

**REVIEW
OF
STAFF STRENGTH
OF
T R D
OF
ELECTRIC DEPARTMENT
WORKING
AT
SUNEPUR DIVISION
(ECR/Effi/WSR/SEE/19-20/34)**

GUIDANCE BY

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**WORK-STUDY CELL
East Central Railway
HAJIPUR
EXECUTIVE SUMMARY**

Study No.	ECR/Effi./WSR/SEE/19-20/34
Subject	REVIEW OF STAFF STRENGTH OF TRD OF ELECTRICAL DEPARTMENT AT SENEPUR DIVISION .
Area	SENEPUR DIVISION
Division	SENEPUR
Department	ELECTRICAL.
Terms of Reference	Assessment of Man Power requirement
Total No. of Recommendations	01
No. of posts recommended for surrender	01
Financial Implication	Lac
Month of Circulation	March , 2020

INDEX

Sr. No.	Content	Reference Page No.	
1	Terms of Reference and Methodology Adopted	04	--
2	Synopsis	05	--
3	<u>Chapter I</u> – Introduction	06	--
4	<u>Chapter II</u> – Present Status	07	08
5	<u>Chapter III</u> - Critical Analysis	09	14
6	<u>Chapter IV</u> – Recommendation	15	--
7	<u>Chapter V</u> – Financial Implication	16	--
	<u>Chapter VI</u> – Summary	17	--
8	Annexure	18	--

ACKNOWLEDGEMENT

The team is grateful to Sr.DEE/TRD/SEE, supervisory staff SSE/Electrical/TRD/DEPOT/RD And SSE/Electrical TRD/DEPOT/SPJ and the staff working with him for rendering their full co-operation during the course of study.

TERMS OF REFERENCE

The study has been conducted under the following terms of references:

- a) To review of staff vis-à-vis workload of Electric(TRD) of Senepur Division with a view to identify the surplus manpower in this section.
- b) To assess the effective utilization of staff working in Electric(TRD) at SEE Division.
- c) To suggest for optimization of wages of Electric(TRD) staff working at SEE Division.

METHODOLOGY ADOPTED

The team applied the following work study techniques for conducting the study.

- 1. Data collection and its analysis to assess the factual status & existing work load.
- 2. Spot observations and physical checks to assess the performance of Electric(TRD) staff of SEE Division.
- 3. Discussion with Sr.SEE/ TRD /DEPOT/RD,Sr.SEE/ TRD /DEPOT/SPJ,
- 4. Discussions at various levels of staff to arrive at fruitful result.

SYNOPSIS

Indian Railway is one of the biggest transportation organizations among all other transport organizations in the country. In fact the Railway is backbone of the country's transport systems. In the recent time, Railway is facing tremendous competition from road and air. In the time of competition transport system should not only be agile, prompt and amenable but also financially viable. In order to bring economy in expenditure the optimum utilization of man, machine and material will have to be ensured.

In Railways, the process of absorption of modernization has been started and still in progress in every sphere of the system. As a result of which certain activities have become fully redundant/ obsolete from existing system. These technological up gradations have shown the considerable improvement in the efficiency and manpower productivity in Railways.

Keeping in view, all these constraints, The Work Study Cell is assigned to conduct work study of Electrical (TRD) of SEE division with a view to assess the staff requirement as per the existing workload. Electrical department also plays a vital role in Indian Railways and leads in performance of any zonal Railway. At present 387 staff is on roll against a sanctioned of 387 in Electric (TRD) of SEE Division .

To arrive at the actual requirement of staff, the team held discussions at various levels and kept practicability in view.

Chapter-I

Introduction

1.1 SEE Division is a major division of E.C.Rly. It is electrified Division. The Electric (TRD) staff of SEE Division maintains electric Traction for smooth running of Trains. Electric substation.

Benchmarking is a continuous process of comparing different units and identifying which one is the best in the business and then learning how this excellence was achieved and setting out to improve the efficiency of those units, which were behind. If this concept is implemented it will result large reduction in the cost and make significant contribution in improving the efficiency of various divisions of the Railways, but SEE Division has not infrastructure developed than other Division of Indian Railway. Hence assessment of manpower is done on need base.

1.2 Electric (TRD) staff of Samastipur Division is under the control of Sr.DEE/ TRD /SPJ .

Chapter-II

PRESENT SCENARIO;-

2.0 Summary of work load in the present scenario:-

BOS =343

MOR=295

Vacancy=48

2.1 SEE Division is an important Division of E.C.Rly. There are one electric TRD depot of SEE Division which are as follows :-

1. Sr. SEE/ TRD /SPJ unit :- Maintain power house , Electric substation, 33 kv and 11 kv Transformer, relay, DG set ,LT panel , cable fault , emergency power trip, 2300 railway quarter(including small station) , Divisional railway hospital, High mast tower, street light , Diesel shed ,Store and office work etc. It supplies power to all service building and railway colony. Work is going on in three shifts.
2. Sr. SEE/ TRD/RD unit:- Wiring work of all small station as per requirement, Emergency work maintenance, Dismantling of damage Electric pole , Break down attention etc.

Chapter-III

Critical Examination:-

BOS =387

MOR=290

Vacancy=97

As per spot observation important units working in SEE division under control of Sr. DEE/ TRD /SEE. Work study team has examined the work load of these units in SEE division as per need base and made justification as under:-

1. **Sr. SEE/ TRD /SPJ unit :-** At this Depot 01 SSE is Dischaing his duty as over all in three shifts staff are working to maintain the transformer, relay, DG set ,LT panel , cable fault and emergency power trip Pump operation and maintenance and normal duty for collection of material from other depot, store, tender, establishment and other miscellaneous work such as wiring of quarter and service building. As per observation by work study team the requirement of Electric (G) staff on need base at different points as below:-

a) SEE :- Overall incharge of OHE

Tech	1
Helper	1
	=02

03 staff is required in each shift for street light.

Tech	2
Helper	1
	=03

04 staff required for quarter and service building for emergency work.

Tech	3
Helper	1
	=04

03 staff is required for pump operation and maintenance in each shift.

Tech	2
Helper	1
	=03

Total staff required in all three shift= $02 \times 03 + 03 \times 03 + 04 \times 03 + 03 \times 03 = 36$

RG@12.5%	4.50	=05(say)
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Total		=41
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LR@12.5%	5.12	=05(say)
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Total		=46
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- 2 **Sr. SEE/ TRD /RD unit:-** In this unit the utilization of staff for Wiring work of all small station as per requirement, Emergency work maintenance , Damage Electric pole dismantle , Break down attention etc as below:-

4 Staff required for Wiring work of all small station .

Tech	3
Helper	1
	=04

3 Staff required for Emergency work maintenance

Tech	2
Helper	1
	=03

4 Staff required for Damage Electric pole dismantle

Tech	1
Helper	1
	=04

4 Staff required for Break down attention and establishment, store work

Tech	1
Helper	3
	=04

Total = $04 + 03 + 04 + 04 = 15$

LR@12.5%	1.87	=02(say)
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Total		=15+02=17
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CHAPTER IV

RECOMMENDATION

As there is no yardstick for calculation of staff. The work study team made its assessment of staff on need base. It is observed that 01 vacant posts (may be surrendered). These 01 vacant posts is excess than requirement.

Total Sanction Strength	=387
Total Men on Roll	=290
Total Vacant post	=97
Total Staff required	=336
Excess Staff	=387-386= 01 Staff

After going through the requirement of staff, the work study team observed that the 01 vacant posts is recommended for surrender. and financial saving will be Rs 19.71 Lac per annum. The work is going on without any hindrance.

CHAPTER V

FINANCIAL SAVINGS

If recommendation of the work study report is implemented, the annual recurring financial savings will be as under:

S.No.	Designation	Scale	Grade pay	No of post	Saving per Annum per staff	Annual financial savings (Rs.)
01	T.W.D Gr. III	5200-20200	1900	01	394200	1576800
	Total			01		1971000 (19.71 lac)

CHAPTER VI

Summary :-

After critically examining the work load of various categories of staff working in Electrical (G) of Electrical Department of Samastipur Division, work study team proposes as below:-

S.No.	Designation	BOS	MOR	Requirement	Proposed surrender	Remark
01	T.W.D Gr. III	02	01	01	01	01 vacant post may be surrendered
	Total	02	01	01	01	

Annexure –I

Staff position of Electrical (TRD) of Electrical Department of SEE Division.

Sl NO.	Category	Scale	Grade pay	Sanctioned Strength	Men on Roll	vacancy
1	COS	9300-34800	4600	04	02	02
2	OS	9300-34800	4200	07	07	00
3	Sr.Clerk	5200-20200	2800	03	05	+02
4	Jr.Clerk	5200-20200	1900	03	02	01
5	Sr.Tech.(P)	9300-34800	4200	29	25	04
6	Tech. I (P)	5200-20200	2800	79	73	06
7	Tech.II(P)	5200-20200	2400	36	27	09
8	Tech.III(P)	5200-20200	1900	36	34	02
9	Sr. Tech.(MR)	9300-34800	4200	02	02	00
10	Tech. I (MR)	5200-20200	2800	05	02	03
11	Tech. II(MR)	5200-20200	2400	02	03	+01
12	Tech. III (MR)	5200-20200	1900	02	02	00
13	Tech. I (G)	5200-20200	2800	01	01	00
14	Tech. II(G)	5200-20200	2400	00	00	00
15	Tech. III (G)	5200-20200	1900	00	01	+01
16	B.Man	5200-20200	1900	22	18	04
17	Helper	5200-20200	1800	107	81	26
18	Sr. Tech.(Ref.)	9300-34800	4200	01	01	00
19	Tech. I (Ref.)	5200-20200	2800	00	00	00
20	Tech. II(Ref.)	5200-20200	2400	00	00	00
21	Tech. III (Ref.)	5200-20200	1900	00	04	+04
22	Sr. Tech.(PF)	9300-34800	4200	01	01	00
23	Tech. I (PF)	5200-20200	2800	01	02	+01
24	Tech. II(PF)	5200-20200	2400	01	01	00
25	Tech. III (PF)	5200-20200	1900	01	01	00
	Total			343	295	48



EAST CENTRAL RAILWAY

WORK STUDY REPORT

ON

To assess the utility of Electric TRD staff of
Electrical Department in SEE Division

EFFICIENCY CELL

EAST CENTRAL RAILWAY

HAJIPUR

STUDY NO. ECR/EFF./WSR/SEE/19-20/34

**Office of the
General Manager (Vig)
Hajipur**

No.: - ECR/Eff./WSR/SEE/19-20/20

Dated: 23.03.2020

Sr.DEE(G)

East Central Railway,
Samastipur

**Sub.: - Work study report on adequacy of staff strength of Electric (TRD)
of Electrical Department of SEE Division .**

In connection to the above, it is informed that a work study has been conducted by work study team on adequacy of staff strength of Electric (TRD) of Electrical Department of SEE Division.

The work study team recommended for surrender of 01 vacant post TWD Gr.III of (TRD) of Electrical Department of SEE Division.

The report is being sent to your end for scrutiny, after scrutiny please send your reply within 10 days so that, the report may be finalized and intimated to Railway Board.

DA: Work study report in 22 pages.

(A.Khalifa)
Efficiency Officer
for SDGM

Copy to: (i) PCPO/ HJP for kind information please.
(ii) PCEE/HJP for kind information please.
(iii) ADRM/SEE for kind information please.
(iv) Sr. DPO/ SEE for kind information please

for SDGM

**REVIEW
OF
STAFF STRENGTH
OF
ELECTRICAL GENERAL
OF
ELECTRIC DEPARTMENT
WORKING
AT
SAMASTIPUR DIVISION
(ECR/Effi/WSR/SPJ/16-17/18)**

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**WORK-STUDY CELL
East Central Railway
HAJIPUR**

EXECUTIVE SUMMARY

Study No.	ECR/Effi./WSR/SPJ/16-17/18
Subject	REVIEW OF STAFF STRENGTH OF ELECTRIC GENERAL OF ELECTRICAL DEPARTMENT AT SAMASTIPUR DIVISION .
Area	SAMASTIPUR DIVISION
Division	SAMASTIPUR
Department	ELECTRICAL.
Terms of Reference	Assessment of Man Power requirement
Total No. of Recommendations	01
No. of posts recommended for surrender	05
Financial Implication	19.71 Lac
Month of Circulation	September , 2016

INDEX

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1	Terms of Reference and Methodology Adopted	04	--
2	Synopsis	05	--
3	<u>Chapter I</u> – Introduction	06	--
4	<u>Chapter II</u> – Present Status	07	08
5	<u>Chapter III</u> - Critical Analysis	09	14
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7	<u>Chapter V</u> – Financial Implication	16	--
	<u>Chapter VI</u> – Summary	17	--
8	Annexure	18	--

ACKNOWLEDGEMENT

The team is grateful to Shri A.K.Chaudhary Sr.DEE/G/SPJ, Shri R.N.Prasad DEE/G/SPJ and supervisory staff SSE/Electrical/G/P/SPJ,SSE/Electrical G/OD/SPJ,SSE/Electrical/G/P/SHC,SSE/Electrical/G/P/DBG,SSE/Electrical G/P/NKE, SSE/Electrical /G/P/RXL, and the staff working with him for rendering their full co-operation during the course of study.

TERMS OF REFERENCE

The study has been conducted under the following terms of references:

- a) To review of staff vis-à-vis workload of Electric(G) of Samastipur Division with a view to identify the surplus manpower in this section.
- b) To assess the effective utilization of staff working in Electric(G) at Samastipur Division.
- c) To suggest for optimization of wages of Electric(G) staff working at Samastipur Division.

METHODOLOGY ADOPTED

The team applied the following work study techniques for conducting the study.

5. Data collection and its analysis to assess the factual status & existing work load.
6. Spot observations and physical checks to assess the performance of Electric(G) staff of Samastipur Division.
7. Discussion with Sr. DEE/G/SPJ
8. Discussion with DEE.(G)/SPJ
9. Discussion with Sr.SEE/P/G/SPJ, Sr.SEE/G/P/SHC, Sr.SEE/G/P/DBG, Sr.SEE/G/P/NKE, Sr.SEE/G/P/RXL
10. Discussions at various levels of staff to arrive at fruitful result.

SYNOPSIS

Indian Railway is one of the biggest transportation organizations among all other transport organizations in the country. In fact the Railway is backbone of the country's transport systems. In the recent time, Railway is facing tremendous competition from road and air. In the time of competition transport system should not only be agile, prompt and amenable but also financially viable. In order to bring economy in expenditure the optimum utilization of man, machine and material will have to be ensured.

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Keeping in view, all these constraints, The Work Study Cell is assigned to conduct work study of Electrical (G) of Samastipur division with a view to assess the staff requirement as per the existing workload. Electrical department also plays a vital role in Indian Railways and leads in performance of any zonal Railway. At present 295 staff is on roll against a sanctioned of 343 in Electric (G) of Samastipur Division .

To arrive at the actual requirement of staff, the team held discussions at various levels and kept practicability in view.

Chapter-I

Introduction

2.1 Samastipur Division is a major division of E.C.Rly. It is electrified and non electrified Division. It has many crew changing point where driver, asstt. driver and Guard of mail/express, passenger and Goods trains are changed. A Large number of staff reside in railway quarter. These are 3968 quarter 25 service building and one Diesel loco shed are situated in this Division .The Electric(G) staff of SPJ Division maintains electric light of Railway quarter, service building and Diesel loco shed . They maintain electric point of all station premises area , Electric substation , Street light, High mast tower. They also maintain pump for water supply , transformer, LT panel, ST panel and cable jointing and pump of different station.

Benchmarking is a continuous process of comparing different units and identifying which one is the best in the business and then learning how this excellence was achieved and setting out to improve the efficiency of those units, which were behind. If this concept is implemented it will result large reduction in the cost and make significant contribution in improving the efficiency of various divisions of the Railways, but Samastipur Division has not infrastructure developed than other Division of Indian Railway .Hence assessment of man power is done on need base.

The Electric General staff at Samastipur divisions are being dealt by
SSE/ Electrical/G/P/SPJ,SSE/Electrical /G/OD/SPJ,SSE/ Electrical/G/P/SHC ,
SSE/Electrical/G/P/DBG,SSE/Electrical G/P/NKE, SSE/Electrical /G/P/RXL
headed by one Sr.DEE(G) and assisted by DEE(G).

2.2 Electric (G) staff of Samastipur Division is under the control of Sr.DEE/G/SPJ and assisted by DEE/G/SPJ, DEE/G/DBG.

Chapter-II

PRESENT SCENARIO:-

2.0 Summary of work load in the present scenario:-

BOS =343

MOR=295

Vacancy=48

- 2.1 Samastipur Division is an important Division of E.C.Rly. There are one electric Diesel shed , 3968 nos. Rly quarter, 25 service building , a large no of high mast tower , pump , sub station pump house , SSE/Power office including store and station premises area etc. Electrical/G/Power staff maintain light point, fan AC point, transformer relay and pump in above units. There are 07 important units of electric (G) of Samastipur Division which are as follows :-
3. Sr. SEE/ P/SPJ unit :- Maintain power house , Electric substation, 33 kv and 11 kv Transformer, relay, DG set ,LT panel , cable fault , emergency power trip, 2300 railway quarter(including small station) , Divisional railway hospital, High mast tower, street light , Diesel shed ,Store and office work etc. It supplies power to all service building and railway colony. Work is going on in three shifts.
 4. Sr. SEE/ OD/SPJ unit:- Wiring work of all small station as per requirement, Emergency work maintenance, Dismantling of damage Electric pole , Break down attention etc.
 5. Sr.SEE/G/P/SHC unit:-Maintain power house , Electric substation, 11 kv Transformer, relay, DG set ,LT panel , cable fault , emergency power trip , 375 to 425 nos railway quarter(including small station) all service building ,14 nos high mast tower, street light, pump operation at 04 station, Store and office work etc. It supplies power to all service building and railway colony. Work is going on In 03 shift .

6. Sr.SEE/G/P/DBG unit :-Maintain the power house , Electric substation, 11 kv Transformer, relay, 25 nos DG set including outer station ,LT panel, cable fault and emergency power trip ,15 nos pump , 200-250 Railway quarter(including small station), service building Store and office work etc. It supplies power to all service building and railway colony.Work is going on in 03 shifts.
7. Sr.SEE/G/P/RXL unit:- 37 small station is under control of power/RXL. Electric (G) staff maintains power house , Electric substation, 11 kv Transformer, relay, DG set ,LT panel , cable fault and emergency power trip and pump operation and maintenance of 05 small station. It supplies power to all service building and railway colony. Work is going on In three shift .
8. Sr.SEE/G/P/NKE unit:- 02 important station as Bettiah and Bagaha and is under control of power/NKE. Electric (G) staff maintains power house , Electric substation, 11 kv Transformer, relay, DG set LT panel , cable fault and emergency power trip and pump operation and maintenance of 03 station, brake down attention. It supplies power to all service building and railway colony. Work is going on in 03 shifts.
9. Sr.DEE/G/SPJ office:- Processing work of tender, requisition of stock and non stock items , establishment matter such as pass,PTO, Leave record, retirement, confidential items letter correspondence and charge sheet of electric (G) staff is maintained in this office.

Chapter-III

Critical Examination:-

BOS =343

MOR=295

Vacancy=48

As per spot observation 07 important units working in Samastipur division under control of Sr. DEE/G/SPJ. Work study team has examined the work load of these units in SPJ division as per need base and made justification as under:-

2. **Sr. SEE/ P/SPJ unit** :- In three shifts staff are working to maintain the transformer, relay, DG set ,LT panel , cable fault and emergency power trip Pump operation and maintenance and normal duty for collection of material from other depot, store, tender, establishment and other miscellaneous work such as wiring of quarter and service building. As per observation by work study team the requirement of Electric (G) staff on need base at different points as below:-

Requirement of staff in Power house :- 02 staff required in each shift to maintain 33 kv/11 kv sub station.

Tech	1
Helper	1
	=02

03 staff is required in each shift for street light.

Tech	2
Helper	1
	=03

04 staff required for quarter and service building for emergency work.

Tech	3
Helper	1
	=04

03 staff is required for pump operation and maintenance in each shift.

Tech	2
Helper	1
	=03

Total staff required in all three shift= $02 \times 03 + 03 \times 03 + 04 \times 03 + 03 \times 03 = 36$

RG@12.5%	4.50	=05(say)
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Total		=41
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LR@12.5%	5.12	=05(say)
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Total		=46
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Requirement of staff for other miscellaneous work:- The other miscellaneous work such as UTS, Switch gear, FCD,DG Set, Elect. equipments of DRM building , Hospital, high mast tower,Olapur and Thalwara substation, Hassanpur road ,Roseraghat station and additional work such as collection of material , store etc.

As per observation and discussion with concerning authority staff required as below-

2 Staff required for UTS:-

Tech	1
Helper	1
	=2

3 Staff required for Switch gear

Tech	2
Helper	1
	=3

2 Staff required for FCD

Tech	1
Helper	1
	=02

4 Staff required for DG set maintenance

Tech	3
Helper	1
	=04

3 Staff required for DRM building

Tech	2
Helper	1
	=03

3 Staff required for Hospital

Tech 2
Helper 1
=03

2 Staff required for high mast tower

Tech 1
Helper 1
=02

2 Staff required for Olapur and Thalwara substation

Tech 1
Helper 1
=02

3 Staff required for Additional work such as store, tender, collection of material , meeting hall etc

Tech 2
Helper 1
=03

3 Staff required for Roseraghat station to maintain electric equipment and operation

Tech 2
Helper 1
=03

3 Staff required for Hassanpur road to maintain electric equipment and operation

Tech 2
Helper 1
=03

Total =02+03+02+04+03+03+02+02+03+03+03=30

[LR@12.5%](#) 3.75 =04(say)

Total =34

Grand total 46+34=80

- 3 **Sr. SEE/ OD/SPJ unit:-** In this unit the utilization of staff for Wiring work of all small station as per requirement, Emergency work maintenance , Damage Electric pole dismantle , Break down attention etc as below:-

4 Staff required for Wiring work of all small station .

Tech 3

Helper 1

=04

3 Staff required for Emergency work maintenance

Tech 2

Helper 1

=03

4 Staff required for Damage Electric pole dismantle

Tech 1

Helper 1

=04

4 Staff required for Break down attention and establishment, store work

Tech 1

Helper 3

=04

Total =04+03+04+04=15

[LR@12.5%](#)

1.87 =02(say)

Total =15+02=17

3. **Sr.SEE/G/P/DBG unit:-** Generally, In three shift staff are working to maintain the transformer , relay, DG set ,LT panel , cable fault and emergency power trip ,Pump operation and maintenance and normal duty for collection of material from other depot, store, tender, establishment and other miscellaneous work such as wiring of quarter and service building. As per observation by work study team the requirement of Electric (G) staff on need base at different points as below:-

Requirement of staff in Power house:- 02 staff required in each shift to maintain 11 kv sub station,

Tech 1

Helper 1

=2

03 staff is required in each shift for street light and high mast tower.

Tech 2

Helper 1

= 3

02 staff required for quarter and service building for emergency work .

Tech	1
Helper	1
	=2

02 staff is required for pump operation and maintenance in each shift for DBG .

Tech	1
Helper	1
	=2

03 staff is required for pump & DG set at other station which is under control of this unit.

Tech	2
Helper	1
	=3

Total staff required in all three shift = $02 \times 03 + 03 \times 03 + 02 \times 03 + 02 \times 03 + 09 \times 03 = 54$

RG@12.5%	6.75	=07(say)
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Total		=61
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LR@12.5%	7.62	=08(say)
--------------------------	------	----------

Total		=69
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Staff required for establishment ,store, tender and other miscellaneous work =05

Sr.Clerk	1
Tech	2
Helper	2
	=05

Grand total staff required = $69 + 05 = 74$ staff.

4. **Sr.SEE/G/P/SHC unit:-** This unit has five important stations such as Saharsa , Supaul ,Darum Madhepura, Banmankhi , Raghapur. The broad gauge and electrification work are going on. As per discussion with concerned authority staff are working in 03 shifts to maintain the transformer, relay, DG set ,LT panel cable fault and emergency power trip ,Pump operation and maintenance and normal duty for collection of material from other depot, store, tender, establishment and other miscellaneous work such as wiring of

quarter and service building. As per observation by work study team the requirement of Electric (G) staff on need base at different points as below:-

Requirement of staff in Power house:-

04 staff required in each shift for DG operation at Saharsa, Supaul, Darum Madhepura, Banmankhi station.

Tech	3
Helper	1
	=4

04 staff is required in each shift for pump operation at above stations except Raghapur.

Tech	4
Helper	1
	=2

10 staff required for quarter and service building for emergency work for all above five important stations.

Tech	6
Helper	4
	=10

08 staff is required for station and service building wiring.

Tech	6
Helper	2
	=8

03 staff required for washing pit.

Tech	2
Helper	1
	=3

03 staff is required for officers rest house and waiting room.

Tech	2
Helper	1
	=3

There are 25 other station of SPJ Division except Saharsa , Supaul ,Darum Madhepura, Banmankhi , Raghapur for which at least.

15 staff is required for maintenance & operation .

Tech	10
Helper	5
	=15

Staff required for establishment ,store, tender=1 O.S

Total staff required in all three shift= $04 \times 03 + 04 \times 03 = 24$

RG@12.5%	3.00	=03(say)
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Total		=27
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LR@12.5%	3.37	=03(say)
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Total		=30
-------	--	-----

Total Staff required for normal duty = $10 + 08 + 03 + 03 + 15 + 01 = 40$

LR@12.5%	5.00	=05(say)
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Total		=45
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Grand total = $30 + 45 = 75$ staff

- 5 Sr. SEE/ P/NKE unit:-** Staff working in 03 shift to maintain and operation of Power house and pump operation, 02 shift for DG set ,LT panel , cable fault and emergency power trip .Normal duty for collection of material from other depot, store, tender, establishment and other miscellaneous work such as wiring of quarter and service building. As per observation by work study team the requirement of Electric (G) staff on need base at different points as below:-

Requirement of staff in Power house NKE , Bettiah and Bagaha-

02 staff required in each shift to maintain and operation of Power house and pump.

Tech	1
Helper	1
	=2

03 Staff is required in each shift for DG set operation and maintenance and emergency work.

Tech	2
Helper	1
	=3

03 staff is required for quarter and service building .

Tech	2
Helper	1
	=3

03 staff is required for store, tender, establishment and other miscellaneous work such as wiring of quarter and service building .

Tech	2
Helper	1
	=3

03 staff is required for operation and electric equipment maintenance for Bettiah and 03 for Bagaha.

Tech	4
Helper	2
	=6

Total staff required in all three shift= $02 \times 03 + 03 \times 03 = 15$

RG@12.5%	1.87	=02(say)
Total		=17

LR@12.5%	2.12	=02(say)
Total		=19

Total Staff required for normal duty = $03 + 03 + 03 + 03 = 12$

LR@12.5%	1.50	=01(say)
Total		=13

Grand total staff required = $19 + 13 = 32$

6 Sr. SEE/ P/RXL unit:- 37 small station(including halt) is under control of power/RXL.in which 06 important station such as **RXL, BMKI, SGL, CAA, MAI and Barganiya** has power house, Electric substation, 11 kv Transformer, relay, DG set, LT panel, cable fault and emergency power trip and pump operation. It supplies power to all service building and railway colony. Work is going on in three shift .

Requirement of staff in Power house RXL, BMKI, SGL, CAA, MAI and Barganiya :-

3 Staff required for UTS, Switch gear, FCD, wiring .

Tech 2

Helper 1

=3

2 Staff required for DG set maintenance, quarter and service building maintain ,pump operation and emergency work.

Tech 1

Helper 1

=2

Staff required in each shift for above station.

=02x03x06=36

Total =36+04+05(RG&LR)=45

3 Staff required for additional work such as store, tender, collection of material , establishment etc.

O.S 1

Tech 1

Helper 1

=3

Grand total =45+03

=48

7 Sr.DEE/G/SPJ office:- staff required at Sr.DEE/G office on need base as below:-

Requirement of store, ledger maintenance, material handling =04

C.O.S 2

O.S 2

=4

Requirement of pass, PTO, Establishment matter, charge sheet & punishment, letter correspondence etc. =03

C.O.S 1

O.S 1

Jr.Clark 2

=4

Confidential, Processing work of tender, requisition of stock and non stock items
=04

Total =04+03+04=11

[LR@12.5%](#)

1.37 =01(say)

Total

=12

Summary:-

Sr. SEE/ P/SPJ unit	80
Sr. SEE/ OD/SPJ unit	17
Sr.SEE/G/P/DBG unit	74
Sr.SEE/G/P/SHC unit	75
Sr. SEE/ P/NKE unit:	32
Sr. SEE/ P/RXLunit N	48
Sr.DEE/G/SPJ office	12

Grand Total= 338

Total Sanction Strength =343

Excess Staff

343-338 = 05 Staff

As per observation the work study team found that 338 staff is required for present work load of Electrical (G) of Samastipur Division. Hence work study team observed and discussed with concerning authority, that 05 vacant posts (04 vacant posts of Battery man and 01 vacant post of Jr. clerk) may be recommended for surrender.

CHAPTER IV

RECOMMENDATION

As there is no yardstick for calculation of staff. The work study team made its assessment of staff on need base. It is observed that 05 vacant posts (04 vacant posts of Battery man and 01 vacant post of Jr. clerk) may be surrendered .These 05 vacant posts is excess than requirement.

Total Sanction Strength	=343
Total Men on Roll	=295
Total Vacant post	=48
Total Staff required	=338
Excess Staff	=343-338= 05 Staff

After going through the requirement of staff, the work study team observed that the 05 vacant posts (04 vacant posts of Battery man and 01 vacant post of Jr. clerk) is recommended for surrender. and financial saving will be Rs 19.71 Lac per annum. The work is going on without any hindrance.

CHAPTER V

FINANCIAL SAVINGS

If recommendation of the work study report is implemented, the annual recurring financial savings will be as under:

S.No.	Designation	Scale	Grade pay	No of post	Saving per Annum per staff	Annual financial savings (Rs.)
01	Battery . Man	5200-20200	1900	04	394200	1576800
02	Jr. Clerk	5200-20200	1900	01	394200	394200
	Total			01		1971000 (19.71 lac)

CHAPTER VI

Summary :-

After critically examining the work load of various categories of staff working in Electrical (G) of Electrical Department of Samastipur Division, work study team proposes as below:-

S.No.	Designation	BOS	MOR	Requirement	Proposed surrender	Remark
01	Battery . Man	22	18	18	04	04 vacant post may be surrendered
02	Jr. Clerk	03	02	02	01	01 vacant post may be surrendered
	Total	25	20	20	05	

Annexure –I

Staff position of Electrical (G) of Electrical Department of Samastipur Division.

Sl NO.	Category	Scale	Grade pay	Sanctioned Strength	Men on Roll	vacancy
1	COS	9300-34800	4600	04	02	02
2	OS	9300-34800	4200	07	07	00
3	Sr.Clerk	5200-20200	2800	03	05	+02
4	Jr.Clerk	5200-20200	1900	03	02	01
5	Sr.Tech.(P)	9300-34800	4200	29	25	04
6	Tech. I (P)	5200-20200	2800	79	73	06
7	Tech.II(P)	5200-20200	2400	36	27	09
8	Tech.III(P)	5200-20200	1900	36	34	02
9	Sr. Tech.(MR)	9300-34800	4200	02	02	00
10	Tech. I (MR)	5200-20200	2800	05	02	03
11	Tech. II(MR)	5200-20200	2400	02	03	+01
12	Tech. III (MR)	5200-20200	1900	02	02	00
13	Tech. I (G)	5200-20200	2800	01	01	00
14	Tech. II(G)	5200-20200	2400	00	00	00
15	Tech. III (G)	5200-20200	1900	00	01	+01
16	B.Man	5200-20200	1900	22	18	04
17	Helper	5200-20200	1800	107	81	26
18	Sr. Tech.(Ref.)	9300-34800	4200	01	01	00
19	Tech. I (Ref.)	5200-20200	2800	00	00	00
20	Tech. II(Ref.)	5200-20200	2400	00	00	00
21	Tech. III (Ref.)	5200-20200	1900	00	04	+04
22	Sr. Tech.(PF)	9300-34800	4200	01	01	00
23	Tech. I (PF)	5200-20200	2800	01	02	+01
24	Tech. II(PF)	5200-20200	2400	01	01	00
25	Tech. III (PF)	5200-20200	1900	01	01	00
	Total			343	295	48



EAST CENTRAL RAILWAY

WORK STUDY REPORT

ON

To assess the utility of Electric General staff of
Electrical Department in Samastipur Division

EFFICIENCY CELL

EAST CENTRAL RAILWAY

HAJIPUR

STUDY NO. ECR/EFF./WSR/SPJ/16-17/18

**Office of the
General Manager (Vig)
Hajipur**

No.: - ECR/Eff./WSR/SPJ/16-17/18

Dated: 17.10.2016

Sr.DEE(G)

East Central Railway,
Samastipur

**Sub.: -Work study report on adequacy of staff strength of Electric (G)
of Electrical Department of Samastipur Division .**

In connection to the above, it is informed that a work study has been conducted by work study team on adequacy of staff strength of Electric (G) of Electrical Department of Samastipur Division.

The work study team recommended for surrender of 05 vacant post (04 vacant posts of Battery man and 01 vacant post of Jr.clerk) of Electric (G) of Electrical Department of Samastipur Division.

The report is being sent to your end for scrutiny, after scrutiny please send your reply within 10 days so that, the report may be finalized and intimated to Railway Board.

DA: Work study report in 22 pages.

(M.K.Shukla)
Efficiency Officer
for SDGM

Copy to: (i) CPO/ HJP for kind information please.
(ii) CEE/HJP for kind information please.
(iii) ADRM/SPJ for kind information please.
(iv) Sr. DPO/ SPJ for kind information please

for SDGM

REVIEW