

the Electric-power Boards Act of 1918. This Act provides for several local districts to combine for the purpose of electric-power distribution, and to set up a special Electric-power Board to carry out the work, with rating-powers over the district concerned.

The provisions of this Act have now been taken advantage of by ten districts, details of which are set out in the attached table. The total area covered by these ten districts is 17,179 square miles, being 16·6 per cent. of the total area of the Dominion, and the total population included is 137,960, being 12·5 per cent. of the population of the Dominion. Five of the Boards have laid out their reticulation systems and submitted the necessary loans to the ratepayers for approval. Of these one (Southland) includes a generating-station at Lake Monowai, and the other four provide for taking power in bulk from the Public Works Department.

The total amount of the loans authorized by the ratepayers of these five districts amounts to £1,980,000. This is £20 6 per head of population concerned, and 7·25 per cent. of the unimproved rateable value. It is anticipated that the revenue from the distribution of electric power will cover the whole of the interest charges, but the above figures indicate that the average rate necessary to pay 5 per cent. interest on the whole of the loans would not amount to $\frac{7}{8}$ d. in the pound on the unimproved value. The security for the loans is therefore ample, apart from the actual assets and revenues of the Boards.

The unanimity in support of the five loans already carried was remarkable, the total number of votes cast being 8,907 for and 469 against the loans, showing a majority of nearly twenty to one. In one case, Te Awamutu district, there was not a single vote against the loan.

NEW ZEALAND ELECTRIC-POWER DISTRICTS.

Name of Electric-power District.	Proclamation constituting District gazetted.	Number of Members on Board.	Approximate Area of District.	Population.	Value of Rateable Property (unimproved).	Amount of Loan.	Voting for Loan Poll.	
							For.	Against
			Sq. miles.		£	£		
Southland ..	19/11/19	12	9,986	65,450	13,600,471	1,500,000	6,516	415
Thames Valley ..	8/1/20	12	2,304	16,000	6,814,993	200,000	1,503	28
Te Awamutu ..	8/1/20	10	309	6,000	1,759,558	120,000	359	..
Cambridge ..	8/1/20	8	104	5,000	1,683,632	60,000	198	3
Banks Peninsula ..	8/1/20	7	372	3,500	3,430,817	100,000	331	23
Wairarapa ..	25/3/20	9	2,073	21,800	3,114,718	Poll not yet taken.		
Central ..	8/7/20	7	300	9,110	3,667,904	"	"	
Teviot ..	22/7/20	7	120	1,800	169,137	"	"	
Wairoa ..	29/7/20	10	1,369	3,900	2,417,251	"	"	
Springs-Ellesmere ..	8/7/20	7	242	5,400	2,627,468	"	"	
Totals ..	..	..	17,179	137,960	39,285,949	1,980,000	8,907	469

FUTURE DEVELOPMENTS.

With regard to the future developments under the Electric-power Boards Act, the principles on which the boundaries of new districts should be determined are not set out in the Act, but the responsibility of deciding whether proposed boundaries are advisable or otherwise is cast on the Governor-General in Council, and it is obvious that if the whole Dominion is to be dealt with in the best way possible it is essential that a comprehensive scheme should be drawn up, and in future new districts should be arranged as far as possible to comply with this scheme. In order to decide the correct areas into which the Dominion should be divided for the purposes of the Act the following considerations must be taken into account:—

(a.) The district must be large enough to have financial strength. For this purpose the demand should be at least 800 h.p. to 1,000 h.p., yielding a revenue to the Board of £12,000 to £15,000 per year, and involving a population of at least four thousand to five thousand persons. This is the minimum size in cases in which geographical and other considerations do not permit of a larger district. In the general case the district should be three to five times this size, and in special cases in which a supply will not be available for some years, and the Board has to establish its own power-station, the district should be as large as can be economically supplied from the available power source at the ratio of five head of population per horse-power.

(b.) The district should include both town and country areas, but should have a distinct community of commercial and industrial interests. The country districts should be included with the towns through which their produce is sold and their necessities purchased, and the whole of the back country trading through any one centre should be included with that centre. The boundaries must be designed to foster and encourage this natural community of trading interests.

(c.) The district must be designed to give convenient road access for the distribution-lines to ensure both economical construction and effective patrol and maintenance. From this point of view the boundaries will consist, whenever possible, of mountain-ranges or large impassable rivers, such as the Waimakariri and Rakaia.

(d.) The district must be designed to utilize as far as possible the points of distribution selected as most suitable for the purposes of the main Government transmission-system, and as far as possible the whole output of each of the main Government substations should be taken over by a single Power Board. This will not always be possible owing to the geographical configuration of the district, but should generally be complied with.

(e.) For rating and statistical purposes it will be advisable as far as possible to utilize existing county boundaries whenever they conform approximately to the above considerations.

Taking these considerations into account, a suggested scheme of subdivision of the whole Dominion into electric-power districts is appended herewith, and should be made the basis of future