## The Report on the

## Census of Production

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\text { for } 1954
$$

## Volume 12: Industry G

ELECTRICITY SUPPLY INDUSTRY


Presented by the Board of Trade Po Parliament in pursuance of the Statistics of Trade Act, 1947 ( 10 \& 11 Geo. 6 Ch. 39, Sec. 7)

## The Report on the Census of Production for 1954

VOLUME 12, INDUSTRY G
ELECTRICITY SUPPLY INDUSTRY
THIS REPORT on the Electricity Supply Industry relates to establishments engaged wholly or mainly in producing or distributing electricity. Establishments producing electricity for use by works under the same control are excluded, being classified to the industries covering the major output of the

The electricity supply industry in Great Britain was nationalised on April 1, 1948. In this report separate particulars are given for the nationalised and non-nationalised sectors of the industry. nationalised industry covers the British Electricity Authority and the North of Scotland Hydro Electric Bord. the Lochaber Power Company, although not a nationalised undertaking, is included with the North of Scotland Hydro Electric Board in the following tables under the heading 'North of Scotland'

The figures for larger undertakings include all establishments, regardless of size, of the nationalised industry, the Lochaber Power Company, Railway and Transport Undertakings and electricity undertakings in Northern Ireland.

Gross output in this industry for 1948, 1951 and 1954 is arrived at by aggregating the sale of electricity, by-products and waste products, rents received, net receipts from the sale of appliances value of work charged for and the value of new constructional work carried out by employees of electricity undertakings.

This industry corresponds to minimum list heading 211 in the Standard Industrial Classification The figures in this report are based on returns made to the Ministry of Fuel and Power.
list of tables
Table No. Title Page Table No.
1 Industry sumary: estimates $\begin{array}{ll}\text { Page } \\ \text { for the industry as a whole }\end{array} \quad 12 / \mathrm{G} / 3$

2 Summary of returns received
12/G/3

3 Analysis by size, 1954
$4 \begin{gathered}\text { Analysis according to } \\ \text { specialisation within the }\end{gathered}$ specialisation
industry, 1954

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not
nopl

5 Generation and distribution $12 / \mathrm{G} / 6$ of electri
work done

Table No.
6 Title
Sales of principal products
of the industry by estabof the industry by estab-
lishments classified to
other industris other industries
Sales in the industry of Sales in the
other than
products
$8 \quad \begin{gathered}\text { Total make of intermediate } \\ \text { products }\end{gathered}$
9 Materials and fuel purchased $12 / \mathrm{G} / 9$
10 Average number of employees $12 / \mathrm{G} / 10$ and wages, salaries and
superannuation payments


The following notes describe termin in general use tions of the terms used and a description of the scope the booklet entitled The Report on the Census of Pro, Industrial Classification: Establishments are classiff
ed to industries according to the nature of the ir output and as far as possible. in conformity inth the
tandard Industrial Clasification. Certain products are identified as the principal products of ind individual
and ind
industries, the principal product for a qiven industry Industries. the principal products for a given industry
being of a similar nature or commonly associated in proeing of a similar nature or commonly associated in pro
duction. The princio of clasification normally
ollowed is that an establishment is classified to an followed is that an establishment is classified to an
industry if its output of the principal products of that industry if its output of the principal products of that
industry acoounted for a qreater proportion of the value
of its output than did its output of the principal proof its output than did its
ducts of any other industry.
Specialist producers normally comprise those establish-
nents 50 per cent. or more of whose total output by nents 50 per cent. or more of whose total output by
value is accounted for by the characteristic products of the specialist group.
Intermediate products:
given shoning the total industries figures are
quantities made during the year given showing the total quantities made during the year
of intermediate product ${ }^{\text {in }}$, e.e products which may be urther processed in the establishments in which the
re produced.
Larget establishments: The information given in the re port relates mainly to larger establishments, i.e.
establishments of firms employing on the average more stan 10 persons. In most cases an establishment com prises the whole of the premises under the same owner
ship or managenent at a particular address (e. ©. a a mine or factory) Offices, warehouses, laboratories and
other andiliary places of business situated apart from
Ther the producing works are not regarded as separate estabSmall fi ms are those employing on the average 10 or

The estimates for the industry as a whole given in
Table are normally obtained by increasing the other
items shown in the same proportion as total etployment. Gross output (production) is the total value of good made and other vork done during the year: it is obtain od by adjusting the value of sales and work done during
the yar for changes in the value of stocks of products
on hand for sale and work in progress.
Net output is the amount left after deducting from the
value of gross out value of gross out tput the aggregate of the cost of mat
orials and fuel used. the amount paid for work qiven out
and. for 1951 and 1954 any andransport payments made. and, for 1951 and 1954. any transport payments made
This represents the value added to materialy the the pro
cess of production, and constitutes the fund from which rages. sclaries, rents. rates and taxes, advertising and
other selling expenses and all other similar charges
have sity Sales means sales during the year of goods made in the
establishment covered by the return or made on commiss es for for it, wh
ion value shales is the net selling value, The th
 Materials and fuel The total chat of materials and
fuel purchased inciudes all purchases during the your
of materials for nse in production, and of fuel (includ-
ing oil. gas and olectricity) for all purposes: packing
matericis, including the full cost of returnable cases materials. including the full cost of returnable cases
hen first purchasedi work onfice materials:
hater charges: materials for repairs to buildings: water charges; materials for repairs to buildings.
plant and vhicles when carried out by firm. people included in their returns; consumable tools:
and parts for machinery purchased as replacements. and parts for machinery purchased as replacemens.
Purchases of goods for merchanting are excluded. The
cost of materials and fuel used, given in rable 2, is oot of materials and fuel used, given in Table ${ }^{2}$. is
obtaned by adusting purchases for changes during the
eear in the value of stocks. year in the value of stocks.
Stocks: Firms were required to give stocks of materials
and fuel. products on hand for sale, and work in pro-
gress, at income tav and nd fuel. products on hand for sale, and work in pro-
gress. at income tax values. Customs and Excise Duty paid on materials purchased is
normally included in the cost of materials. Finished ormally included in the cost of materials. Finished
goods are similarly valued as they were sold. duty-paid




 separately as excluded employees. Employes are per surance cards ware held by employers), whe ther employed
full-time or part-time. Morking proprietors are proprietors of businesses other
than limited companies, toge ther with members of the in than limited companies, together with members of the
fanilities hho worted in the business without receiving
fixed wages or salaries. Any persons working less than famind wages or salaries. Any persons. Working less than
fixer Northern
half the normal hours are excluded. Ireland directors of 1 iminted companies. (other than those
paid by fee only) Adninistrative, technical and clerical employees include Northern Ireland): managers, superintendents and works foremen: research, experimental, development. technica
and desiqn employees (other than operatives $)$; draughts men and tracers; travellers: and office (includin Operatives include all other classes
broadly speaking. all manual workers. Outworkers are persons employed by the firm who work on
naterials supplied by the firm in their own homes Wages and salaries include oll overtime payments, bonus insurances. Contributory pensions etc. They exclude
payments to vorking propritotors.
paymital

$$
\begin{aligned}
& \text { Capital expenditure includes expenditure on ner building } \\
& \text { work, and on plant, machine oy and vehicles. charged to }
\end{aligned}
$$ work, and on plant, machine ry and vehiciles, charged to

capital account during the year. including any transporit
and installation cost in and installation costs involved. It includes expendi
ture in respect of establikhments in Graat Britain hivic
had not begun production be fore the end of the year had not be gun production be fore the end of the year
(arich has not previousily ben included in the Census of
Production reports for individual industries). Symbols used:
for not available
(less than half the final for nil or neg.
digit shown). als between the sums of benstituent items and the totith others of a similar nature hhere been combined separate details might disclose information relating to
an individer separate details might dis
an individual undertaking.

| Estimates for the industry as a whole |
| :--- |
| TABLE 1 |

Summary of returns received
(A) British Electricity Authority and North of Scot 1and

TABLE 2

|  |  | Unit | Great Britain |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1948 | 1951 | 1954 |
| Number of generating stations |  | No. | 330 | 354 | 367 |
| Electricity sold to consumers (a) |  | £ 000 | 190. 561 | 253.805 | 353.455 |
| By- and waste products sold (a) |  | - | 679 | 1.519 | 1,956 |
| Rents received (a) |  | . | 3.839 | 3.688 | 3.008 |
| Net receipts from sale of appliances | (a) | $\cdots$ | 1.356 | 4.396 | 6.875 |
| Work charged for (a) (b) |  | . | 9.295 | 14.232 | 17.623 |
| Work of new construction (c) |  | . | 27.234 | 33,243 | 48.265 |
| Gross output (production) (d) |  | $\cdots$ | 232.963 | 310.883 | 431.182 |
| Cost of materials and fuel used (e) |  | $\cdots$ | 99.645 | 113.925 | 176. 232 |
| Amounts paid for transport (f) |  | $\cdots$ |  | 16.280 | 189 |
| Net output |  | . | 133,318 | 180.678 | 254.761 |
| Average number of employees | $\left\{\begin{array}{l}\text { operatives } \\ \text { others }\end{array}\right.$ | №. | $\begin{aligned} & 104.533 \\ & 43.627(\mathrm{~g}) \end{aligned}$ | $\begin{array}{r} 120,083 \\ 58,528 \end{array}$ | $\begin{array}{r} 125.762 \\ 60.461 \end{array}$ |
| Total employment |  | . | 148.160 | 178.611 | 186. 223 |
| Net output per person employed |  | $\varepsilon$ | 900 | 1.012 | 1.368 |
| Wages and salaries | $\left\{\begin{array}{l} \text { of operatives } \\ \text { of others } \end{array}\right.$ | £ 0.00 | $\begin{aligned} & 3.753 \\ & 17.605 \end{aligned}$ | $\begin{aligned} & 45,431 \\ & 28.061 \end{aligned}$ |  |
| Capital expenditure |  |  |  |  |  |
| New building work |  | $\cdots$ | 24.090 | 34, 229 | 50, 560 |
| Plant and machinery | $\left\{\begin{array}{l}\text { acquisitions (h) } \\ \text { disposals }\end{array}\right.$ | $\because$ | ${ }^{66.886}$ | 109.727 ${ }_{573}$ | 158,222 1.152 |
| Appliances for hire |  | $\because$ | 1.387 | 931 169 | 1.769 122 |
| Vehicles | \{ $\begin{aligned} & \text { actupusitiolions } \\ & \text { disposals }\end{aligned}$ | $\because$ | 1.145 53 | 1.063 ${ }_{\text {103 }}$ | 1.269 130 |
| Vessels | $\left\{\begin{array}{l}\text { accuisitions } \\ \text { disposals }\end{array}\right.$ | .. |  | 1.103 | 922 66 |


(C) Total

|  | Unit | Great Britain$1948$ | United Kingdom |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1951 | 1954 |
| Number of generating stations | No. | 350 | 373 | 386 |
| Electricity sold to consumers (a) | £. 000 | 198, 373 | 265, 354 | 370.926 |
| By- and waste products sold (a) | .. | 782 | 1.623 | 2.116 |
| Rents received ( $\alpha$ ) | .. | 3.841 | 3.735 | 3.048 |
| Net receipts from sale of appliances (a) | .. | 1.356 | 4.425 | 6.907 |
| Work charged for (a) (b) | .. | 9.302 | 14.441 | 17.837 |
| Work of new construction (c) | . | 27.741 | 34.658 | 49.513 |
| Gross output (production) (d) | . | 241.394 | 324, 236 | 450.347 |
| Cost of materials and fuel used (e) | . | 105. 472 | 122.249 | 188.281 |
| Amounts paid for transport (f) |  |  | 16.315 | 189 |
| Net output |  | 135,922 | 185.673 | 261.877 |
| Average number of employees $\quad\left\{\begin{array}{l}\text { operatives } \\ \text { others }\end{array}\right.$ | №. | $\begin{gathered} 107.995 \\ 43.976(\mathrm{~g}) \end{gathered}$ | $\begin{array}{r} 125.420 \\ 59.718 \end{array}$ | $\begin{array}{r} 131.240 \\ 61.795 \end{array}$ |
| Total employment | . | 151.971 | 185.138 | 193.035 |
| Net output per person employed | $\varepsilon$ | 894 | 1.003 | 1.357 |
| Wages and salaries $\quad\left\{\begin{array}{l}\text { of operatives } \\ \text { of others }\end{array}\right.$ | $\varepsilon^{\prime} 0.00$ | $\begin{aligned} & 35.022 \\ & 17.79 \end{aligned}$ | $\begin{aligned} & 47.468 \\ & 28.584 \end{aligned}$ | $\begin{aligned} & 60.077 \\ & 35.725 \end{aligned}$ |
| Capital expenditure New building work |  | 24.119 | 34,562 | 51.633 |

Analysis by size, 1954
Larger undertakings in the United Kingdom

| Size of generating station Number of operatives (a) | Generating Stations | $\begin{aligned} & \text { Units sent } \\ & \text { out } \end{aligned}$ | Operatives employed <br> (a) | Wages |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Mn. k Wh | Number | £'000 |
| 1 - 10 | 118 | 737 | 299 | 152 |
| 11-24 | 55 | 1.205 | 865 | 451 |
| 25-49 | 41 | 473 | 1.421 | 747 |
| 50-99 | 42 | 3.657 | 2.854 | 1.511 |
| 100-199 | 73 | 23,940 | 10.564 | 5,969 |
| 200-299 | 28 | 18.551 | 6.789 | 3.844 |
| $300-399$ | 18 | 12.715 | 6.157 | $3.568$ |
| $400-499$ 500 and over | 5 | 4.130 | 2.251 | 1.534 |
| 500 and over | 6 | 5,721 | 3.538 | 2.261 |
| Total | 386 | 71.129 | 34,738 | 20.037 |

(a) Excluding operatives employed outside generating stations. The number of operatives
(A) Summary of generation and distribution of electricity Larger undertakings in the United Kingdom

| TABLE 5 |
| :--- |

(a) Total figures are overstated by the amount of the sales betwe
and Other Undertakings and included in the figures of both.
(B) Sales of electricity and other products, rents received and charges for work done
(B) Sales of electricity and other products, rents (contd.)

TABLE 5 (contd.)

|  | 1951 |  |  | 1954 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | British <br> Electricity <br> Authority <br> and North of <br> Scotland | Other takings | Total | BritishElectricity <br> Authority <br> and North <br> ScotlandScit | $\begin{aligned} & \text { Other } \\ & \text { Under- } \\ & \text { Uakings } \end{aligned}$ | Total |
|  | £. 000 | £. 000 | \& 000 | $\varepsilon^{\prime} 000$ | £'000 | £. 000 |
| Rents received |  |  |  |  |  |  |
| Meter rents | 1.067 |  |  | 424 | 1 | 425 |
| Hire of appliamces | 2,622 | 47 | 3.735 | 2.584 | 39 | 2.623 |
| Total rents received | 3.688 | 47 | 3.735 | 3.008 | 40 | 3,048 |
| Net receipts from sale of appliances | 4.396 | 30 | 4.425(d) | 6.875 | 32 | 6.907 (d) |
| Work charged for |  |  |  |  |  |  |
| Fitting and repairing of appliances | 8.454 | - | 8.454 | 10.657 | - | 10.657 |
| Installation, repair and maintenance of public lamps | 1,936 | - | 1.936 | 2.368 | . | 2,368 |
| New constructional work charged to other Divisions and Electricity Boards | 293(e) | - | 293(e) | (f) | - | - |
| Other | 3.549 | 209 |  | 4.598 | 214 | 4.812 |
| Total work charged for | 14,232 | 209 | 14.441 | 17.623 | 214 | 17.837 |
| Total | 277.640 | 11,938 | 289.578 | 382.917 | 17.917 | 400.834 |

(a) To consumers and to undertakings other than units of the British Electricity Authority and North of
Scotland.
excluded
excluded.
(b) To consumers and other under takings.
(b) To consumers and other undertakings.
(c) Includes transactions between E Electricity Boards and Other Undertakings in Great Britain.
(d) Net receipts from sale of appliances are derived as follors.
(c) Includes transactions between Electricity Boards and Other
(d) Net receipts from sale of appliances are derived as follows:

|  | 1951 | 1954 |
| :--- | ---: | ---: | 

(e) In addition repair and maintenance work to the value of $£ 338,000$ was carried out.
(f) For 154 the vactue of new constructional work charged to other Divisions and Area Boards is included
in Table 5 (C).

Larger undertakings in the United Kingdom
TABLE 5 (contd.)

|  | 1951 |  |  | 1954 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | BritishElectiricity <br> Authority <br> and North of <br> ScotlandScole | Other Undertakings | Total | British Electricity Authority and North of Scotland | Other takings | Total |
| Electricity sold | $\begin{gathered} \varepsilon .000 \\ 253,805(\alpha) \end{gathered}$ | $\begin{array}{\|c\|} \hline \varepsilon^{\prime} 000 \\ 11.549(b) \end{array}$ | $\begin{array}{\|c\|} \hline \varepsilon .000 \\ \hline 265.354(\mathrm{c}) \\ \hline \end{array}$ | $\begin{gathered} £^{\prime} 000 \\ 353.455(a) \end{gathered}$ | $\begin{array}{\|c\|} \hline \varepsilon \cdot 000 \\ 17.471(b) \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \varepsilon^{\prime} 000 \\ 370.926(c) \\ \hline \end{array}$ |
| BY- and waste products sold Scrap metal <br> Steam and hot water <br> Ashes <br> Other | $\begin{aligned} & 937 \\ & 488 \\ & 49 \\ & 45 \\ & \hline \end{aligned}$ | $\begin{array}{r} 57 \\ 45 \\ 2 \end{array}$ | $\begin{gathered} 994 \\ 533 \\ 97 \end{gathered}$ | $\begin{array}{r} 1.201 \\ 632 \\ 98 \\ 25 \\ \hline \end{array}$ | $\begin{array}{r} 82 \\ 72 \\ 6 \end{array}$ | $\begin{array}{r} 1.283 \\ 704 \\ 104 \\ 25 \\ \hline \end{array}$ |
| Total by- and waste products sold | 1.519 | 104 | 1.623 | 1.956 | 160 | 2.116 |


| TABLE 5 (contd.) |
| :--- |

(a) Amount charged.
(b) For 1951 the amount of work charged to other Divisions and Electricity Boards is included in Table 5 (B).

TABLE 6 - Sales of principal products of the industry by establishments classified to other industries

TABLE 7 - Sales in the industry of other than principal products Larger undertakings in the United Kingdom This table is not applicable to the industry.

| Larger undertakings in the United Kingdom |
| :--- |
| TABLE 9 |


|  | 1951 | 1954 |
| :---: | :---: | :---: |
|  | Number | Number |
| Average number of employees | 125,420 | 131.240 |
| Operatives $\begin{aligned} & \text { Odministrative, technical and clerical employees }\end{aligned}$ | 59.718 | 61.795 |
| Total | 185.138 | 193, 035 |
| salaries.paid to | $\mathrm{E}^{\prime} 000$ | £. 000 |
| Wages and salaries Operative Administrative, technical and clerical employees | $\begin{aligned} & 47.468 \\ & 28.584 \end{aligned}$ | 60.077 35.725 |
| Total | 76.052 | 95,802 |
|  | \& | $\varepsilon$ |
| Wages and salaries per head Operatives | 378 479 | ${ }_{572}^{456}$ |
| Administrative, technical and clerical employees | 479 | £. 000 |
| Superannuation and other pension funds for employees and dependents (b) |  |  |
| Employers ${ }^{\text {a }}$ contributions |  | 5.821 |
| Employees covered | .. | Number 98.385 $£ .000$ $\Sigma^{\prime} 000$ |
| Pension, etc. payments for former employees and dependents (b) |  | 379 |

(a) In 1954 the average number of canteen and "other workers", not incluct
(b) The figures given relate to larger undertakings in Great Britain only.

Employment in a specified week (a)


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[^0]:    (a) Week ended September 22, 1951, or October 30, 1954.

