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REPORT

ON THE

**Administration of the Indian
Electricity Act, 1910,**

IN THE

PUNJAB

For the year 1939.

(Not to be sent up to Simla.)

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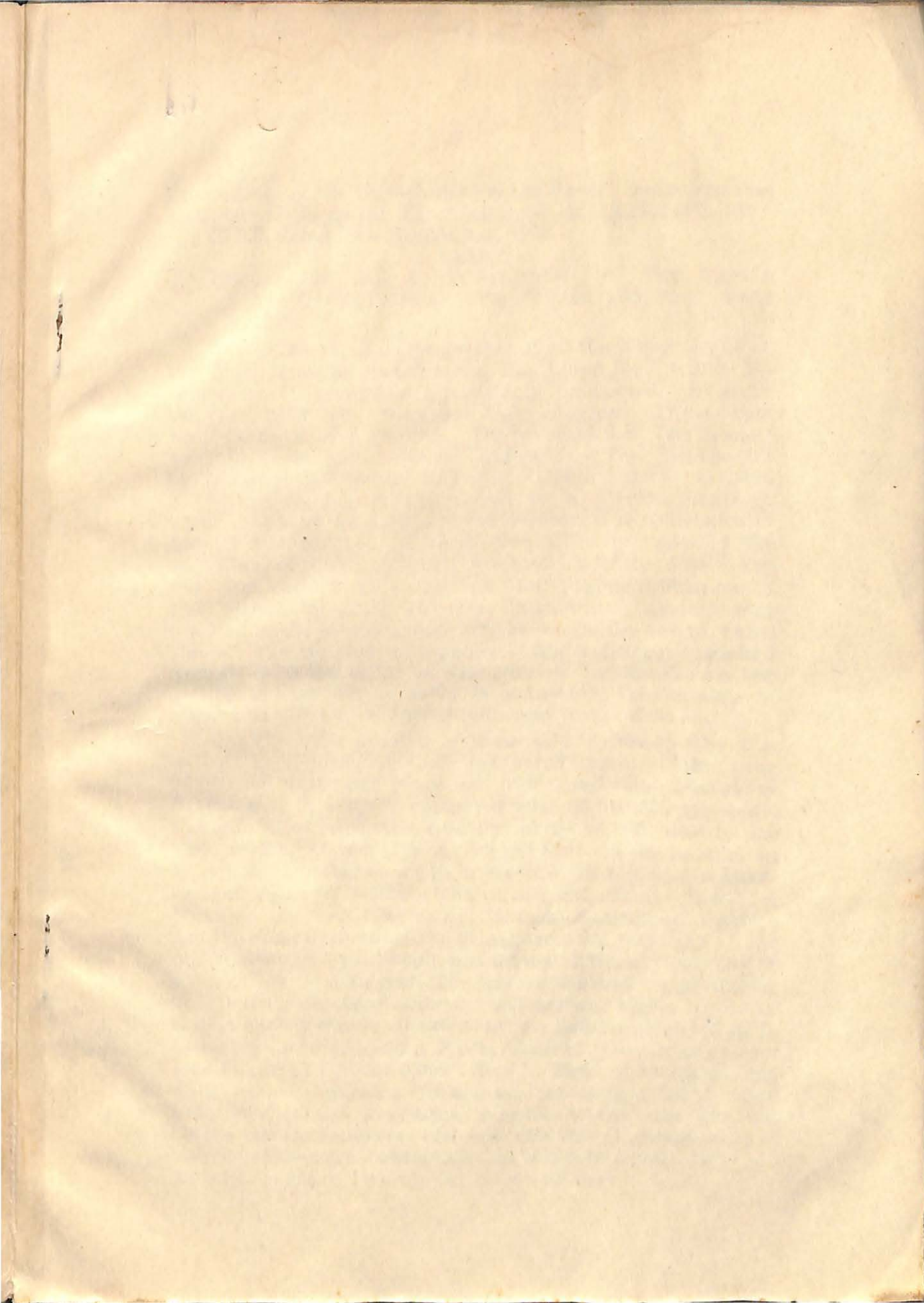
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Proceedings of the Government of the Punjab. Industries and Labour Department (Electricity), No. 1448/623-S.-El.-40/37769, dated 20th September, 1940.

READ :—

REPORT ON THE ADMINISTRATION OF THE INDIAN ELECTRICITY ACT IN THE PUNJAB FOR THE YEAR 1939.

AFTER the rapid electrification of all the larger towns of the Punjab during recent years, the scope for further development is becoming increasingly restricted. Even so the year 1939 has witnessed fair progress. Three new licences have been granted. The revocation of two licences has not made any practical difference. The licence for Campbellpur held by the Municipal Committee was revoked as the undertaking was transferred to a private company which has been granted a fresh licence. The Chichawatni Licence was revoked as there was little prospect of the execution of the compulsory works at an early date. Ten new applications were received for the electrification of eight places, including two for Chichawatni, against four received in the previous year for the electrification of three places. The number of operative undertakings increased from 54 to 58 and so far as the Punjab Public Works Department, Electricity Branch, is concerned, the number of towns and other areas served increased from 45 to 65.

2. The total number of units sold to the public was well over 100,000,000 as compared to a little over 92,000,000 units last year. Of this total the Electricity Branch sold 57,670,000 compared with 53,818,000 last year. The number of consumers rose by over 14,000 during the year marking an increase of 108 per cent on the number in 1934. The number of medium pressure installations increased from 3,557 to 3,924. The more important increases occurred on the Electricity Branch System at Lahore, Amritsar and Jullundur. The total generating capacity of the plants installed by licencees was 39,401 kW. against 29,639 kW. in the previous year. The largest single power producing unit outside the Electricity Branch System, with a capacity of over 8,000 kW. was installed by the Lahore Electric Supply Company in the Shahdara Power Station. Connected power load increased by over 5,000 H. P. Flour and rice hulling mills, wood working institutes, pumping plants, metal industries, textile industries, general workshops, ice and cotton ginning factories and oil mills were the best users of power in the order mentioned. As in the previous year 145 factories generated energy for their own use.

3. Two applications were received under section 27 of the Act for supply of energy outside the 'area of supply' specified in the licences. The application of the Rawalpindi Electric Supply Power Company, Limited, was rejected, and the Company was advised to apply for an amendment of the licence to extend the 'area of supply'. The application of the same Company for conferment of the powers of Telegraph Authority under section 51 of the Act was also rejected. The application of the Kasauli Electric Supply Company for supply to the Lawrence Military School at Sanawar was pending at the end of the year.

4. Orders of Government on the report of the Electricity Advisory Board regarding the revision of the maxima rates under the Amritsar Municipal Electric Licence have been postponed until the extra capital expenditure involved in a thorough technical overhaul of the local distribution system, which is being undertaken by the Committee shortly, is known. The question of revising the maxima rates under the Jullundur Electric Licence was still under consideration.

5. As might be expected, with the extensive electrical development in recent years, the number of accidents has a tendency to rise. There were 98 accidents during the year against only 82 in the previous year. Most of the accidents were of a minor character and occurred on licensees' works through falling of trees and other objects. Ten persons received fatal injuries through careless handling of electric apparatus. No authorised person in the employ of a licensed contractor or any electrical undertaking met with an accident. Careful inquiries into the circumstances of every accident revealed that not a single one was due to violation of the Indian Electricity Rules.

6. The Electric Inspector and his staff carried out 3,497 inspections against 3,085 last year. It may be mentioned that three years ago, in 1936, the number of inspections was only 1,745. Stricter inspections resulted in 16 prosecutions under the Rules against only 2 in the previous year. 115 warning notices were issued to members of the public with reference to rule 70. 105 cases of infringement of rule 48 were suitably dealt with. The miscellaneous work of the Inspector and his staff has increased appreciably. 78 general complaints and disputes were referred for investigation against 60 in the previous year. 77 test certificates relating to the plants of various licensees and private owners were scrutinised. Voltage and earth tests

were carried out in numerous cases. In 12 cases of dispute regarding the accuracy of meters and maximum demand indicators, the apparatus was sent to the Punjab College of Engineering and Technology for test. Much work was done in regard to settlement of disputes under clause VI (3) of the Schedule to the Act, approval of methods of constructions under section 18 of the Act and scrutiny of street lighting, water supply and sullage pumping agreements.

7. Four examinations against only two in the previous year were held by the Provincial Advisory Committee under rule 48 of the Indian Electricity Rules, 1937. Of the 946 candidates, 585 were declared successful. Last year there were only 219 candidates.

8. Mr. Stowers, the Electric Inspector and his staff deserve credit for the useful work done during the year. Government particularly appreciate the increase in the number of inspections.

Order.—Ordered that the above review be published in the *Punjab Gazette* and be circulated with the report.

Ordered also that a copy be forwarded to the Electric Inspector to Government, Punjab, for information.

By order of the Governor of the Punjab,

S. K. KIRPALANI,

*Secretary to Government, Punjab,
Electricity and Industries Departments.*

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7. Four examinations against only two in the previous year were held by the Provincial Advisory Committee under rule 18 of the Indian Electricity Rules, 1937. Of the 246 candidates, 587 were declared successful. Last year there were only 219 candidates.

8. Mr. Stowers, the Electric Inspector and his staff deserve a credit for the useful work done during the year. Government particularly appreciate the increase in the number of inspections.

Order—Ordered that the above review be published in the Punjab Gazette and be circulated with the report.

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By order of the Governor of the Punjab,

S. K. KRISHNAJI

Secretary to Government, Punjab,
Electricity and Industries Department.

Report on the Administration of the Indian Electricity Act, 1910, in the Punjab, for the year 1939.

THE electrical development continued to show steady progress. Three new licences were granted during the year for the supply of electrical energy, at Bhalwal, Khushab and Campbellpur, respectively. In the case of Campbellpur, the licence held by the Municipal Committee was revoked and the new licensees took over the undertaking. The licence for Chichawatni was revoked as the licensees had failed to fulfil the preliminary obligations imposed on them by law and the terms of their licence. The total number of licences at the end of the year was 64. The number of operative undertakings during the year was 55* leaving 6 either in the constructional stage or awaiting the completion of certain formalities under the law.

The Public Works Department, Electricity Branch, supplied energy at 65† places (including towns and villages), as against 45 at the end of the previous year.

Including Wah village in which a large industrial concern distributes surplus energy to the public, and Badomali, where supply is authorised under section 28 of the Indian Electricity Act, there were at the close of the year, 6,122 towns, villages and areas in the province where the supply of electrical energy was made available to the public. It is interesting to note that during the last 5 years no less than 89 additional towns, villages and rural and suburban areas have been given a supply of electrical energy.

A statement showing the names of places, with their respective populations, for which licences have been granted, is attached to the report as Appendix I. A skeleton map showing the locality of the areas where electricity is, or will be in the near future, made available is also appended at the end of the report. Appendix II shows the names of towns and villages, in which supply is made available by the Electricity Branch.

The number of persons using electricity rose by 14,448 during the year. The names of the undertakings or places recording the largest number of new consumers are noted below :—

1. Lahore	...	3,092
2. Public Works Department, Electricity Branch	...	2,678
3. Amritsar	...	1,260
4. Rawalpindi	...	873
5. Multan	...	484

*Includes one bulk supply undertaking.

†Includes Jullundur and Amritsar and two places in an Indian State.

Report on the Administration of the Indian Electricity Act, 1910 in the Punjab for the year 1935. 2

As compared to the year 1934, there has been an increase of 108 per cent in the number of consumers using electricity.

2. (a) *Statutory undertakings.*—The total generating capacity of the plant installed by electrical undertakings (other than the Public Works Department Electricity Branch) was 39,401 K. Ws., as against 29,639 K. Ws. in the previous year. The new undertakings that commenced operations during the year installed plant aggregating 377 K. Ws. while the existing concerns put into operation additional plant totalling 9,388 K. Ws. to meet the increased demand.

The largest single power producing unit, with the capacity of 8,010 K. Ws., was installed during the year in the Shahdara Power Station of the Lahore Electric Supply Company.

The classes of generating plants in operation by public supply undertakings in the province at the close of the year were as follows:—

Hydraulic ... 50,857 K. Ws.

Steam ... 26,013 „

Internal combustion ... 11,631 „

The total number of units sold by electric supply undertakings, exclusive of the units re-sold in Jullundur, Amritsar and Model Town, increased from 92,194,840 to 101,539,822 or by 10.1 per cent. The number of units sold by licensed undertakings fell from 47,603,722 to 43,869,711 and of those by the Public Works Department, Electricity Branch, rose from 53,818,474 to 57,670,111. In the case of Renala Khurd undertaking which supplies energy for irrigation purposes, there was a small decline in the number of units sold.

A graph showing the number of units sold annually by electric supply undertakings in the province is attached as Appendix III.

(b) *Medium Pressure Installations.*—The number of premises to which energy at medium pressure was supplied by electric supply undertakings rose from 3,557 to 3,924 or by approximately 10 per cent. In premises where energy at this pressure is utilised for industrial purposes, apparatus aggregating 5,068 H. P. was installed and consisted mostly of electric motors.

As in the previous year, the Public Works Department, Electricity Branch, headed the list of new medium pressure installations with 231 additional connections, the nearest other undertakings being Lahore with 86 connections, Amritsar with 24 connections and Jullundur with 23 connections.

The distribution of new electrical plant among the industries of the province during the year was as follows :—

(i) Flour milling and rice hulling	1,247	H. P.
(ii) Wood Working	703	"
(iii) Pumping plant	555	"
(iv) Metal industries	508	"
(v) Textile industries	438	"
(vi) Workshops (General)	317	"
(vii) Ice manufacturing	307	"
(viii) Cotton ginning and oil mill-ing.	258	"
(ix) Rubber industries	73	"
(x) Tanning industries	56	"
(xi) Match manufacturing	31	"
(xii) Ink manufacturing	30	"
(xiii) Miscellaneous	545	"

(c) *Factories, etc., generating energy for their own use.*—

There was no change in the number of factories generating energy for their own use (*viz.*, 145). With the opening up of the Dhulian Oil Field of the Attock Oil Company, additional power plant to the extent of 200 K. Ws. was installed, but by the end of the year it had not been put into operation.

3. *Applications for the grant of licences.*—Ten applications for the grant of licences for the generation and supply of electrical energy were received during the year in respect of the undermentioned places :—

Names of places.

Names of applicants.

- | | | |
|----------------|-----|--|
| (1) Gidderbaha | ... | Messrs. Babbar and Company,
Lahore. |
| (2) Hazro | ... | The Attock Electric Supply Company,
Limited Lahore. |

<i>Names of places.</i>	<i>Names of applicants.</i>
(3) Bhakhar ...	Messrs. Bhakhar Electric Supply Company, Bhakhar. (i)
(4) Leiah ...	(i) Messrs. The Leiah Electric Supply Company, Circular Road, Multan. (ii) Messrs. The Thal Electric Supply and Industrial Corporation, Beadon Road, Lahore.
(5) Nawanshahr (Doaba) ...	Messrs. Lakhwara (Wadhawan and Company, Lahore.
(6) Chichawatni ...	(i) Messrs. The Chichawatni Electric Supply Company, Limited, Lahore. (ii) Messrs. The Chichawatni Electric Supply Company, Khanewal.
(7) Campbellpur ...	The Attock Electric Supply Company, Limited, Lahore.
(8) Shujabad ...	Messrs. Khushi Ram and Company, Vihari.

Three licences, as noted below, were granted during the year:—

Description of licences. *Names of concerns to whom granted.*

1. The Bhalwal Electric Licence, 1939. The Colony Electric Supply and Industries, Limited, Bholwal.
2. The Khushab Electric Licence, 1939. Messrs. M. R. Kohli and Company, 10, Nisbet Road, Lahore.
3. The Campbellpur Electric Licence, 1939. The Attock Electric Supply Company, Limited, Lahore.

The Chichawatni Electric Licence, 1939, granted to Messrs. Lal Dass and Sons was revoked during the year. The Campbellpur Electric Licence, 1931, granted to the Municipal Committee, Campbellpur, was revoked and the undertaking was taken over by a private company known as the Attock Electric Supply Company, Limited, Lahore.

4. Applications for the amendment of the undermentioned licences were received during the year:—

- (1) The Mian Channu Electric Licence, 1937. Clause 10 (i)
- (2) The Kamalia Electric Licence, 1937. Clause 10 (i)
- (3) The Rawalpindi Electric Licence, 1923. Clause 4
- (4) The Phularwan Electric Licence, 1937. Clause 10 (i)
- (5) The Kalka Electric Licence, 1936. Clause 6
- (6) The Khanewal Electric Licence, 1935. Clause 6
- (7) The Multan Electric Licence, 1922. Clause 3
- (8) The Palwal Electric Licence, 1938. Clause 10 (i)
- (9) The Hansi Electric Licence, 1932. Clause 4
- (10) The Pattoki Electric Licence, 1935. Clause 10 (i)

Applications for the amendment of the following licences were pending from the previous year:—

- The Kalka Electric Licence, 1936. Clause 6
- The Khanewal Electric Licence, 1935. Clause 6
- The Sirsa Electric Licence, 1935. Clause 4

Applications for the amendment of licences for Kalka, Khanewal, Sirsa, Rawalpindi, Mian Channu, Kamalia and Palwal were sanctioned during the year. Those concerning

Phullerwan, Multan, Hansi, Pattoki, Khanewal (second amendment) and Kalka (second amendment) were under consideration when the year closed.

5. *Applications for sanction under section 27 of the Indian Electricity Act, 1910.*—During the year under report, the application of the Rawalpindi Electric Power Company, Limited, for sanction under section 27 of the Act for the supply of electrical energy to Dhamial and Chuhar Harpal villages was rejected by the Provincial Government.

The application of the Kasauli Electric Supply Company, Limited, for permission to give supply to the Lawrence Military School at Sanawar was still pending when the year closed.

6. *Applications under section 51 of the Act for the grant of powers of Telegraph Authority.*—The application of the Rawalpindi Electric Power Company, Limited, for the grant of powers of telegraph authority for the laying of transmission lines for the supply of energy to Dhamial village was rejected by Government.

7. *Conditions of Supply, Forms of Contract and Scales of Miscellaneous Charges.*—The conditions of supply in respect of Sargodha, Ambala City, Multan, Moga, Karnal and Pakpattan were under consideration at the close of the year.

The Provincial Government approved the forms of contract and the scale of miscellaneous charges in respect of the following licenced towns :—

Pakpattan.

Toba Tek Singh.

Sonepat.

Kamalia.

Campbellpur.

Similar approval was awaited at the close of the year for the following towns :—

Hansi.

Hissar.

Bhiwani.

Rohtak.

Rupar.

8. *Statements of Accounts.*—The statements of accounts were generally received in time. The period for the submission of the statements of accounts was extended in the case of Gujrat, Montgomery and Fazilka. The attention of the licensees for Jullundur, Dalhousie, Gujar Khan, Kaithal, Bhera, Pattoki and Phulerwan who had made a default, was drawn to the provisions of the law for careful compliance.

9. *Revision of maxima rates.*—The report of the Electricity Advisory Board in connection with the revision of the maxima rates under the Municipal Electric Licence, Amritsar, was still under consideration of the Punjab Government when the year closed. The matter of the revision of the rates in respect of Jullundur was not settled by the end of the year.

10. *Accidents.*—The total number of accidents from all causes reported during the year was 98, representing an increase of 16 over the previous year. The largest increase, viz., 15 was under the head "Accidents to licensees' works caused through falling of trees and other objects", but these accidents were only of a minor character.

Persons unauthorised to attend to electrical installations accounted for two additional deaths over the previous year, while no authorised person in the employ of a licenced contractor or any electrical undertaking met with a fatal accident.

Four animals were killed during the year as a result of electric shock, as against one during last year.

A statement giving an analysis of the various accidents which occurred since the year 1931 is attached as appendix IV. A brief description of the circumstances under which various persons lost their lives during the year under report is given below:—

One person climbed a support for aerial lines, regardless of warning notices and anti-climbing devices and made contact with live conductors, with the result that he fell down and succumbed to the injuries received by him.

An employee of the Posts and Telegraph Department died as a result of coming into contact with live conductors while altering the position of a telegraph wire. He had failed to notify the owner of the electrical installation that he intended to undertake work in dangerous proximity to the live conductors and inadvertently came in contact with them.

Two persons interfered with earth connections at consumers' premises and caused them to make contact with live conductors with the result that they received fatal electric shocks.

Three persons met with fatal accidents following contact with brass lamp-holders the wiring of which was defective.

A contractor's cooly came in contact with aerial lines on a consumer's premises while undertaking repairs to the roof.

One person working in an electro-plating factory met his death while removing plated parts from an electro-plating bath. He was in bad health at the time, and the investigations showed that he received a very low pressure shock which would not have proved fatal to a person in good health.

Three persons died from the effects of shock sustained through interfering with wiring or by contact with wiring in poor condition on consumers' premises.

In all cases enquiries were held into the causes of the accidents, and in no case could it be established that the Indian Electricity Rules had been breached.

11. *Prosecutions.*—Sixteen prosecutions for breaches of the Indian Electricity Rules, as detailed below, were instituted during the year under report, as compared to 2, in the previous year:—

8 under rule 124 for the breach of rule 70 of the Indian Electricity Rules, 1937.

4 under section 47 of the Indian Electricity Act for non-compliance with orders issued under rule 5 (4) of the Indian Electricity Rules, 1937.

4 under rule 123 for the breach of rule 48 of the Indian Electricity Rules, 1937.

Of these, 3 resulted in conviction and sentences of fines, five were withdrawn as the offenders removed the defects before the hearing of the cases, one abated on account of the death of the accused and 7 were pending at the close of the year.

12. *Electric Inspector's Activities.*—(a) *Inspections.*—3,497 inspections were carried out during the year by the Electric Inspector and officers appointed to assist him, against 3,085 in 1938, representing an increase of over 13 per cent.

On a suggestion by the Central Government, the Punjab Government, agreed provisionally for one year, to the entrustment of the power of appointing Electric Inspector under section 36 (1) of the Indian Electricity Act, 1910, in respect of mines, oil fields and minor railways in the Punjab.

(b) *Tests.* (i) *Earth tests.*—Periodical tests on licensees' works were conducted during the year in 35 areas, and in cases where results proved unsatisfactory, suitable reports were submitted to the licensees for the removal of the defects.

(ii) *Test certificates.*—Seventy-seven test certificates relating to the plants of various licensees and owners of electrical plants were scrutinised during the year and approved where the results were acceptable.

(iii) *Meter tests.*—Ten Watt-hour meters and 2 Maximum Demand Indicators were forwarded to the Punjab College of Engineering and Technology, Mughalpura, for test on behalf of various electric supply undertakings, and the results of the tests were duly conveyed to the owners.

(iv) *Voltage tests.*—Tests of the voltage of supply to consumers were carried out in 28 towns, and comprised 142 tests in all. Where unsatisfactory test results were recorded, suitable reports were made to the licensee for the removal of defects.

(c) *General complaints and disputes.*—Seventy-eight complaints and disputes of varied nature were referred to the Electric Inspector during the year, as compared to 60 in the previous year.

Eight disputes were referred to the Electric Inspector for decision under Clause VI (3) of the Schedule to the Act (disputes arising from cost of service lines, amount of energy to be guaranteed, sufficiency of security offered, etc.). Of these, five were referred back for the submission of further particulars to which no replies were received, and three were found not to fall within the purview of the particular provisions of the Act under which they had been submitted. Five disputes under section 26 (6) of the Indian Electricity Act, 1910 (meter disputes) were referred to the Electric Inspector for decision, of which four were decided, and one was turned out owing to the failure to deposit the necessary fees.

(d) *Appeals.*—The Managing Agents, Sialkot Electric Supply Company, appealed under section 13 (1) (b) against

the orders of the Executive Engineer, 1st Lahore Provincial Division, refusing to grant permission to lay a high tension 66 K. V. underground cable along the wheel-guard over Aik Nala bridge on Sialkot Pasrur Road. The appeal was rejected on the ground that concrete road-ways were likely to be provided on all road bridges in the Punjab in which case it would be inadvisable for the surfaces to be broken for repairs to electrical cables, etc. The licensee was advised to consider the question of using an aerial line in place of an underground cable.

The appeals preferred by the Rawalpindi Electric Power Company, Limited, and the Krishna Printing Press, Gojra, under section 36 (3) against the orders of the Electric Inspector issued under rule 5 (4) were both rejected by Government.

(e) *Approval of methods of construction.*—Detailed specifications and designs showing methods of construction to be adopted by the licensees for Mian Channu, Rupar, Phullerwan, Pindi Gheb and Vihari were submitted to the Electric Inspector during the year. After suitable alterations and improvements all received approval.

(f) *Street lighting agreements.*—Nine street lighting agreements proposed to be executed between certain Municipal Committees and electric supply undertakings were received for obtaining the approval of the Provincial Government under rule 9-A of the Municipal Works Rules. These agreements together with four others pending from last year were dealt with by the Electric Inspector. The Provincial Government accorded their approval to 10 street lighting agreements.

The street lighting agreement between the Municipal Committee, Montgomery and the Punjab Electric Power Company, Limited, Gujrat, which had been under negotiation for the past five years received the approval of Government during the year but agreements relating to Gujrat and Lahore, both of which had long been outstanding, were still to be ratified.

(g) *Water supply and sullage pumping agreements.*—Water supply and sullage pumping agreements to be executed between Municipal Committees and the electric supply undertakings at Panipat, Mian Channu and Burewala were

submitted to Government for approval. Government accorded their approval to agreements relating to Panipat and Mian Channu but approval to Burewala agreement was still awaited at the close of the year.

Amritsar.—The Electric Inspector conducted an investigation into the condition of the licensee's works and under the orders of Government rendered assistance to the Municipal Committee licensee in the preparation of estimates for the necessary additional plant and for the removal of dangerous works.

Campbellpur.—The Electric Inspector acted as arbitrator between the Municipal Committee, Campbellpur, and the new licensee for Campbellpur as to the value of the installed works to be transferred on the revocation of the previous licence and the grant of the new one.

(h) *Erection of buildings in the vicinity of aerial lines.*—The public continued to erect structures and buildings in the vicinity of aerial lines of electric supply undertakings without first obtaining the approval of the Electric Inspector which resulted in considerable correspondence. The attention of the offenders was drawn to the provisions of rule 70 of the Indian Electricity Rules. In all 115 warning notices were issued from the office of the Electric Inspector against 112 during the previous year, and in the majority of cases the owners of buildings either refrained from causing the lines to be rendered accessible or paid the necessary cost of altering the supply lines.

13. *Relaxations.*—The provisions of the undermentioned rules were relaxed during the year in favour of the parties noted :—

Name of rule.	Name of party in whose favour relaxed.
60 (1) (d).—Regarding the equipment required for cutting of supply.	Public Works Department, Electricity Branch.
69 (1) (a).—Regarding height of aerial lines above streets.	Ditto.

14. *Amendment of the Indian Electricity Act and the Rules made thereunder.*—The Punjab Government passed an Act called the Punjab Electricity Act, 1939, to explain and amplify section 7 of the Indian Electricity Act, 1910, in its relation to the Punjab and to give the Punjab Government the powers of a licensee when it engaged in the business of supplying electrical energy.

Rules 60, 64 (2), 73 (1), 74, and 51 of the Indian Electricity Rules were amended during the year.

Proposals for the amendment of rules 47, 49, 2 (n) and (o) and 58 were submitted to the Central Electricity Board during the year under report.

A proposal to insert a new rule 59 (A) having reference to the maintenance of tower wagons by licensees and non-licensees was also submitted to the Central Electricity Board. The draft amendment was published for inviting public criticism.

15. *Rules for the licensing of electrical contractors and the issue of certificates of competency to supervisors.*—Rule 48 of the Indian Electricity Rules, 1937, pertaining to the licensing of electrical contractors and the issue of certificates of competency to supervisors came into force in the whole of the province on the 1st April, 1939, and in terms of the procedure laid down in Punjab Government Resolution No. 2318-EL.-37/41761, dated 7th December, 1937, four electrical supervisors' examinations, with two oral tests for illiterate mistries, were held during the year.

Nine hundred and forty-six candidates appeared in these examinations. Five hundred and eighty-five were declared successful and granted certificates of competency. One hundred and fifty-one certificates were issued to candidates, who were exempt from the examination.

One hundred and five cases of infringement of rule 48 were reported during the year and suitably dealt with.

Fourteen cases of infringement were submitted to the Advisory Committee for such action as the Committee considered fit. Nine persons were warned not to undertake electrical work which they were not authorised to do and 16 persons were asked to show cause why they should not be prosecuted for failing to observe the provisions of rule 48.

Three persons were prosecuted. Of them one was convicted and fined. The other two cases were pending at the close of the year.

16. *General.*—There was no change in the superior staff. The Electric Inspector and his Assistants continued to do very valuable work during the year under report.

RAM LAL,
Director of Industries,
Punjab.

Dated Lahore, 1st June, 1940.

1. Amritsar	...	...
2. Lahore	...	...
3. Ferozepore	...	...
4. Rawalpindi	...	...
5. Multan	...	...
6. Gujranwala	...	...
7. Sialkot	...	...
8. Jalandhar	...	...
9. Ludhiana
10. Hoshiarpur
11. Patna
12. Ferozpur
13. Bahawalpur
14. Faisalabad
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three persons were presented. Of them one was considered and fined. The other two cases were pending at the close of the year.

10. General.—There was no change in the superior staff. The Electric Inspector and his Assistants continued to do very valuable work during the year under report.

HAM LAL,

Director of Industries,

Punjab.

Dated Lahore, 1st June, 1910.

APPENDIX I.

Towns for which licences have been granted to companies or local authorities for the supply of electricity.

Name of town.	Population.
1. Ambala Cantonment	36,338
2. Ambala City	35,193
3. Amritsar	263,210
4. Abohar	14,035
5. Bhalwal	4,153
6. Bhiwani	35,866
7. Bhera	19,741
8. Campbellpur	7,997
9. Chakwal	9,542
10. Dera Ghazi Khan	23,468
11. Fazilka	18,463
12. Gujranwala	58,716
13. Gujrat	52,604
14. Gojra	9,779
15. Gujarkhan	5,155
16. Hoshiarpur	25,925
17. Hissar	25,179
18. Hansi	18,356
19. Hafizabad	14,431
20. Jullundur	86,858
21. Jhelum	17,666
22. Jagadhri	13,268
23. Jhang-Maghiana	36,035
24. Kasauli	3,212

Name of town.	APPENDIX I	Population
25. Karnal	...	118,371
26. Ktanewal	...	11,205
27. Kaithal	...	18,709
28. Khusbab	...	14,194
29. Kalka	...	7,937
30. Lahore	...	400,075
31. Muzaffargarh...	...	5,353
32. Multan	...	108,351
33. Montgomery	...	28,163
34. Moga	...	17,581
35. Muktsar	...	14,345
36. Mianwali	...	14,107
37. Mandi Baha-ud-Din	...	3,668
38. Murree	...	1,271
39. Mandi Burewala	...	3,271
40. Okara	...	10,712
41. Panipat	...	32,915
42. Pattoki	...	8,016
43. Pakpattan	...	11,311
44. Rawalpindi	...	75,767
45. Rohtak	...	35,235
46. Rewari	...	26,279
47. Sialkot	...	85,093
48. Sargodha	...	26,761
49. Shahdara	...	5,249
50. Sirsa	...	18,909

Name of town. *Population.*

51.	Sonepat	15,050
52.	Simla	18,144
53.	Tandlianwala	6,105
54.	Toba Tek Singh	5,908
55.	Mian Channu	4,349
56.	Dalhousie	1,080
57.	Kamalia	13,220
58.	Arifwala	3,201
59.	Phullerwan	2,991
60.	Rupar	8,764
61.	Palwal	10,807
62.	Vihari	1,588
63.	Pindi Gheb	10,506
64.	Hissar, Hansi, Bhiwani and Rohtak combined licence.	

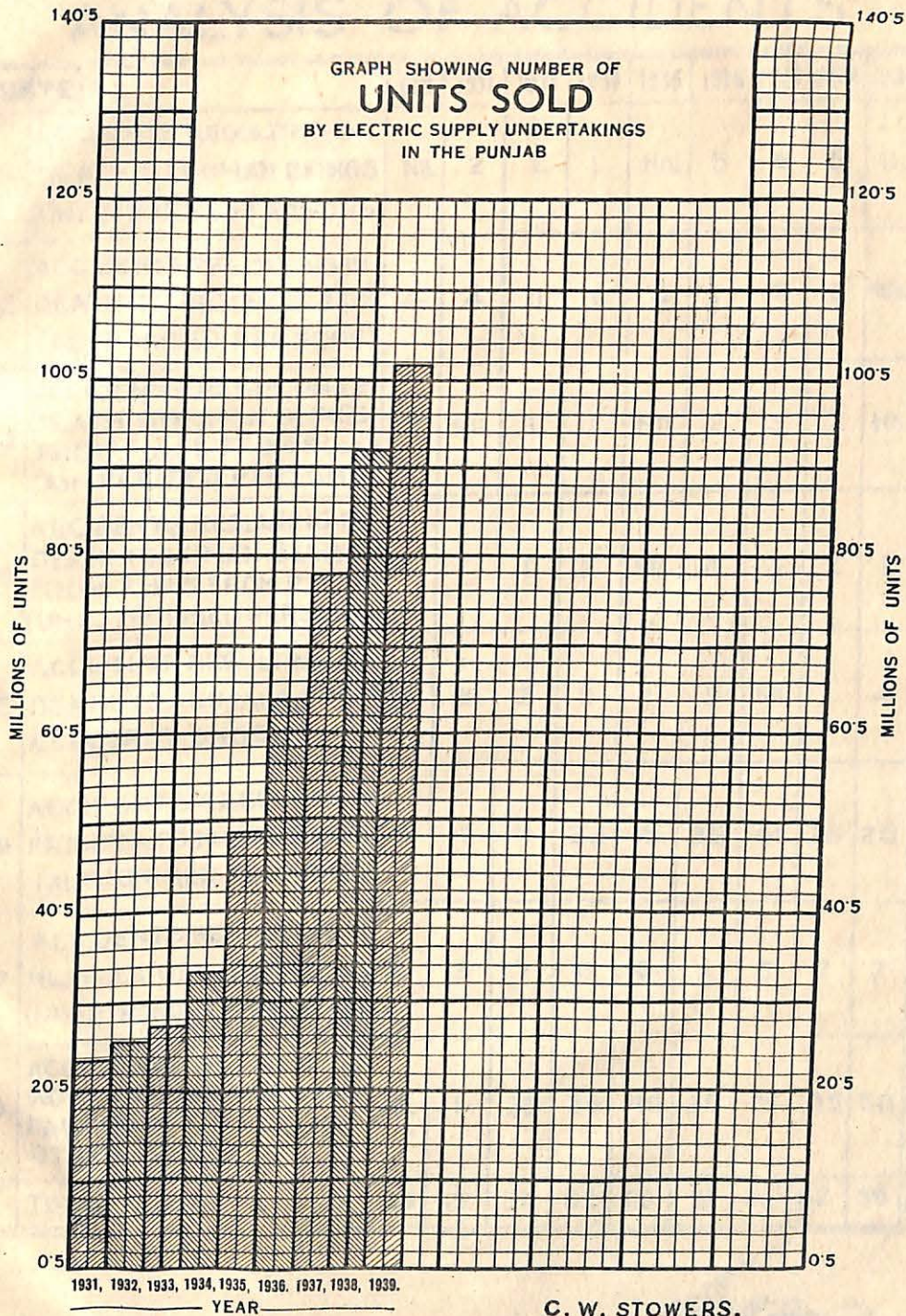
APPENDIX II.

Towns and villages served by the Public Works Department,
Electricity Branch.

1. Pathankot.	23. Sadar Bazar (Ferozepore Cantonment).
2. Gurdaspur.	24. Sheikhpura.
3. Dina Nagar.	25. Chuharkana.
4. Batala.	26. Nankana Sahib.
5. Dhariwal.	27. Jaranwala.
6. Qadian.	28. Lyallpur.
7. Village Lakhi.	29. Dharmsala.
8. Village Nowshera Majja Singh.	30. Kartarpur.
9. Verka (Amritsar District).	31. Suranusi (District Jullundur).
10. Chheharta (Amritsar District.)	32. Mughalpura.
11. Tarn Taran.	33. Hussainiwala (Ferozepore).
12. Phillaur.	34. Zaffarwal (District Gurdaspur).
13. Goraya.	35. Phagwara.
14. Bopari (District Jullundur).	36. Kapurthala.
15. Ludhiana.	37. Model Town (Lahore).
16. Baghbanpura.	38. Jullundur City (through Jullundur Electric Supply Company, Limited).
17. Kasur.	39. Amritsar (through Municipal Committee, Amritsar).
18. Sadar Bazar, Lahore Cantonment.	40. Dakoha (Jullundur Suburban East).
19. Ichhra.	41. Birring (Jullundur Suburban East)
20. Muslim Town.	
21. Ferozepore City.	
22. Tankanwali Basti (Ferozepore District).	

42. Chak Hussaina (Jullundur Suburban West).	54. Village Atta near Goraya.
43. Maksudpur (Jullundur Suburban West).	55. Lehl (District Gurdaspur).
44. Mahmud Buti (near Lahore).	56. Dehriwala Ditto.
45. Kot Duni Chand (District Lahore).	57. Mansom Manj Ditto.
46. Jivnana (Lahore District).	58. Sohal Ditto.
47. Village Dalewala near Goraya.	59. Basti Madhra (Ferozepore).
48. Village Dhunda near Dhariwal.	60. Japhowal (District Gurdaspur).
49. Kangra.	61. Dhanna Singh Wala (Lahore District).
50. Sarna (District Gurdaspur).	62. Pritam Singh Wala (Lahore District).
51. Madhopur. (District Gurdaspur).	63. Renala Khurd.
52. Majitha (District Amritsar).	64. Chandar Nagar (Amritsar District).
53. Kot Abdul Khaliq (Kasur).	65. Dhapai (Amritsar District).

APPENDIX " III "



THE KAPUR ART PRINTING WORKS. LAHORE.

C. W. STOWERS,
ELECTRIC INSPECTOR,
TO GOVT: PUNJAB.

APPENDIX IV

ANALYSIS OF ACCIDENTS

S.N.	YEARS	1931	1932	1933	1934	1935	1936	1937	1938	1939
1	ACCIDENTS RESULTING IN DEATH TO HUMAN BEINGS (UNAUTHORISED PERSONS)	NIL	2	2	1	NIL	5	6	8	11
2	ACCIDENTS RESULTING IN DEATH TO HUMAN BEINGS (AUTHORISED PERSONS)	4	4	11	11	4	1	3	2	NIL
3	ACCIDENTS RESULTING IN DEATH TO HUMAN BEINGS FROM FALLS FROM POLES (AUTHORISED PERSONS)	2	NIL	1	1	NIL	2	3	2	NIL
4	ACCIDENTS RESULTING IN DEATH TO HUMAN BEINGS FROM FALLS FROM POLES (UNAUTHORISED PERSONS)	NIL	1	1	2	NIL	4	3	2	1
5	ACCIDENTS RESULTING IN DEATH TO ANIMALS FROM ELECTRIC SHOCK	5	NIL	2	2	1	3	NIL	1	4
6	ACCIDENTS RESULTING IN INJURIES TO HUMAN BEINGS (AUTHORISED PERSONS)	8	4	7	23	15	35	41	25	25
7	ACCIDENTS RESULTING IN INJURIES TO HUMAN BEINGS (UNAUTHORISED PERSONS)	4	3	7	6	6	11	5	7	7
8	ACCIDENTS TO LICENSEES WORKS CAUSED THROUGH FALLING OF TREES AND OTHER OBJECTS.	NIL	1	20	36	40	30	25	35	50
	TOTAL	23	15	51	82	66	91	86	82	98

S. J. W. S.
 ELECTRIC INSPECTOR
 TO GOVT: PUNJAB.

