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REPORT



ON THE

ADMINISTRATION OF THE INDIAN ELECTRICITY ACT, 1910,

IN THE

PUNJAB

for the year 1937.

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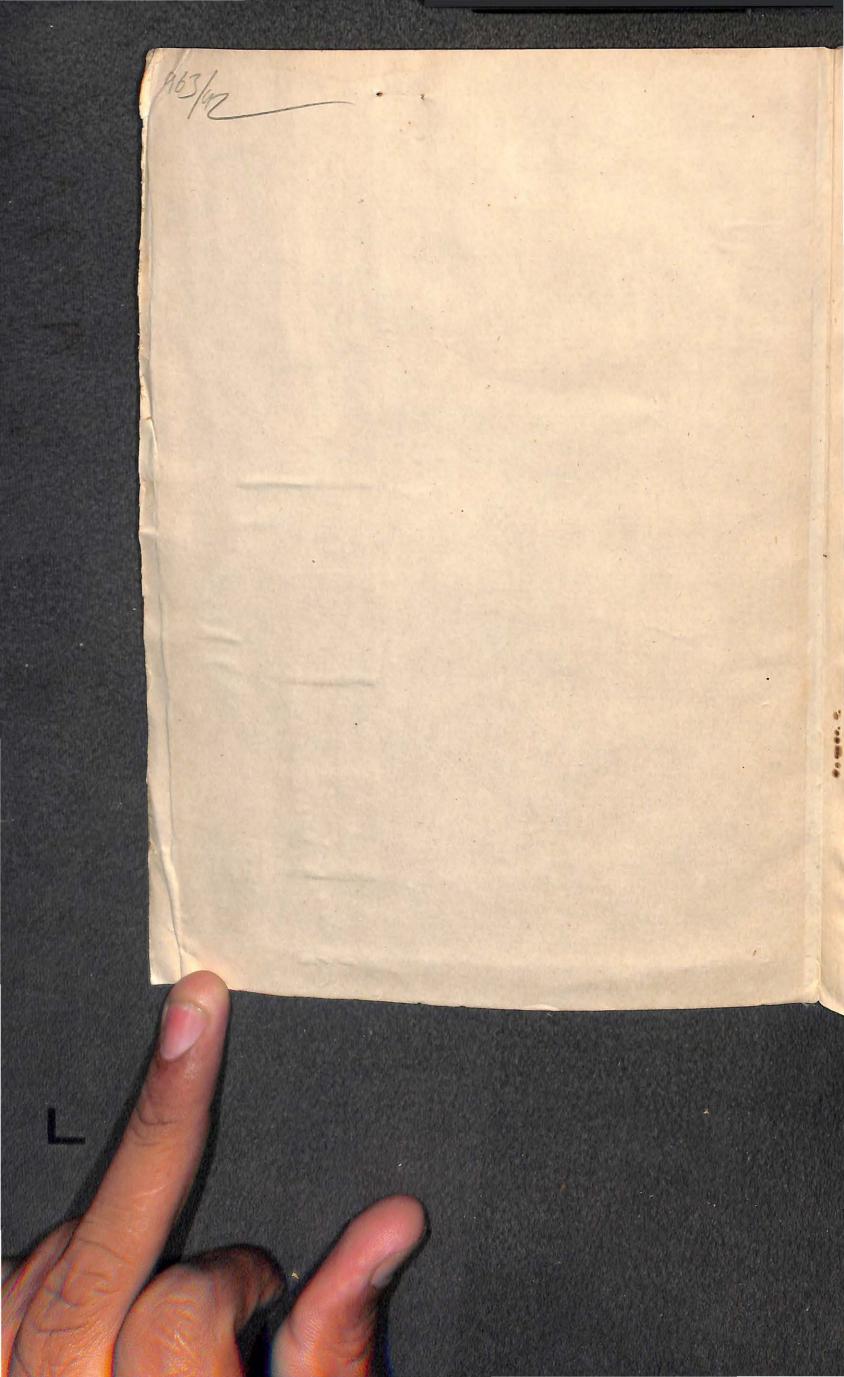
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Proceedings of the Government of the Punjab, Industries and Labour Department (Electricity), No. 2042-El.-38/39798-A., dated Lahore, the 29th November, 1938.

READ-

Report on the Administration of the Indian Electricity Act in the Punjab for the year 1937.

ELECTRICAL development in the Punjab continues to make rapid progress. Six new licences for the supply of electrical energy were granted during 1937 raising the total number of licences from 54 to 60. Three fresh applications for supply of energy at 3 places were received during the year. Twenty-one applications for supply of energy at 12 places were pending from last year. Forty-four electrical supply undertakings were in actual operation at the end of the year against only 35 in 1936. In addition, the Public Works Department, Electricity Branch, was supplying energy in 42 places against 29 at the end of 1936. Excluding the two places of bulk supply by the Electricity Branch at Amritsar and Jullundur, electrical energy is now being distributed at 84 centres as against only 62 at the end of 1936. Practically all the bigger towns open to development by private parties, which are likely to give commercial returns, have now been electrified.

The total number of units sold to the public was 80,306,336 of which the Electricity Branch, including the Renala installation, generated 46,399,143. Corresponding figures for 1936 are 68,212,611 and 38,094,552, respectively. The number of medium power installations increased from 2,541 in 1936 to 2,948 at the end of 1937. The increase in connected power load was roughly 10,724 H. P. of which 4,750 H. P. was connected by the Electricity Branch. The best users of power are flour and rice mills, steel manufacturing mills, wood-working concerns, workshops for general purposes and cotton and oil mills in the order indicated. Fresh electrical pumping sets aggregating 730 H. P. were connected during the year.

2. Three applications were received under section 27 of the Act for supply of energy outside the area of supply specified in the licences. Two were accepted and the third was under consideration. Sanction accorded to the Municipal Committee, Amritsar, was necessary in order to regularise the action of the licensee in connecting premises between the area of supply and the Khalsa College, Amritsar.

In one case sanction for supply of energy was accorded under section 28 of the Act to a Calcutta firm. The supply was primarily intended for the abattoir at Lahore Cantonment. As the abattoir scheme was dropped, the sanction lapsed.

3. On the recommendation of the Electricity Advisory Board, Government ordered a revision of the maxima rates under the Gujranwala Electric Licence, 1925.

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The question of revision of maxima rates under the Amritsar Electric Licence has been referred for advice to the Board.

The question of revision of rates under the Jullundur Electric Licence was still under consideration at the end of the year.

The Rawalpindi Electric Power Company, Limited, has

voluntarily reduced the rates at Jhelum.

The dispute between the Municipal Committee, Multan, and the Multan Electric Supply Company, Limited, has been settled by arbitration.

- 4. The total number of accidents was 86 as against 91 in 1936. In 25 cases no injury was caused to human life. For the rest, 15 cases proved fatal as against 12 last year. In most of the remaining 46 cases injuries were not of a serious nature. Government note with pleasure that no accident was due to any breach of the Indian Electricity Rules.
- 5. The work of the Electric Inspector and his staff has increased appreciably. 2,538 inspections were carried out as against only 1,745 in 1936.

Four meter disputes were referred to the Electric Inspector, but cases could not progress owing to non-payment of fees. Three appeals were lodged and decided. Nine licensees submitted, for the approval of the Electric Inspector, their general designs showing methods of construction. Fourteen street lighting agreements were also submitted to him under rule 9-A of the Municipal Works Rules. Including the 7 agreements pending from the previous year, 21 agreements in all were scrutinised by the Electric Inspector. For meter testing Government have appointed, Mr. Bence Jones, the Principal, and Mr. Mathewman, a Professor of the Maclagan Engineering College, as competent persons under sub-section (6) of section 26 to decide differences or disputes.

The Indian Electricity Rules, 1937, superseding the rules

of 1922 came into force on 1st April, 1937.

6. Government are pleased to record their appreciation of the useful work done by Mr. Stowers, the Inspector, and his Assistants during the year.

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 Director of Industries, Punjab, for information.

By order of the Governor of the Punjab,

S. K. KIRPALANI,

Secretary to Government, Punjab, Electricity and Industries Departments. 1710 CS-100-19-1-39-SGPP Labore.

Report on the administration of the Indian Electricity Act, 1910, in the Punjab for the year, 1937.

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- Timir (112.00, 07.33) Bulgaria (101, 22.1.21 o. 211 a. 226.) &

The progress of electrical development was steadily maintained during the year under report. The total number of licences granted under the Indian Electricity Act for the supply of electrical energy increased from 54 in 1936 to 60 at the end of 1937. Six fresh licences were granted during the year. Forty-four electric supply undertakings were in actual productive operation at the end of the year, while the others were either in the constructional stage or were awaiting completion of certain formalities under the Act. The Public Works Department, Electricity Branch, supplied energy at 42 places (including towns and villages) as against 29 towns at the end of the previous year.

A statement showing the names of places for which licences have been granted is attached to the report as appendix I. A map showing the location of the various supply companies and the Public Works Department, Electricity Branch, is also appended at the end of the report. Appendix II shows the names of places supplied by the Electricity Branch.

2. (a) Statutory undertakings.—The total generating capacity of the plant installed by the licensed electric supply undertakings (other than the Public Works Department, Electricity Branch) was 27,795 K. W. as against 26,293 in the previous year. It may be noted that the actual increase in the installed capacity was much greater, for the figure of 26,293 for last year included the capacity of the plant at Amritsar, whereas the figure of 27,795 for the year ending 1937 does not include the capacity of the stand-by plants at Amritsar and Jullundur which are in receipt of energy in bulk from the Electricity Branch. The largest additions were made at Rawalpindi and Multan where generating sets of 2,500 K. W. and 1,350 K. W. of Steam Turbo-Alternator class respectively were installed during the year. The generating sets in operation in the province were driven as under:—

50,297 K. W. hydraulically. 18,253 K. W. by steam.

7,245 K. W. by internal combustion engines.

The total number of units sold by the licensed undertakings increased from 34,483,413 to 42,153,460 (including 70,99,219 units sold by the Municipal Committee, Amritsar and 11,47,048 units sold by the Jullundur Electric Supply Company, Limited, by purchase from the Electricity Branch).

The generating capacity of the Public Works Department, Electricity Branch (including the Renala Khurd Power Station) remained the same as last year, viz., 49,100 KWs. The total number of units sold by the Electricity Branch (including those sold to the Municipal Committee, Amritsar, the Jullundur Electric Supply Company Limited and the Model Town Society, Limited, Lahore), was 42,552,345 as against 34,356,131 last year. The total number of units sold by the Renala Khurd Station was 3,846,798.

A graph showing the increase in the number of units is attached as appendix III at the end of the report.

(b) Consumers installations.—The total number of medium pressure installations (both connected to the licensees works and to the system of the Electricity Branch) which means the number of premises to which medium pressure is supplied and not the number of electrical units connected at the close of the year under report, was 2,948, as against 2,541 last year. The number of such installations in the Model Town where energy is being supplied in pursuance of sanction granted under section 28 of the Indian Electricity Act, was 18. The distribution of the power plant among the leading industries of the province is as below:—

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OHS WERE

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1.	Workshops for general purposes	681 H. P.
2.	Flour and rice mills	2,795 H. P.
3.	Wood working	810 H. P.
4.	Cotton and oil mills.	595 H. P.
5.	Metal working	700 71. 7.
	Ice manufacture	549 H. P.
7.	Textiles man lo W N 058 I	451 H. P.
8.		2,000 H. P.
9.	Miscellaneous	1,205 H. P.
nega .	Total Total W. M.	9,494 Н. Р.

In addition to the above, pumping sets aggregating 730 H. P. and many smaller plants driven at low pressure, of which no record is kept, were connected. Assuming the capacity of the latter to be not more than 500 H. P it is estimated that licensed undertakings were supplying energy for power purposes to the extent of 10,724 H. P. more than the previous year. The largest increase is reported to have occurred in respect of the Public Works Department, Electricity Branch, to whose works 4,750 H. P. of power load was connected during the year.

- (c) Factories, etc., generating electricity for their own use. -Records of the actual capacity of electrical generating plant installed in all factories are not available, but so far as it has been possible to ascertain, at least 142 factories generate electrical energy, and during the year under report 3 factories alone were responsible for putting into operation generating plant aggregat. ing 4,826 H. P. Of this 2,592 H. P. consisted of new plant and 2,234. H. P. of used plant that had been lying idle for a number of years. In this connection it would be interesting to note that the Sutlej Cotton Mills, Limited, Okara, which started working during the year has an installation which consists of 2 steam Turbo-alternators of 2,000 and 312 KWs. capacity respectively and 759 motors. In this factory each machine is driven by an independent motor, with the result that shafting and belt losses are eliminated. (I) The (Proposed)
- 3. Applications for the grant of licences.—Three fresh applications for licences were received during the year for the grant of licences in respect of the undermentioned places:—

Blechie

(yasa

Names of places. steadil

Power

Company,

Names of applicants.

Chichawatni viquud 1940a... Messrs. Lall Dass and Sons, duoudd) (besogori) betimid Lahore.

Phullerwan ... The Traders Electric Supply Company, Phullerwan.

Vihari onder and The Vihari Electric Supply Company, Limited, Labore.

The undermentioned 21 applications were pending from last year : and usually smaller plants direct at for T .H and a state of the control o

Names of places. Names of applicants.

- is estimated that ficensed undertakings were supplying anony to the oxtent of 10,721 H. P. more than the 1. Arifwala .. (1) Messrs. Capur and Company, denoted therebell descripted above a sale to secret a
- of power had were connected (2) The Okara Electric Supply Company, Limited, Lahore.
- 2. Mian Channu Electric Power Company, Lahore.
- (2) Messrs. Sujan Singh Ujjal Singh, Factory Owners, Mian Channu.

3. Kamalia Electric Supply Company, Limited, Lahore. anoction it would be interesting to note

- 4. Jalalpur Jattan .. The Punjab Electric Power Com-pany, Limited, Lahore.
- 5. Rupar Electric Supply Company, Limited, Lahore.
- 6. Campbellpur
- 6. Campbellpur .. (1) The (Proposed) Campbellpur Electric Supply Company, applications sordar, beginning received during the year for the grant of licences in respect of the undermentioned places :-
 - (2) The (Proposed) Campbellpur Electric Power Company, Limited, Lahore (through Names of applicants. Messrs. Dhodhy and Com pany).
- Electric, (3) The Campbellpur Messis Lan Dass and Sons, Company, Power Supply Limited (Proposed) (through Mr. Y. R. Puri) (later con-The Best Ricefrie Supply Comverted into Attock Electric Limited). Supply Company,

Jan Corte

pany, Phullerwan,

-med clagar piassis ivadiv (4) The Campbellpur Electric Company, Limited, Labore. pany, Lahore.

Names of places.

Names of applicants.

re. oply ling ore.	Company, Limited, Land he Orare Electric Sup Company, Limited Labe Charlerwan Electric Irac Company, Jhelma. The Engar Electric Sup Company, Jimited, Labe	ed, Lahore (through Mr. Dhody).
des des pen	Lala Musa, Chicharatai a stion, when the year an aberica took back their what the higger tooks o to give commercial acts	(4) The Dalhousie Electric Company, Lahore, (Promoted by Rai Bahadur Dr. Maharaj Krishen Kapur and others).
8.	Pindigheb	Messrs. M. R. Kohli and Company, Lahore.
	Dhullarwan	The Phullerwan Electric Trading Company, Lahore.
10.		Messrs. M. R. Kohli and Company Lahore.
	Jagraon Assert	Messrs. Seengal Jain and Company, Lahore.
12.	Myles panelO	(1) Messrs. Malak Chand Suri and Sons, Lahore.
		(2) L. Lekh Raj and others of Jhelum.
	Six licences as noted belo	w were granted during the year:-
		Names of concerns to whom granted.
1.	licence 1937	S. S. Sardar Ujjal Singh, Factory Owner, Mian Channu.
2.	The Dalhousic Electric Licence, 1937.	The Jullundur Electric Supply Company, Limited, Jullundur.

Description of licences.

Names of concerns to whom granted.

.3.	The Ka	malia	Electric	The	Kamalia	Electric	Supply
beli	Licence,	1937.	Sola)		Company	, Limited,	Lahore.
4.	The Ar	ifwala	Electric	The	Okara	Electric	Supply
	Licence,	1937.				, Limited,	
5.	The Ph	ullerwan	Electric	The	Phullerw	an Electric	Trading
THE	Licence,	1937.	Comp		Company	, Jhelum.	"ATELL
6.	The Rupar	r Electri	c Licence,	The	Rupar	Electric	Supply
-HER	1937.	OU TOWN	i billi		Company	, Limited,	Lahore.
dgu	mada)	Lightor	,bo		a distant		
		1 - 5 - 5 -	The state of the s	0 7.		~ 7 7	77 11

Applications for the grant of licences for Jalalpur Jattan, Campbellpur, Pindigheb, Khushab, Lala Musa, Chichawatni and Vihari were still under consideration when the year under report closed. The applicants for Jagraon took back their fee of Rs. 500 as the Electricity Branch had decided to feed the town from their own system. It appears that the bigger towns open to private parties which are likely to give commercial returns have practically all been electrified. The areas which are covered by the various stages of the Uhl River Project will be electrified by the Electricity Branch.

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

cences w	ere received during the year :-	
Sport 1	The Sirsa Electric Licence,	10. Khrahar 10.
emplant of the	1938	Clause 10 (i).
2.	The Sonepat Electric Li-	
nnO hua	cence, 1935	Clause 10 (i).
3.	The Rewari Electric Licence,	
on ime	1935	Clause 10 (i).
4.	The Jhang-Maghiana Eletric	A POLITIC AMMEN - 100
	Licence, 1936	Clause 4.
0 819rd 51	The state of the s	
-	1936 ambati	Clause 4.
-7730 6.	The Dera Ghazi Khan	Six biograph of note
	Electric Licence, 1935	Clause 10 (i).
- bosten 7. n	The Multan Electric Li-	Properties of Regner
admid . de	cence, 1921	Clauses 3, 5 (b) (v).
8.	The Ambala Cantonment	old number mate and
	Electric Licence, 1936	Clause 4.
9. dans 9.	The Mianwali Electric	2. The Dathonsie Mi
-wheel	Licence, 1935	Clause 10 (i).
10.	The Khanewal Electric	(3)
	Licence, 1935	Clause 10 (i).

The Jhang-Maghiana Electric 11. Clause 10 (i). Licence, 1936

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

> The Panipat Electric Licence, 1934 Clause 9 (1). 1.

The Abohar Electric Licence, 1934 2.

Clause 4.

The Hissar, Hansi, Bhiwani and Clauses 5, 7 and Rohtak Electric Licence, 1932

annexures.

4. The Sargodha Electric Licence, 1931

Clause 4.

Applications for the amendment of the licences in respect of Abohar, Sargodha, Sirsa, Rewari, Sonepat, Jhang-Maghiana, Pattoki, Multan and Ambala Cantonment were sanctioned during the year. The Lahore Electric Supply Company did not proceed actively with their application for the amendment of the Hissar, Hansi, Bhiwani and Rohtak Electric Licence, 1932. The application for the amendment of clause 9 (1) of the Panipat Electric Licence, 1934, remained pending. remaining four applications concerning the Dera Ghazi Khan, Jhang-Maghiana, Khanewal and Mianwali Electric Licences were under consideration when the year closed.

5. Applications for sanction under section 27 of the Indian Electricity Act.—The Okara Electric Supply Company Limited were allowed to supply electrical energy to Coleyana Estate outside their licensed area and to lay down an electric supply line for the purpose.

The application of the Kasauli Electric Supply Company Limited for sanction to supply electric energy to the Lawrence Royal Military School at Sanawar was under consideration when the year closed.

The Punjab Government gave formal sanction to the Amritsar Municipal Committee to supply electrical energy to certain consumers between the Committee's area of supply and the Khalsa College, Amritsar.

6. Applications for sanction under section 28 of the Indian Electricity Act. Sanction was granted during the year to Messrs. Octavious Steel and Company, Limited, Calcutta, to supply electrical energy to the Defence Department of the Government of India at Lahore Cantonment. The supply was primarily intended for the abattoir, but as the construction of the abattoir was abandoned, the sanction lapsed.

With regard to the 20 applications for the grant of sanction under section 28 mentioned in last year's report, the Punjab Government decided that in the case of towns where supply to the general public was concerned, it was in the interests of both the supplier and the consumer that the supply should be regulated by a regular licence rather than by sanction under section 28.

- 7. Applications under section 51 of the Act for the grant of powers of Telegraph authority.— The application of the Lahore Electric Supply Company for the grant of powers of Telegraph authority within the sparsely populated portion of the area of supply under the Lahore Electric Licence, 1912, was sanctioned during the year under report. Applications for the grant of similar powers in respect of Pakpattan, Hissar, Hansi, Bhiwani and Rohtak were under enquiry when the year closed.
- 8. Conditions of Supply.—The Punjab Government gave sanction to the conditions of supply for Abohar, Gujranwala and Simla during the year. The draft conditions in respect of Hoshiarpur were still under consideration when the year closed.

The Punjab Government gave their approval to the scale of miscellaneous charges and the form of contract generally to the licensees who started operations during the year.

- (a) Rate of interest on consumer's security deposits.—The Punjab Government approved of the reduction of the rate of interest payable by the licensees on the security deposited by consumers to the extent that interest at the rate of 3 per cent. be paid on deposits of Rs. 10 to 49 and at the rate of $3\frac{1}{2}$ per cent, on deposits of Rs. 50 and above. These rates were incorporated in the form of contract approved by Government.
- (b) Declared pressure of supply.—Owing to the failure of certain licensees to comply with rule 28 of the Indian Electricity Rules, 1937, the Punjab Government included a provision in all forms of contract to specify the pressure at which supply must be given.
- 9. Statements of accounts.—The statements of accounts were generally received in time. The licensees under the Pattoki, Chakwal, Pakpattan and Mianwali Electric Licences were exempted from the submission of annual statements in respect of the first year of their working. The number of licensees who did not submit their statements of accounts

the abaitoir was signaloned, the smudlon is seed.

within time, was small. There was only one licensee, viz., the Municipal Committee, Campbellpur, which did not submit statements of accounts as the question of the revocation of the Campbellpur Electric Licence, 1931, was under the consideration of Government.

10. Revision of maxima rates. - Accepting the recommendations of the Electricity Advisory Board, the Punjab Government ordered a revision of the maxima rates under the Gujranwala Electric Licence, 1925.

arbitrator appointed to settle the dispute between Municipal Committee, Multan, and the Multan Supply Company, Limited, gave his Electric award towards the close of the year 1936. The consideration of the question of the revision of rates under the Multan Electric Licence, 1922, has for the present been deferred. The Rawalpindi Electric Power Company, Limited, having reduced their rates at Jhelum of their own accord, it was not considered necessary to refer the matter to the Electricity Advisory Board.

The question of the revision of rates in respect of Jullundur was under consideration when the year closed.

The question of the revision of maxima rates under the Amritsar Electric Licence was referred to the Electricity Advisory Board towards the close of the year for advice.

11. Accidents.—It is satisfactory to note that the number of accidents decreased from 91 to 86 during the year under report. Of these 25 related to licensees' works caused through falling of trees and other objects not resulting in any injuries. Of the remaining 61 accidents, 15 proved fatal and 46 resulted in injuries. A statement showing the details of the accidents which have occurred since 1931 is attached as appendix IV.

The number of fatal accidents was 15 as against 12 last year. From the information available it is not clear whether or not all these deaths were the result of electric shock. In a number of cases employees of electric supply companies fell from ladders, consumers' premises, etc., and received fatal injuries without showing evidence of having received electric shock. Particulars of these accidents are given below :-

In 2 cases, the employees of soda water factories received injury while inserting electrical accessories into live fittings. Subsequent enquiries revealed that the conditions at the time were such that intense shocks could be received from contact with live conductors: the floors were wet and in neither case were shoes being worn. inspections were carried out during the

Inspector and his Assistants, as against 1,7 so last year,

- In one case a butcher met his death while handling a table fan in a damp situation without first disconnecting it from the supply. Such accidents would not have occurred, had the persons concerned known the danger involved in handling electrical apparatus in damp situations and had the right type of fittings been used.
 - One fatal accident occurred following the breaking of an insulator and contact of a live conductor with an ineffectively earthed line support.
- Iwo fatal accidents occurred as the result of persons handling live electrical apparatus without first disconnecting the supply. In one case there was no chance of recovery as the person was alone when the accident occurred but in the other case there was every prospect of recovery, had correct treatment been administered.
 - Six employees of electric supply undertakings lost their lives, three of whom fell from ladders while attending to aerial lines, and three came in contact with live conductors in the performance of their duties.
 - Three members of the public succumbed to injuries received following falls from supports of aerial lines. In all cases adequate precautions had been taken to prevent access to the live conductors by the provision of barbed wires and danger notices but the victims paid no heed to them.
 - Of the 46 injuries other than fatal, 41 occurred to persons employed in the electrical trade and the remaining 5 to persons who had no connection with the trade, (viz. unauthorised persons). Many of the injuries were not of a serious nature. It is gratifying to note that in no case could it be established that the accident was due to any breach of the Indian Electricity Rules. A graph showing the number of fatal and non-fatal accidents is attached as appendix V.
- 12. Prosecutions.—The prosecution of the Lahore Electric Supply Company, in connection with the electrocution of a child on the Shish Mahal Road, Lahore, did not end in conviction. No fresh prosecution was instituted during the year.
- 13. Electric Inspector's activities.—(a) Inspections.—2,538 inspections were carried out during the year by the Electric Inspector and his Assistants, as against 1,745 last year. The

effectiveness of the inspections is reflected in the decrease in the number of accidents. It is hoped that the enforcement of the rules requiring the grant of licences to electrical contractors and the issue of certificates of competency to supervisors will result in elimination, or, at any rate, in a decrease in the accidents due to faulty installations.

- (b) Earth-tests.—Systematic testing of licensees' works was carried out during the year as hitherto and earth-tests were conducted in 14 areas. In all cases where unsatisfactory results were recorded, reports were made to the licensees for the removal of the defects.
- (c) Meter-tests.—It was decided to transfer the Electric Inspector's laboratory and laboratory equipment to the Maclagan Engineering College with the exception of such portable apparatus as was required for general tests. The Punjab Government appointed Mr. Philip Reginald Bence Jones, Principal and Mr. Thomas Henry Mathewman, Professor of Electrical Engineering, of the Maclagan Engineering College as competent persons within the meaning of sub-section (b) of section 26 of the Indian Electricity Act, to decide any difference or dispute that may arise as to whether a meter, etc., was or was not correct.
- (d) Disputes.—Four meter disputes were referred to the Electric Inspector for decision, but in no case was the decision given owing to non-payment of fees.
- (e) Appeals.—The undermentioned 3 appeals were submitted to the Electric Inspector under section 13 (1) (b) of the Act:
- (1) By the Muktsar Electric Supply Company, Limited, against the orders of the Municipal Committee, Muktsar, disapproving of the laying of a cable under certain roads. The Electric Inspector gave his decision in favour of the company.
- (2) By the Mianwali Electric Supply Company against the conditions imposed by the Public Works Department, Buildings and Roads Branch, while authorising the company to lay their electric supply lines along certain roads in Mianwali. The Electric Inspector decided in favour of certain modifications of the conditions.
- (3) By the Abohar Electric Supply Company, Limited, against the objection raised by the Public Works Department, Buildings and Roads Branch, to the

company's proposal to lay aerial lines along certain roads at Abohar. The Electric Inspector's decision required the company to remove the lines at their own cost, if and when required to do so.

(f) Approval of methods of construction.—Nine licensees submitted their general designs showing the methods of construction for the approval of the Electric Inspector. These designs were generally crudely prepared and many of them lacked essential details. The Electric Inspector reports that there is a tendency amongst the new licensees to construct works on the trial and error system rather than to calculate their strength and stability before erection. The use of wooden poles treated with ASCU has not yet found general favour with the licensees operating in small towns as it is considered that these poles are heavy as compared with steel tabular poles of equivalent strength and that they are difficult to handle and owing to their varying dimensions require special fittings. These poles are, however, being used freely in rural areas which result in a saving in the cost of distribution.

The Electric Inspector working in collaboration with the Public Works Department, Electricity Branch, has prepared new designs for guarding aerial lines which though equally serviceable are less costly than the designs approved by him in the past.

(g) Street lighting agreements.—Fourteen street lighting agreements were submitted to the Electric Inspector under rule 9-A of the Municipal Works Rules. In the majority of cases they were found to contain provisions which were either inconsistent with the Indian Electricity Act, or were incapable of practical interpretation or were inequitable. The tendency of the local authorities to demand the inclusion of certain terms which are not usually permitted, resulted in delays in the approval of the street lighting agreements, and in several cases it became necessary for the district authorities to intervene. Twenty-one street lighting agreements (14 received during the year and 7 pending from last year) were scrutinised by the Electric Inspector of which 13 received the approval of the Punjab Government.

The Electric Inspector rendered technical advice to several local authorities on the practical interpretation of certain clauses of street lighting agreements and other cognate matters.

- Erection of buildings in the vicinity of aerial lines .-One hundred and seven notices were issued during the year by the Electric Inspector to owners of buildings or structures which were being erected in the vicinity of aerial lines, drawing their attention to the requirements of rule 70 of the Indian Electricity Rules, 1937, and impressing upon them the necessity of obtaining the requisite cert ficates from the Electric Insector. With a view to stopping he illegal practice of erecting buildings in close proximity to the works of the licensees the Punjab Government, at the instance of the Chief Engineer, Punjab, Public Works Department, Electricity Branch, invited the attention of all Commissioners and Deputy Commissioners to the suggestions contained in Punjab Government circular letter of 1932 wohich were to the effect that when local authorities sanctioned building plans, they should in due course invite the attention of the applicarnts to the provisions of the Indian Electricity Rules with regard to the accessibility of electrical works.
- 14. The provisions of the undermentioned rules were relaxed during the year in favour of the parties noted below:

Name of the rule.

Name of the party in whose favour the relaxation was allowed.

1. Rule 67 of the Indian Electricity Rules, 1922, regarding suspension of non-metal sheathed, weather proof, vulcanised rubber insulated cables.

2. Rule 69 (1) (a) of the Indian Electricity Rules, 1937.

Messrs. Harbhagwan Nanda and Company, Licensees under the Fazilka Electric Licence, 1934.

The Jullundur Electric Supply Company Limited, Licensees under the Dalhousie Electric Licence, 1937.

- 15. Amendment of the Indian Electricity Act, 1910, and the Indian Electricity Rules, 1922.—The Indian Electricity (Amendment) Act, 1937, came into force on 31st March, 1937, and the Indian Electricity Rul s, 1937, which superseded the rules of 1922 came into force on 1st April, 1937.
- Mr. H. P. Thomas, Chief Engineer, Public Works Department, Electricity Branch, was nominated on the Central Electricity Board from the Punjab

	Name of town. A MIGHERAGIA	Population.
38.		17,581
34.	Muktsar	14,845
35.	Mianwali	14,107
36.	Mandi Baha-ud-Din	3,668
37.	Murree did d did	1,530
38.	Mandi Burewala	3,271
39.	Okara m.dod	10,712
aas = 40.	Panipat	32,915
41.	Pattoki	8,016
100 - 42.	Pakpattan	11,311
43.	Rawalpindi	75,767
44.	Rohtak	35,235
45.	Rewari	26,279
46.	Sialkot	85,093
47.	Sargodha	26,761
48.	Shahdara	5,249
49.	Sirsa	18,909
50.	Sonepat	15,050
51.	Simla	18,144
52.	Tandlianwala badaxhall	6,105
53.	Toba Tek Singh	5,903
54.	Mian Channu	4,349
55.	Dalhousie indpend	1,030
56.	Kamalia auddagw-ynadl	13,220
57.	Arifwala	3,201
58.	Phullerwan lewoesid	
59.		8,764
7.90	Kalka	28
400,00	stodad	
08,8	dregallargath	
10,801	Multan	
or,ac	· · · · · · · · · · · · · · · · · · ·	

37. Amiliar (through Municipal Committee, A

distributed erode. The horse Distributed in the

J.v. vist Liditore District.

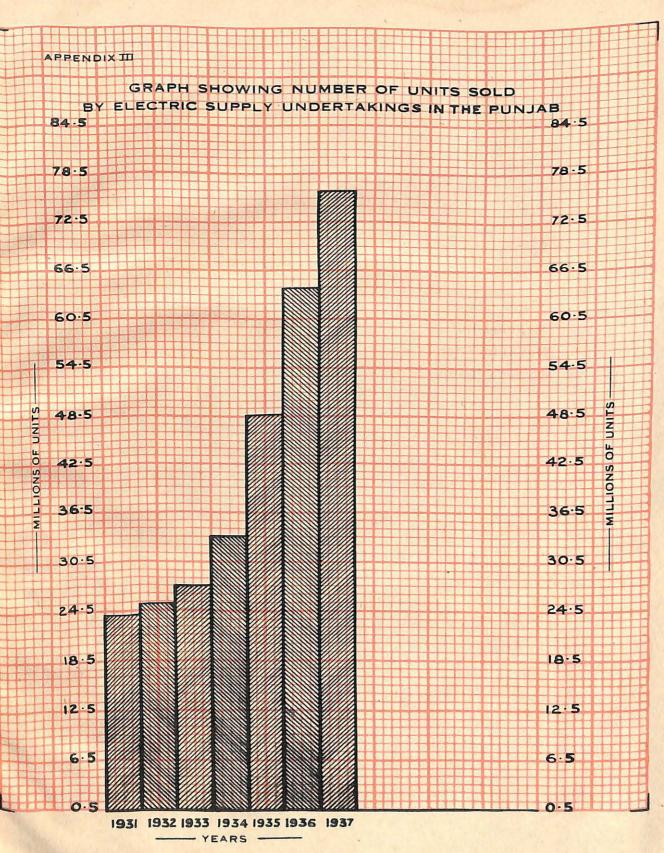
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APPENDIX II.

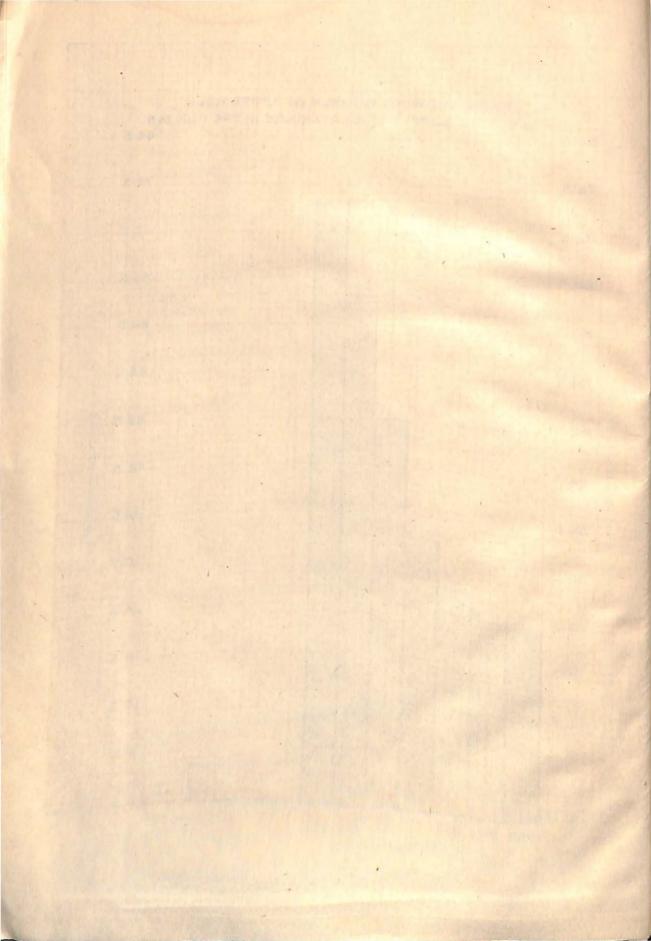
Towns and villages served by the Electricity Branch.

- 1. Pathankot.
- 2. Gurdaspur.
- 3. Dina Nagar.
- 4. Batala. cipicolii auboutilit desorde and antique .88
- 5. Dhariwal.
- 6. Qadian.
- 7. Village Lakhi.
- 8. Village Nowshera Majja Singh.
- 9. Amritsar Suburban (including Verka and Chheharta).
- 10. Tarn Taran.
- 11. Phillaur.
- 12. Goraya.
- 13. Boparee.
- 14. Ludhiana.
- 15. Baghbanpura.
- 16. Kasur.
- 17. Sadar Bazar (Lahore Cantonment).
- 18. Ichhra.
- 19. Muslim Town.
- 20. Ferozepore City.
- 21. Tankanwali Basti and Sadar Bazar, Ferozepore.
- 22. Sheikhupura.
- 23. Chuharkana.
- 24. Jaranwala.
- 25. Nankana Sahib.
- 26. Lyallpur.
- 27. Dharamsala.
- 28. Kartarpur.
- 29. Suranussi.
- 30. Part of Moghalpura and North-Western Railway, Lahore.

31.	Hussainiwala.	
32.	Zaffarwal whitehall out ud havene senaltiv ben came	T
33.	Phagwara	.E
34.	Kapurthala.	.2
35.	Model Town.	10
36.	Jullundur City (through Jullundur Electric Supply C pany).	om-
37.	Amritsar (through Municipal Committee, Amritsar).	-
38.	Jullundur Suburban East (including Dakoha and Biring	5).
39.	Jullundur Suburban West (including Chak Hussani Maksudpur).	.0
40.	Mahmud Buti. Andrew gailentem) ned real mestern A	.0
41.	Kot Duni Chand (Lahore District).	.01
42.	Jivnana (Lahore District).	.11
	Gorago.	.21
	Bognree.	.84
	Ladhiona	AL.
	Bagbbanpura	.dr
	Easur.	.DE
	Sadar Barrr (Lohors Cautonment).	TI
	Ichbra.	18.
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	Derogepore Clor.	.08
	Tembenevill Basil and Sader Basar, Ferenceponer	:18
	Shoikhu ura.	.00
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C.W.STOWERS
ELECTRIC INSPECTOR
TO GOVERNMENT PUNJAB



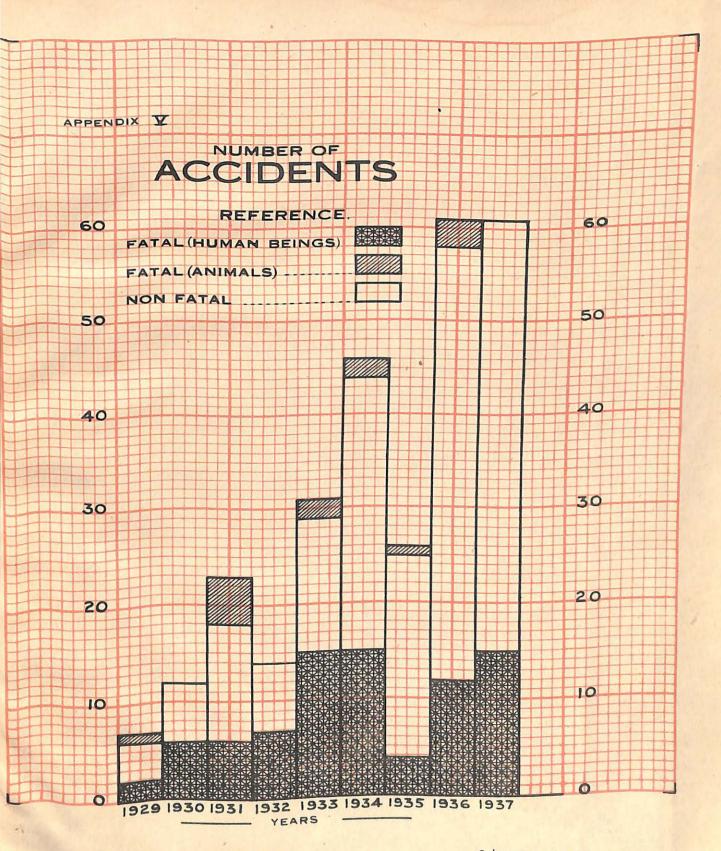
ANALYSIS OF ACCIDENTS

S.Nº	YEARS	1931	1932	1933	1934	1935	1936	1937
1.	Accidents resulting in death to human beings (unauthorised persons)	NIL	2	2	1	NIL	5	6
2.	Accidents resulting in death to human beings (authorised persons)	4	4	11	11	4	1	3
3.	Accidents resulting in death to human beings from falls (authorised persons)	2	NIL	1		NIL	2	3
4.	Accidents resulting in death to human beings from falls from poles (unauthorised persons)	NIL	ı	1	2	NIL	4	3
5.	Accidents resulting in death to animals from electric shock	5	NIL	2	2	ı	3	NIL
6.	Accidents resulting in injuries to human beings (authorised persons	8	4	7	23	15	35	41
7.	Accidents resulting in injuries to human beings (unauthorised persons)	4	3	7	6	6	11	5
8.	Accidents to licensees' works caused through falling of trees & other objects	NIL		20	36	40	30	25
	Total	23	15	51	82	66	91	86

FEROZ PRINTING WORKS, LAHORE.

C. W. STOWERS, ELECTRIC INSPECTOR TO GOVERNMENT PUNJAB.





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