

1919.
NEW ZEALAND.

RAILWAY TIME-TABLE COMMISSION

(REPORT OF).

Presented to both Houses of the General Assembly by Command of His Excellency.

REPORT.

To His Excellency the Right Honourable Arthur William de Brito Savile, Earl of Liverpool, Member of His Majesty's Most Honourable Privy Council, Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, Knight Grand Cross of the Most Excellent Order of the British Empire, Member of the Royal Victorian Order, Knight of Justice of the Order of Saint John of Jerusalem, Governor-General and Commander-in-Chief in and over His Majesty's Dominion of New Zealand and its Dependencies.

MAY IT PLEASE YOUR EXCELLENCY,—

In pursuance of the appointment dated 18th September, 1919, instructing us to inquire into and report upon the following matters:—

- (1.) The condition of the rolling-stock on the 2nd July, 1919;
- (2.) Whether such rolling-stock has been maintained in a good and efficient condition, and whether proper provision has been made for the upkeep and renewal thereof;
- (3.) Whether the number of engines, carriages, and wagons under repair on the 2nd July, 1919, was excessive;
- (4.) Whether any Inspector or other officer having charge of rolling-stock and responsible for its condition has reported adversely on the condition and upkeep of the rolling-stock;
- (5.) Whether the curtailment of train services made on the 2nd July, 1919, was due to the unsafe condition of the rolling-stock;
- (6.) Whether an excessive number of engines, carriages, and wagons has been passed through the repair-shops since 2nd July, 1919;
- (7.) Whether the curtailment of train services was brought about solely by shortage of coal, and what reserve stock of coal was held by the Department on the 2nd July, 1919;
- (8.) The causes to which the depletion, if any, of stocks of coal was due;
- (9.) Whether proper diligence and foresight were exercised by the Railway Department in obtaining coal-supplies to meet its requirements;
- (10.) Whether the Department was brought under the jurisdiction of the Coal Trade Committees or other authorities under the Coal Trade Regulations and rationed in the same way as other industries, and, if so, whether the Department regularly kept such Committees or authorities apprised of its requirements;

- (11.) Whether the Department used its organization in co-operation with such Committees or authorities for the purpose of obtaining coal and maintaining stocks for railway purposes ;
- (12.) Whether all the coal obtained for and allocated to the Railway Department under the Coal Trade Regulations was delivered to the Department, and whether and to what extent coal allocated for railway purposes was diverted to other industries ;
- (13.) Whether the diversion of coal from the railways to other industries detrimentally affected the position of the railway coal reserves ;
- (14.) Whether the Railway Department kept closely in touch with the overseas coal-suppliers with a view to supplementing supplies obtained through the Coal Trade Committees ;
- (15.) Whether the staff of the Department was of sufficient strength on the 2nd July, 1919, to have enabled the ordinary time-table in operation on that date to be maintained had other conditions been satisfactory ;
- (16.) Whether the restrictions imposed on the carriage of passengers and goods were essential ;
- (17.) Whether the curtailment made in the train services was due to causes other than shortage of coal ;

We have the honour to report that we have duly inquired and have taken evidence at Wellington and Christchurch, after advertising in the daily papers at the main centres throughout the Dominion inviting persons desirous of giving evidence to attend. No person, however, responded to the invitation.

The following witnesses were examined: The General Manager of the New Zealand Railways; the Chief Engineer of the New Zealand Railways; the Chief Mechanical Engineer of the New Zealand Railways; the Assistant Chief Mechanical Engineer of the New Zealand Railways; the Locomotive Engineers for the Auckland, Wellington, South Island Main Line and Branches, and the Westland and Westport Sections; the Chief Clerks of the Locomotive and the Stores Branches of the New Zealand Railways; the Workshops Managers at Newmarket, East Town, Petone, Addington, and Hillside; the Workshops Foremen at Napier and Invercargill; the Brake Inspectors for the North and South Islands; the Assistant Locomotive Foreman at Christchurch.

The following witnesses connected with the Coal Control Department were also examined: Mr. A. H. Miles, formerly Chairman of the Coal Trade Committee; Mr. A. MacIntosh, formerly a member of the Coal Trade Committee; Mr. A. M. Adams, formerly Chief Executive Officer of the Munitions and Supplies Department; Mr. F. J. Gunn, Officer in charge of the Coal Control Department. Mr. Jas. Findlay, Chairman of the Overseas' Shipping Committee, was also examined.

Counsel appeared before us representing the Railway and Coal Trade Departments.

We forward with our report a note of the evidence taken, and letters, documents, and returns put in and received by us.

ROLLING-STOCK AND ENGINES.

An exhaustive inquiry and report on the condition of the rolling-stock on the New Zealand railways in July, 1916, recorded in parliamentary paper D.—4, 1917, show that it had been maintained in good and efficient order and condition.

It has been found advantageous in making the present inquiry to adopt this as the starting-point for further inquiries as to the condition of the rolling-stock and engines on 2nd July, 1919.

Reference to the official data given in Return No. 15 adopted from the annual Railway Statements presented to Parliament shows that during the past four years the train-mileage run each year was—

In the year ending 31st March, 1916	..	..	9,356,522
In the year ending 31st March, 1917	..	..	9,146,331
In the year ending 31st March, 1918	..	..	7,468,646
In the year ending 31st March, 1919	..	..	7,477,583

(See Appendix A.)

The two last years show a reduced mileage—roughly, 2,000,000 below the mileage for the year 1916.

The reduction in train-mileage was effected by the Railway Department curtailing the time-tables to overcome the difficulties arising through loss of men from enlistment and also to save coal. The curtailment would also diminish the amount of repairs required in the future.

A reference to the diagram attached (see Appendix B), which has been adopted from the official railway data, will show that since the 31st March, 1916, the following additions have been made:—

In wagons, an increased carrying-capacity of 9,381 tons, equal to an increase of 5·09 per cent.

In carriages, an increased seating-capacity of 2,854 passengers, equal to an increase of 4·61 per cent.

In engines, an increase in tractive power of 833,196 lb., equal to an increase of 10·51 per cent.

These figures indicate that so far as the capacity and power were concerned the stock and engines on the 2nd July, 1919, were capable of dealing with a considerably greater amount of work than they were in the year ending the 31st March, 1916, and are far ahead of that required during a similar period immediately preceding the 2nd July, 1919.

For some years the Railway Department had been carrying on a programme for building stock and engines commensurate to meet expected extensions and increased traffic. As the war progressed it became desirable to suspend this work, which was done gradually. Much material and many of the men thus released became available for the maintenance work. Some of the parts and materials which were formerly procured from Great Britain have, during the war period, been obtained from America and to a limited extent from private stocks. On the whole no serious difficulty has arisen from any deficiency.

There has been a shortage of skilled mechanics at all the shops, especially at Petone. The shortage still continues.

Mr. H. H. Jackson, who was the Chief Mechanical Engineer of the New Zealand Railways for many years, retired on the 31st March, 1919, and was succeeded by Mr. E. E. Gillon. The evidence of the latter, and of the Engineers in charge of the districts, and of the Workshops Managers, has been consistently to the effect that the rolling-stock and engines have been properly maintained and are in good and efficient condition.

Appended are Rolling-stock Returns Nos. 1 to 18, called for, showing particulars concerning essential parts required for the maintenance and repairs of the rolling-stock and engines, in support of the evidence given.

The General Manager's evidence shows that no difficulty has occurred in working the railways on the reduced time-table during the past two years arising from defective rolling-stock or engines or shortage of staff.

COAL-SUPPLIES.

Particulars of the railway coal-supplies from April, 1913, to the 2nd July, 1919, are shown on Coal Returns Nos. 1 to 8 attached.

About 260,000 tons of bituminous coal, obtained from the West Coast and Australia, and about 66,000 tons of brown coal, were required per year for the full time-table and the years ending the 13st March, 1916 and 1917; and somewhat less than this for the reduced time-table of 1918 and 1919. Brown coal, which has only about two-thirds of the heating-power of bituminous coal and which deteriorates quickly, is not kept in stock, and is usually used for light traffic. The fast through trains and heavy work require bituminous coal.

In October, 1913, the coal stock was 85,442 tons. Difficulties in obtaining coal began immediately after this, and as the war progressed the reserve stock fell with some fluctuations until by July, 1919, only 9,560 tons remained in stock, compelling the Railway Department to suspend the ordinary time-table then in operation.

The present officers consider that the stock of bituminous coal should not be less than 80,000 tons in normal times, but no written rule to this effect seems to have been made. Difficulties in getting supplies began soon after the declaration of

war, and during 1916 the deficiency became general throughout the country. A conference between the Minister of Munitions and Supplies, the Minister of Railways, the then General Manager of Railways, some of the principal men of business, and shipping representatives was held on the 19th December, 1916, resulting in an Advisory Committee of six being formed, of which the then General Manager of Railways was one. After this, by a war regulation dated the 5th February, 1917, a Committee of three, under the control of the Minister of Munitions and Supplies, called the "Coal Trade Committee," was established. The Committee was advisory only. The Minister of Munitions was the administrator of the coal regulation through the officers of his Department. By a regulation of the 28th August, 1917, the rationing of all coal-supplies—including the railways—came under his control. This became effective on the 4th October, 1917. The Minister did not regulate the purchase of coal or the rate of freights. He obtained offers of freights, but it was left to the General Manager of Railways to accept or refuse these offers.

There was not enough coal coming forward to properly meet all demands.

In the distribution of the coal available, the supplies of the Navy and for the transports and shipping carrying the troops and food-supplies for the Imperial Government necessarily would rank first, and could not be limited. Supplies for the railways and great producing industries, which are mutually inseparable, would come next. The interests of the whole community were concerned in this order of distribution.

On the 4th October, 1917, when the rationing of coal began under the Minister of Munitions, the Railway Department was required to render weekly returns of the stocks, and give constant notice of its requirements to the Minister of Munitions, and it did this regularly.

The Munitions Department's duties regarding coal-supplies were most onerous and complex. This question was largely governed by causes beyond the Department's control or observation—the naval and military conditions in Europe, the control of the available shipping by the Imperial authorities, the shortage of shipping throughout the world, diminished importation from Newcastle, diminished output from the West Coast mines, all added to the difficulty of pursuing any definite plans.

After examining the voluminous correspondence submitted to us, we can only conclude that the Coal Trade Committee and the Munitions Department gave the most careful and painstaking attention to their work. The Railway Department on several occasions refused offers of coal, sometimes because it was unsuitable, and sometimes because it would not pay the higher freight charges necessary to get the additional coal.

The final episode which seems to have led to the railway collapse was the influenza epidemic. Commencing in New Zealand at the end of October, 1918, it not only directly affected the mining population, but, by the prolonged quarantine regulations which were imposed first in New Zealand and immediately after in Australia, it dislocated the local as well as the overseas shipping to an unparalleled extent, and this difficulty continued to operate up to the date that the ordinary time-table had to be suspended for want of coal-supplies.

MAY IT PLEASE YOUR EXCELLENCY,—

Regarding the matters specifically referred to us we find—

1. *The condition of the rolling-stock on the 2nd July, 1919.*

The evidence shows that the rolling-stock and engines were in good and efficient condition on the 2nd July, 1919.

2. *Whether such rolling-stock has been maintained in a good and efficient condition, and whether proper provision has been made for the upkeep and renewal thereof.*

The evidence shows that the rolling-stock and engines had been maintained in good and efficient condition, and that proper provision had been made for the upkeep and renewal thereof.

3. *Whether the number of engines, carriages, and wagons under repair on the 2nd July, 1919, was excessive.*

The evidence shows that the number of engines, carriages, and wagons under repair on the 2nd July, 1919, was not excessive.

4. *Whether any Inspector or other officer having charge of rolling-stock and responsible for its condition has reported adversely on the condition and upkeep of the rolling-stock.*

The evidence was to the effect that no Inspector or other officer responsible for its condition had reported adversely on the condition and upkeep of the rolling-stock and engines during the last four years up to the 2nd July, 1919.

5. *Whether the curtailment of train services made on the 2nd July, 1919, was due to the unsafe condition of the rolling-stock.*

The curtailment of train services made on 2nd July, 1919, was not due to the unsafe condition of the rolling-stock or engines.

6. *Whether an excessive number of engines, carriages, and wagons has been passed through the repair-shops since 2nd July, 1919.*

The evidence shows that an excessive number of engines, carriages, and wagons had not been passed through the repair-shops since 2nd July, 1919.

7. *Whether the curtailment of train services was brought about solely by shortage of coal, and what reserve stock of coal was held by the Department on the 2nd July, 1919.*

The curtailment of the train services was brought about solely by the shortage of coal. The whole stock of coal held by the Department on 2nd July, 1919, was 9,560 tons, scattered over a great number of depots, and was quite insufficient to continue running the old time-table.

8. *The causes to which the depletion, if any, of stocks of coal was due.*

There was a great depletion of stocks from the end of October, 1913, with fluctuations to the 2nd July, 1919. The causes of the depletion were—the shortage of shipping, the shortage of miners, the diminished output of bituminous coal from the West Coast mines, the diminished importations of bituminous coal from Newcastle, strikes, the increased demand by the Navy for Westport coal, to a limited degree to diversions from railways to various industries, and to the refusals by the Railways to pay higher freights for overseas coals which external conditions justified. Finally, the influenza epidemic began about the end of October, 1918, to seriously affect the population of the Dominion, and later that of the Commonwealth of Australia, and severe quarantine regulations were rendered necessary throughout Australasia.

9. *Whether proper diligence and foresight were exercised by the Railway Department in obtaining coal-supplies to meet its requirements.*

The railway coal stocks, which were 85,442 tons in October, 1913, fell with various fluctuations to 9,560 tons by 2nd July, 1919. During this period a conference between Ministers and others was held, and a Committee of six was set up on the 19th December, 1916, the General Manager of Railways participating. After that a Committee of three acted with the Minister of Munitions from 5th February, 1917, until 28th August, 1917, when Coal Trade Committees were set up. After 4th October, 1917, the Minister of Munitions rationed the railways and other consumers. This course was agreed to at the time by the Railway Department. It, in fact, requested the Minister of Munitions to bring his powers into force, because it considered it was not getting a sufficient share of coal from the West Coast mines. The Railway Department continued to make its own purchases. None of these efforts produced sufficient coal.

In the year ending March, 1918, the Railways reduced the time-tables by about 2,000,000 miles a year. After the Minister of Munitions undertook the rationing of coal on 4th October, 1917, the Railway Department commenced to make weekly returns of stocks of coal and constant statements of requirements to him.

The General Manager of Railways refused to pay higher freights demanded by ocean steamers to make special trips to bring supplies to New Zealand, thus losing opportunities of supplementing railway supplies.

In respect that the General Manager refused to pay higher freights which were reasonable, we do not think that he showed proper foresight.

The influenza epidemic stopping the output of coal and paralysing the shipping finally precipitated the crisis.

The late General Manager, Mr. Hiley, relinquished office on 30th April, 1919. It is right to state that a perusal of the correspondence shows that the matter of coal-supplies was not dealt with by the present General Manager.

10. *Whether the Department was brought under the jurisdiction of the Coal Trade Committees or other authorities under the Coal Trade Regulations and rationed in the same way as other industries, and, if so, whether the Department regularly kept such Committees or authorities apprised of its requirements.*

The control of railway coal-supplies was brought under the jurisdiction of the Minister of Munitions by a war regulation of 28th August, 1917, and the necessary machinery was put into operation on 4th October, 1917, from which date all consumers, including the railways, were rationed by the Minister of Munitions. The Railway Department kept the proper authorities apprised of its requirements.

11. *Whether the Department used its organization in co-operation with such Committees or authorities for the purpose of obtaining coal and maintaining stocks for railway purposes.*

The Railway Department co-operated with the Coal Trade Board to obtain stocks for railway purposes.

12. *Whether all the coal obtained for and allocated to the Railway Department under the Coal Trade Regulations was delivered to the Department, and whether and to what extent coal allocated for railway purposes was diverted to other industries.*

Coal obtained for the railways and afterwards allocated to the Railway Department by the Minister of Munitions was sometimes diverted by him to other purposes under urgent circumstances. The necessity for final allocation could not always be foreseen. As far as we can ascertain about 6,000 tons were diverted between May, 1918, and 2nd July, 1919.

13. *Whether the diversion of coal from the railways to other industries detrimentally affected the position of the railway coal reserves.*

Diversion of coal from the railways lessened the quantity of the railway supplies to the extent mentioned in the answer to the preceding question.

14. *Whether the Railway Department kept closely in touch with overseas coal-supplies with a view to supplementing supplies obtained through the Coal Trade Committees.*

The Railway Department kept closely in touch with overseas coal-suppliers. The railway coal-supplies were not obtained through the Advisory Committee, but were ordered by the Railway Department and allocated by the Minister of Munitions and his officers.

15. *Whether the staff of the Department was of sufficient strength on the 2nd July, 1919, to have enabled the ordinary time-table in operation on that date to be maintained had other conditions been satisfactory.*

The staff on the 2nd July, 1919, was sufficient to have continued the ordinary time-table had there been sufficient coal-supplies available.

16. *Whether the restrictions imposed on the carriage of passengers and goods were essential.*

The restrictions imposed on the carriage of passengers and goods were essential.

17. *Whether the curtailment made in the train services was due to causes other than shortage of coal.*

There was no other reason for the curtailment made in the train services but the shortage of coal.

All which we respectfully submit.

We have the honour to be, Your Excellency's obedient servants,

J. P. MAXWELL, M.Inst.C.E.

J. MARCHBANKS, M.Inst.C.E.

W. D. HUNT.

Wellington, 15th October, 1919.

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