1)
Department of Energy
Thames House South
Millbank
LONDON SW1P 4QJ

3 February 1981

Dear Derek,

JOINT BRITISH RAIL/DEPARTMENT OF TRANSPORT REVIEW OF MAIN LINE RAILWAY ELECTRIFICATION : FINAL REPORT

1. I am attaching two advance copies of the Final Report of the Electrification Review. We will be publishing the report on Thursday 5 February at 11.00 am, when John Palmer and Michael Posner, the Steering Group co-chairmen, will be holding a press briefing session. My Secretary of State will not hold a press conference himself, but will answer an inspired written Parliamentary Question at 11.00 am. Copies of the report will be available in the House of Commons for MPs (and for Members of the House of Lords) at the time of publication.

2. We shall be issuing a press notice on Thursday, but this has to be cleared with British Rail, and copies are not yet available. I will aim to send you advance copies of the Press Notice and Written Answer as soon as these are ready.

3. I am copying this letter, with two copies of the report, to Tim Lankester at No. 10, Stephen Pride at Industry, Anthea Case at the Treasury, Jean Lamont at Trade, Jim Currie at the Scottish Office, Keith Trimnell at the Welsh Office and David Miles at the Cabinet Office.

Yours sincerely,

Tony Baker

A T BAKER

CONFIDENTIAL

a HMT
ENG
IND
TRADE
WO
CO

TL

10 DOWNING STREET

From the Private Secretary

3 February 1981

Main Line Eletrification

The Prime Minister has read your Minister's minute of 26 January on the above subject, and has noted that he is committed to publishing the joint study, a copy of which he enclosed. She has commented, however, that she is not convinced by the case that is made out in the report in favour of the eletrification programme, and consequently she continues to have great reservations about it.

I am sending copies of this letter to John Wiggins (H.M. Treasury), Julian West (Department of Energy), Ian Ellison (Department of Industry), Stuart Hampson (Department of Trade), Godfrey Robson (Scottish Office), John Craig (Welsh Office) and David Wright (Cabinet Office).

T. P. LANKESTER

Anthony Mayer, Esq.,
Department of Transport.

5-11

CONFIDENTIAL

CONFIDENTIAL

cc MR. HOSKYNS
MR. DUGUID

MR. LANKESTER

Original returned to Mr Walters.

ELECTRIFICATION OF RAILWAYS

1. The results of the study depend on optimistic assumptions which have been discredited by our experience. One is that the Inter City freight and parcels will, by increased efficiency, so improve quality of service that they can beat road competition, substantially expand, and raise fares in real terms by 1% a year.

2. Nevertheless, in spite of the optimistic assumptions the rate of return is only 11%, and on some permutations falls to 7%. This latter value is below the cut-off rate for most investment agencies and virtually all firms in the private sector.

3. The report considers various electrifications vs the base option - the latter is the existing rail network. To electrify or not - that is the question addressed in the Report. The report does not consider a "thin-out and run-down the network" option - but this is a very live one. Indeed many would argue that the "thin-out-run-down" option is the only one worth considering.

4. Experience with large electrification schemes has not been uniformly happy. The midland electrification of the 1950s was many years behind schedule and much over budget.

5. Arguments about support for the supplying industries are largely spurious. By the time that the programme is on stream it is unlikely that there will be substantial excess capacity in these industries. Furthermore, export sales, which will be mainly to the "third world" countries are likely to be constrained by (i) the very low growth rate anticipated for Africa in the next decade (see World Development Report); (ii) the increasing capacity, indeed over capacity, in many third world countries; and (iii) the reduction in IFI support for such investments (because of their poor record in the past decade or so).

AAW

29 January 1981

CONFIDENTIAL

2

Prime Minister

The report referred to below is bulky and I don't think you will have time to look at it. (Duty Clerk has it if you do want to). Alan is critical of the report (see Flag A), but Mr Fowler is committed to publishing it.

MS

CONFIDENTIAL

PRIME MINISTER

I have great reservations about this programme.

MAIN LINE ELECTRIFICATION

I briefly mentioned last week that the last Government had set up a joint study by my Department and the Railways Board of the case for a programme of main line electrification.

The report of the study, in which the Treasury and the Department of Energy have been involved throughout, and to which the Departments of Industry and Trade have contributed, has now been submitted to me. There are commitments to publishing it (which I could not unilaterally suspend) and I have concluded that the best course is to publish as soon as possible. Any obvious delay would be turned to our disadvantage.

Now see published copy

I enclose an advance copy of the report for you and other interested colleagues. There are two points worth emphasising. First, the report concludes that there is a sound financial case for a programme of main line electrification. Such a programme will enable BR to make significant improvements in productivity over the coming years. Progress on this front is crucial to BR's future. Secondly, at least 80% of the programme would be carried out by private sector firms - mainly Balfour Beatty, GEC, and Hawker Siddely. It will provide them with a major source of revenue, and work for their labour force. It will also enable the firms to keep their technology up to date and compete abroad that much more effectively.

Am not convinced

CONFIDENTIAL

CONFIDENTIAL

However, as the co-chairmen make clear in their letter of submission, any decision on this report needs to take account of broader issues about the prospects for the railway's commercial businesses - Inter-City and Freight - which would be the main beneficiaries of electrification and would need to pay for it. I propose therefore to put to my colleagues the issues about electrification in the wider report on the longer-term prospects of the railways which I am due to make to E Committee in the near future. Meanwhile to keep our options open I propose to make only a short holding statement on the publication of the report, that it raises a number of broad issues that the Government will need to consider.

My officials are still examining the project that the Board have submitted to me to extend electrification into East Anglia. This was mentioned in your Private Secretary's letter of 24 November. The project would provide continuity of work for the private sector, but I would not want to take any decision on it until E Committee have been able to consider my paper on the broader questions I have mentioned.

I am copying this minute to the Chancellor of the Exchequer, the Secretaries of State for Energy, Industry, Trade, Scotland and Wales, and Sir Robert Armstrong.

NORMAN FOWLER

26th January 1981

CONFIDENTIAL

CONFIDENTIAL file

BK

cc: HMT

Flat land

24 November 1980

The Prime Minister has read your letter of 18 November on British Rail's electrification programme. She has noted that your Department is currently examining the B.R. Board's proposals to extend electrification in East Anglia to Cambridge and to Norwich; she very much hopes that no decision will be taken on this to allow the scheme to go ahead.

I am sending a copy of this letter to Peter Jenkins (HM Treasury).

T P LANKESTER

R.A.J. Mayer, Esq.,
Department of Transport

CONFIDENTIAL

CONFIDENTIAL

DEPARTMENT OF TRANSPORT
2 MARSHAM STREET LONDON SW1P 3EB

MINISTER OF TRANSPORT

Prime Minister

You asked about the BR investment programme: tighter than we thought.

TL. 18/11

T. P. Lankester Esq
Private Secretary to the
Prime Minister
10 Downing Street
LONDON SW1

18 November 1980

Dear Tim,

Thank you for your letter of 13 November about the Prime Minister's question on why British Rail are continuing with their electrification programme at this time of public expenditure difficulty.

The only electrification work in progress at the moment is a scheme approved by the last Government in 1976 to electrify the services from St. Pancras to Bedford. Commitments already made run until 1982. The scheme is now at an advanced stage and cancellation, besides affecting employment in GEC and BICC would carry very substantial financial penalties. In other words it is highly unlikely that there would be any significant financial saving if cancellation ~~investment~~ took place at this stage. The Department is currently examining the Board's proposals to extend electrification in East Anglia to Cambridge and to Norwich. No decision has been taken and there would be no expenditure on this scheme next year.

I hope no decision will be taken on either 'rent'

As for the review of the case for a programme of main line electrification, this was started by the last government and will report shortly. Mr Fowler expects to deal with this in the report ~~that he is~~ due to make to E Committee early in the New Year about the longer term prospects for the railways. But again there is no prospect of expenditure next year and no commitment. In summary, apart from long-standing commitments for the St. Pancras-Bedford line, electrification costs will not contribute to the Board's EFL next year.

Finally, I enclose a note on the wider question of the relationship between investment by BR and their EFL.

I am sending a copy of this letter to Peter Jenkins (HM Treasury).

Yours Sincerely,

R A J Mayer

R A J MAYER
Private Secretary

CONFIDENTIAL

BRITISH RAIL INVESTMENT AND EFL 1981-82

1. The prospective external financing limit for 1981/82 resulting from the consideration by E Committee is £920m. Of this, some £735m is in support of the passenger railway under the EEC regulations, and £53m is a special facility reserved for financing the short run transition costs of closing down the heavily loss-making collected and delivered parcels service next year. The balance of borrowing is therefore some £132m covering current losses in the non-passenger businesses and for investment in them.

2. Within these financing arrangements, the separate ceiling on the total of investment in the railway and the subsidiaries is for £425m. This is the ceiling set by the last Government, and Mr Fowler sees considerable political advantage in not making public cuts in it. The Railways Board argue with considerable force that they need to be investing at a higher level in order to continue to provide the same range of railway services. However, the investment spend has been cut back this year by some £15m as the Board struggle to keep within their EFL, and we can count on at least a similar underspend next year to arrive at the figure of £920m for the EFL. The Board have for example already decided to defer the next major planned expenditure on the Advanced Passenger Train. The balance of the programme for next year is almost all committed on such things as a number of major re-signalling projects already under way, on the established programme to build 220 vehicles a year to renew the stock for the London commuter services, on completing the programme for High Speed Trains and continuing a build to replace the worn out stock of sleeping cars, both of which latter programmes have already been cut back.

?

3. On the other hand, it is the case that the Board have not been renewing the rural services, are not at present replacing the large fleet of diesel multiple units, and are building a very small number of freight locomotives each year, and this will continue to be the position next year. It seems very likely that next year the Board will also have to cut back on their new programmes for refurbishing some of their rolling stock, which is intended to extend the life of the stock and defer the need for replacement.

18 NOV 1980

Nat Ind

cc HMT

20/11/80

10 DOWNING STREET

From the Private Secretary

13 November 1980

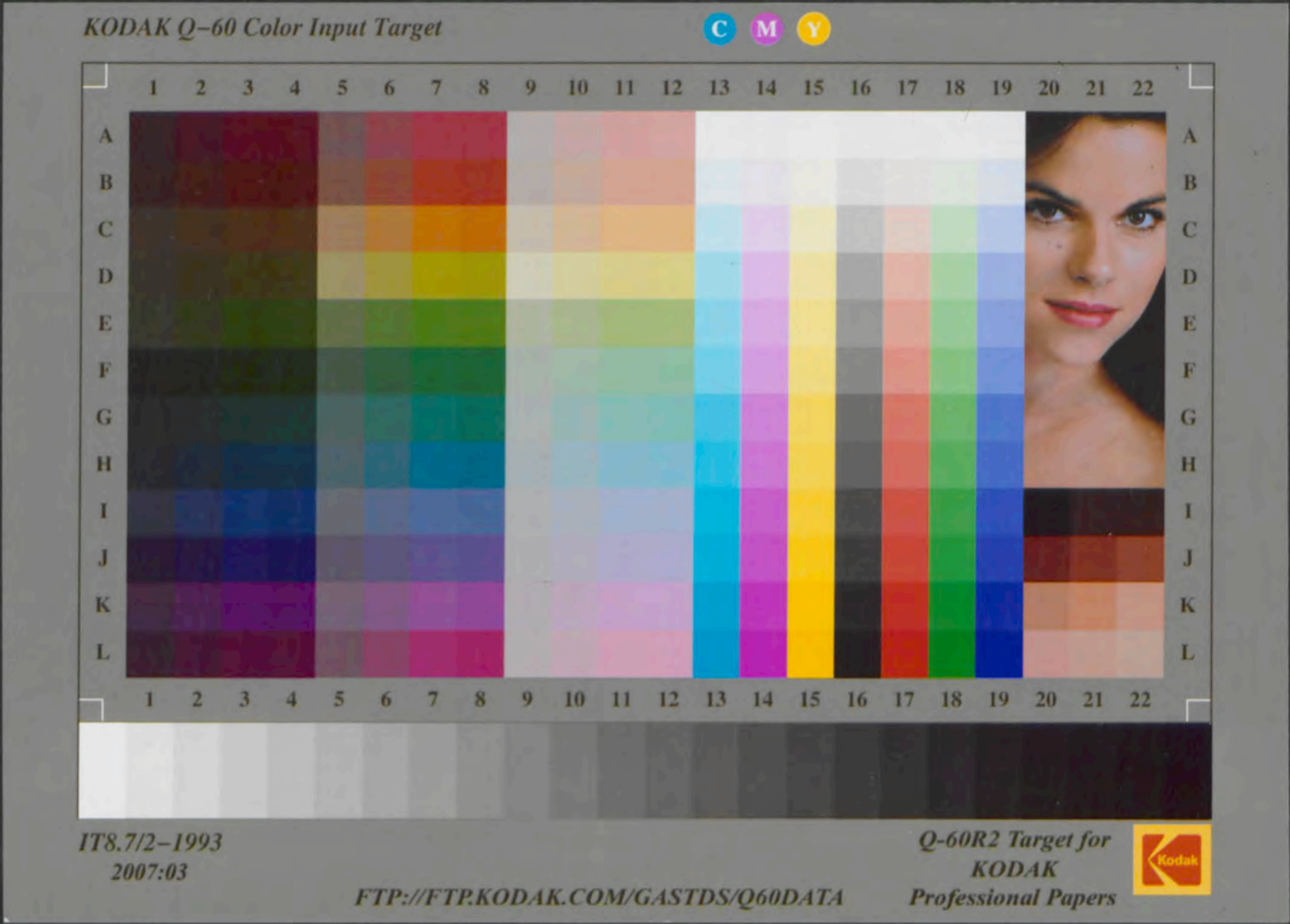
In a discussion the Prime Minister had with the Chancellor yesterday, she raised the question of why British Rail are continuing with their electrification programme at this time of public expenditure difficulty. I should be grateful for a note on this and on BR's investment programme generally, set alongside their prospective external financing limit.

I am sending a copy of this letter to Peter Jenkins (HM Treasury).

T. P. LANKESTER

Anthony Mayer, Esq.,
Department of Transport.

JS


KODAK Q-60 Color Input Target
C M Y
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
A B C D E F G H I J K L
IT8.7/2-1993
2007:03
FTP://FTP.KODAK.COM/GASTDS/Q60DATA
Q-60R2 Target for
KODAK
Professional Papers
Kodak