

October, 1947, and represented an increase of 7·2 per cent. The highest Saturday output was 5,389,000 units on 9th August, 1947 (last year 4,819,000), an increase of 8·5 per cent.

The highest Sunday output was 4,923,000 units on 10th August, 1947 (last year 4,474,000), an increase of 10·0 per cent.

The total system units generated by all plants in the North Island for the financial year ending 31st March, 1948, was 1,778,000,000 compared with 1,718,000,000 last year, an increase of 3·5 per cent. The system units generated by Government-owned plants only plus units purchased from Supply Authorities were 1,718,400,000 units for the year ending 31st March, 1948, compared with 1,656,300,000 units last year, an increase of 3·9 per cent.

From 13th March, 1947 (just before the beginning of the year), until Friday, 20th June, 1947, all Supply Authorities were required to reduce consumption to below their allocations. After 20th June each Authority was required to keep within an allocation which allowed about a 3-per-cent. increase in consumption on the previous years. In mid-December each Supply Authority was given a new allocation for 1948 which was estimated would allow an average increase in load of about 5 per cent. above that of 1947. Due to unfavourable hydraulic conditions, it was again necessary to reduce consumption, and on 11th March, 1948, directions were issued to keep consumption to 5 per cent. below the revised allocation, and this reduction was extended to 15 per cent. on the 30th March.

The system voltage was increased by raising Arapuni and Karapiro 110 kV voltage 5 per cent. on Monday, 22nd March, 1948, and Mangahao and Waikaremoana voltage 5 per cent. on Wednesday, 24th March, 1948.

Generation details by Government plants plus units purchased for resale (compared with 1946-47) are as follows:—

| Station.                               | Year ended 31st March, 1948. |                  |                     | Year ended 31st March, 1947. |                  |                     |
|----------------------------------------|------------------------------|------------------|---------------------|------------------------------|------------------|---------------------|
|                                        | Maximum Kilowatts.           | Units generated. | Annual Load Factor. | Maximum Kilowatts.           | Units generated. | Annual Load Factor. |
|                                        |                              |                  | Per Cent.           |                              |                  | Per Cent.           |
| Arapuni .. ..                          | 152,500                      | 725,660,000      | 54·5                | 150,000                      | 786,185,000      | 59·8                |
| Horahora* .. ..                        | 11,100                       | 721,000          | 74·5                | 12,500                       | 88,235,950       | 80·6                |
| Karapiro .. ..                         | 67,200                       | 349,568,000      | 59·4                | ..                           | ..               | ..                  |
| King's Wharf .. ..                     | 28,700                       | 40,006,000       | 15·9                | 33,009                       | 47,582,495       | 16·4                |
| Mangahao .. ..                         | 21,300                       | 86,558,000       | 46·5                | 21,000                       | 113,582,000      | 61·7                |
| Penrose .. ..                          | ..                           | 1,762,000        | ..                  | ..                           | 9,089,920        | ..                  |
| Piripaua .. ..                         | 100,200                      | 165,492,000      | 47·8                | 44,000                       | 182,872,510      | 47·4                |
| Tuāi .. ..                             |                              | 252,308,000      |                     | 63,900                       | 290,697,366      | 51·9                |
|                                        | ..                           | 1,622,075,000    | ..                  | ..                           | 1,518,245,241    | ..                  |
| <b>Auxiliary and standby stations—</b> |                              |                  |                     |                              |                  |                     |
| Evans Bay .. ..                        | ..                           | 49,514,000       | ..                  | ..                           | 86,618,160       | ..                  |
| Kourarau .. ..                         | ..                           | 3,358,000        | ..                  | ..                           | 2,973,397        | ..                  |
| New Plymouth .. ..                     | ..                           | 14,527,000       | ..                  | ..                           | 16,156,070       | ..                  |
| Onehunga .. ..                         | ..                           | 1,762,000        | ..                  | ..                           | 2,941,330        | ..                  |
| Opunake .. ..                          | ..                           | 1,477,000        | ..                  | ..                           | 1,633,599        | ..                  |
| Palmerston North .. ..                 | ..                           | 1,992,000        | ..                  | ..                           | 5,407,422        | ..                  |
| Poverty Bay .. ..                      | ..                           | 1,796,000        | ..                  | ..                           | 1,796,220        | ..                  |
| South Taranaki .. ..                   | ..                           | 1,025,000        | ..                  | ..                           | 1,112,024        | ..                  |
| Taumarunui .. ..                       | ..                           | 3,606,000        | ..                  | ..                           | 3,230,100        | ..                  |
| Tauranga .. ..                         | ..                           | 7,413,000        | ..                  | ..                           | 7,244,415        | ..                  |
| Wilson's .. ..                         | ..                           | 3,000,000        | ..                  | ..                           | 2,962,000        | ..                  |
| Other miscellaneous .. ..              | ..                           | 6,864,000        | ..                  | ..                           | 6,029,847        | ..                  |
| Total units generated and purchased    |                              | 1,718,409,000    |                     |                              | 1,656,314,025    |                     |

\* Shut down 4th April, 1947.