

**WORK STUDY TO REVIEW
THE STAFF STRENGTH OF
SSE/ELEC/POWER/ALLP,
KTYM, ERS, ERM, IPN &
TCR SECTIONS-
TVC DIVISION
SOUTHERN RAILWAY**

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PLANNING BRANCH

G. 275 / WSSR-481819 / 2019-20

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TVC DIVISION
SOUTHERN RAILWAY**

STUDIED BY

**WORK STUDY TEAM
OF
PLANNING BRANCH**

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INDEX

SERIAL NUMBER	CONTENTS	PAGE NUMBER
(i)	ACKNOWLEDGEMENT	1
(ii)	AUTHORITY	
(iii)	TERMS OF REFERENCE	
(iv)	METHODOLOGY	
(v)	SUMMARY OF RECOMMENDATIONS	2
CHAPTERS		
I	INTRODUCTION	3 – 4
II	PRESENT SCENARIO	5 – 33
III	CRITICAL ANALYSIS	34-37
IV	PLANNING BRANCH'S REMARKS ON CO-ORDINATING OFFICER'S VIEWS	38
V	FINANCIAL SAVINGS	39
ANNEXURES		
I	S.A.V.E. STATEMENT OF SSE/ELEC/POWER/ALLP, KTYM, ERS, ERM, IPN & TCR SECTIONS	40
II	STATION WISE POSITION OF POWERSIDE AS ON 12.11.2019	41
III	BENCHMARKING ISSUED BY RAILWAY BOARD FOR THE MONTH OF SEPTEMBER 2019	42
IV	CO-ORDINATING OFFICER'S VIEWS	43



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(ii)**AUTHORITY**

Annual programme of work studies, approved by SDGM for the year 2018-19.

(iii)**TERMS OF REFERENCE**

To review the staff strength of SSE/POWER/ALLP, KTYM, ERS, ERM, IPN & TCR sections in Trivandrum Division/S.Rly.

(iv)**METHODOLOGY**

The following methodology has been adopted while conducting the study:

- 1) Collection of data
- 2) Discussion and interaction with officers of the Division and supervisors and staff of the unit.
- 3) Observation at Field Unit.
- 4) Working out the requirements on need base duly considering benchmarking, need basis, quantum of outsourcing and modernization.



(V)

SUMMARY OF RECOMMENDATIONS

---NIL---



CHAPTER I**1.0 INTRODUCTION****1.1 Electrical Department:**

Electrical Department of Indian Railways is responsible for the operation and maintenance of the Electrical Assets, as well as construction activities involving electrical installations.

Electrical Rolling Stock: Operation and maintenance of Electrical Locomotives, Electrical multiple units and Mainline electrical multiple units.

Electrical Traction Distribution Installations: Operation and Maintenance of Traction Sub-Stations, Switching stations and Traction overhead power supply systems and supervisory control and data acquisition systems.

Electrical General Services: Operation and maintenance of Train Lighting and Air-Conditioning equipment in coaches- Operation and maintenance of HT & LT Power Distribution, standby generators power backup systems, lighting, ventilation, Air-Conditioning, Lifts, Escalators and Pumping in stations, Offices, Workshops, Railway Colonies, Railway Hospitals, Passenger Reservation Systems, Level Crossings Gates etc.,

In Southern Railway, power supply for Railway Electric Traction is availed from State Electricity Boards of Tamil Nadu (TANGEDCO), Kerala (KSEB), Andhra Pradesh (APTRANSCO) and the power supply for General Services is availed from State Electricity Board of Karnataka (KPTL) also in addition to the three other State Electricity Boards indicated above.

1.2 One of the main departments of the Indian Railways, Electrical department shoulders lot of responsibility in proper operation of railway services. With Railway Electrification on the rise, Electric traction hauls almost 60% of freight traffic and 48% of passenger traffic.

1.3 The Electrical department is headed Member/Traction (*ex officio Secretary to the Govt. of India*) at the Railway Board level. At the Zonal Level, Principal Chief Electrical Engineer (PCEE) is the Principal Officer of the Electrical Department. Sr.Divisional Electrical Engineer (Sr.DEE) heads the organization at the Divisional Level. He is assisted by DEEs

(General, Traction Operation, Traction Distribution & Electrical Loco shed) and ADEEs.

- 1.4** The department, at the Divisional level is divided into a number of functional units vested with one or more of the functions of the department elaborated in the previous paragraphs.
- 1.5** The units considered for this study, SSE/P/ALLP, KTYM, ERS, ERM, IPN & TCR of Trivandrum Division, takes care of General Services maintenance of the assets under its jurisdiction.
- 1.6** The term Benchmark originates from the chiseled horizontal marks that surveyors made into which an angle iron could be placed to bracket (bench) and leveling rod, thus ensuring that the leveling rod can be repositioned in exactly the same location in future. Bench Marking is also a point of reference for a measurement. It is the process used in management in which organization evaluates various aspects of their process in relation to the best practice usually within their own sector.
- 1.7** Keeping the above aspects in view, the work study team has made an attempt to study the present system of working at SSE/POWER/ALLP, KTYM,ERS, ERM, IPN & TCR Sections of Trivandrum Division, through Benchmarking and need basis as means of reducing cost and right sizing the work force. With increased activity of Outsourcing and further growth of Technology, the work load vs requirement of staff is critically examined in the ensuing chapters.



CHAPTER II

2.0 PRESENT SCENARIO

2.1 Southern Railway has six (6) Divisions namely MAS, MDU, TPJ, PGT, TVC & SA. Electrical Department of TVC Division is functioning under the overall control of DEE/G/TVC who is assisted by ADEEs/TVC, SSEs and Supervisors in extending Co-operation for smooth and efficient functioning of the Department with sub units/sections. Among the six Divisions, Trivandrum Division comes under the category of Divisions consuming less than 23,00,000 Units.

2.2 ORGNISATIONAL SETUP:

DEE/G/TVC
ADEEs/G/TVC
SSE/ELEC/POWER/ALLP, KTYM, ERS, ERM, IPN & TCR
JE/ELEC/POWER
Sr.Tech/Power
Tech I/P
Tech II/P
Tech III/P
Helpers

2.3 DUTY HOURS & DEPLOYMENT OF STAFF AT VARIOUS PLACES IN THIS SECTIONs:

The duty hours of the staff of this sections is as below:

For SSEs and JE are General & Supervisory.

For Other staff

- a) 06.00 Hrs-14.00 Hrs;
- b) 14.00 Hrs-22.00 Hrs;
- c) 22.00 Hrs-24.00 Hrs & 00.00 Hrs-06.00 Hrs and
- d) 16.00 Hrs-24.00 Hrs & 00.00 Hrs-08.00 Hrs.

2.4 This workstudy deals with the staff strength review of the Six sections of TVC Division -SSE/POWER/ALLP, KTYM, ERS, ERM, IPN & TCR Section.

2.5 SSE/POWER/ALLP SECTION:

2.5.1 STAFF STRENGTH OF THIS SECTION:

S.A.V.E Statement of staff working in this section is as below:

SAVE' STATEMENT of SSE/E/ALLP as on 21.02.2019					
Category	Grade Pay (Rs.)	Sanction	Actual as on 12.11.19	Vacancy	Excess
SSE	4600	0	1	0	1
JE	4200	0	1	0	1
Sr. Technician	4200	1	0	1	0
Tech. Gr. I/P	2800	2	1	1	0
Tech. Gr. II/P	2400	2	1	1	0
Tech. Gr. III/P	1900	3	1	2	0
HELPER/P	1800	0	6	0	6
Total		8	11	5	8

According to the above scale check statement issued by DPO/TVC, there is no pinpointing of SSEs, JEs and Helpers in this section and net vacancy is 3.

2.5.2 JURISDICTION OF SSE/POWER/ALLP SECTION:

This section's jurisdiction is 70 Kms. between VAY-ALLP-CHPD from KM 28/500-600 to KM 98/300-400.

2.5.3 STATIONS IN THE SSE/ELEC/P/ALLP's JURISDICTION:

There are Twelve (12) stations in this Section as listed below.

S.No.	Station Name	Station Code	At Km.
1	CHEPPAD	CHPD	92

2	HARIPPAD	HAD	87
3	KARUVATTA	KVTA	81
4	THAKAZHI	TZHI	74
5	AMBALAPUZHA	AMPA	69
6	PUNNAPRA	PNPR	64
7	ALAPUZHA	ALLP	57
8	THUMPOLY	TMPY	53
9	KALAVOOR	KAVR	47
10	MARARIKULAM	MAKM	44
11	THIRUVIZHA	TRVZ	33
12	CHERTHALA	SRTL	33/100-200

2.5.4 ASSETS OF THIS SECTION:

1. No. of stations	-	12
2. No. of Level crossing gates (manned & unmanned gates)	-	78
3. No. of power line crossings	-	10
4. No. of service connections	-	103
5. No. of staff Quarters	-	132
6. No. of service buildings	-	30
7. No. of sub-station (HT)	-	01
8. No. of pumps	-	14
9. No. of UPS	-	15
10. No. of generators	-	05
11. No. of Retiring Rooms	-	02
12. No. of ORH	-	01
13. No. of Running Rooms	-	01
14. No. of Rail kalyana mandapam	-	NIL
15. No. of Transformers	-	02
16. No. of HT earths	-	12
17. No. of LT earths	-	409

18. No. of Lights	-	1704
19. No. of ceiling fans	-	543
20. No. of Air Circulator Fans	-	02
21. No. of Pre-Cooling Charging Points	-	14
22. No. of Pvt. Stalls	-	23
23. No. of PRS	-	03
24. No. of UTS	-	06
25. No. of Posts	-	512
26. No. of AC Plants	-	06
27. No. of Water Coolers	-	07
28. No. of Geysers	-	02
29. No. of High Masts	-	03
30. No. of Tower Light	-	01
31. No. of Fire Extinguishers	-	08
32. No. of Rolling Inspection Lights	-	10

2.5.5 DETAILS OF POWER SIDE ATTENTION:

Sl.No.	Year	No.of Failure/Maintenance
1	2017	1524
2	2018	1794
2	2019 (upto April 2019)	467
Grand Total (3 years)		3785
Average p.m. (3785/28)		135.18

2.5.6 OUTSOURCING:

Sl. No.	Details of Contractor	Details of Agreement
1	Smt. Sindhu Shibhu, Sheena mangal, manappally north, karunagapally	No.V/E.252/II/Misc.Dt.30.04.2018 KYJ Rly.Station (Outside agency for switching ON/OFF of passenger

		rake originating from KYJ Rly.Station)
2	M/s Diesel Engineering Works, Tripunithura, Eroor South P.O.	No.V/E.29/II/ACM/DG/ERM & ALLP dt. 03.09.2018 (AMC for Diesel Generator Set)

2.6 SSE/POWER/KTYM SECTION:

2.6.1 STAFF STRENGTH OF THIS SECTION:

S.A.V.E Statement of staff working in this section is as below:

SAVE' STATEMENT of SSE/E/KTYM as on 21.02.2019					
Category	Grade Pay (Rs.)	Sanction	Actual as on 12.11.19	Vacancy	Excess
SSE	4600	0	1	0	1
JE	4200	0	1	0	1
Sr. Technician	4200	2	2	0	0
Tech. Gr. I/P	2800	2	0	2	0
Tech. Gr. II/P	2400	1	2	0	1
Tech. Gr. III/P	1900	2	3	0	1
HELPER/P	1800	0	2	0	2
Total		7	11	2	6

According to the above scale check statement issued by DPO/TVC, there is no pinpointing of SSEs, JEs and Helpers in this section.

2.6.2 JURISDICTION OF SSE/POWER/KTYM SECTION:

This section's jurisdiction is 72 Kms. between ERS-KTYM-QLN from KM 9/700 to KM 81/800-900.

2.6.3 STATIONS IN THE SSE/ELEC/P/KTYM's JURISDICTION:

There are Thirteen (13) stations in this Section as listed below.

S.No.	Station Name	Station Code	At Km.
1	CHANGANACHERY	CGY	77/330
2	CHINGAVANAM	CGV	67/920
3	KOTTAYAM	KTYM	59/700
4	KUMARANALLOOR	KFQ	56/260
5	ETTUMANUR	ETM	49/240
6	KURUPPANTHARA	KRPP	41/380
7	KADUTHURUTHI	KDTY	38/230
8	VIAKOM RAOD	VARD	34/840
9	PIRIVAM ROAD	PVRD	28/620
10	KANJIRAMATTOM	KPTM	22/250
11	MULANTHURUTHY	MNTT	17/370
12	CHOTTANIKKARA ROAD	KFE	13/730
13	THIRUPUNITHRA	TRTR	9/730

2.6.4 ASSETS OF THIS SECTION:

1. No. of stations	-	13
2. No. of Level crossing gates (manned & unmanned gates)	-	35
3. No. of power line crossings	-	61
4. No. of service connections	-	61
5. No. of staff Quarters	-	171
6. No. of service buildings	-	NA
7. No. of sub-station (HT)	-	01
8. No. of pumps	-	23
9. No. of UPS	-	22
10. No. of generators	-	05
11. No. of Retiring Rooms	-	03

12. No. of ORH	-	02
13. No. of Running Rooms	-	01
14. No. of Rail kalyana mandapam	-	NIL
15. No. of Transformers	-	02
16. No. of HT earths	-	14
17. No. of LT earths	-	512
18. No. of Lights	-	1901
19. No. of ceiling fans	-	398
20. No. of Air Circulator Fans	-	06
21. No. of Pre-Cooling Charging Points	-	03
22. No. of Pvt. Stalls	-	33
23. No. of PRS	-	03
24. No. of UTS	-	09
25. No. of Posts	-	494
26. No. of AC Plants	-	06
27. No. of Water Coolers	-	08
28. No. of Geysers	-	02
29. No. of High Masts	-	07
30. No. of Tower Light	-	07
31. No. of Rolling Inspection Lights	-	00

2.6.5 DETAILS OF POWER SIDE ATTENTION:

Sl.No.	Year	No.of Failure/Maintenance
1	2017	4699
2	2018	5221
2	2019 (upto March 2019)	1568
Grand Total (3 years)		11488
Average p.m. (11488/27)		425.49

2.6.6 OUTSOURCING:

Sl. No.	Details of Contractor	Details of Agreement
1	M/s Zinzac sales & services	V/E.29/11/AMC/63KVA/KTYM dt. 17.05.2016
2	M/s Zinzac sales & services	V/E.29/11/AMC/30KVA/CGY dt. 17.05.2016

2.7 SSE/POWER/ERS SECTION:

2.7.1 STAFF STRENGTH OF THIS SECTION:

S.A.V.E Statement of staff working in this section is as below:

SAVE' STATEMENT of SSE/E/ERS as on 21.02.2019					
Category	Grade Pay (Rs.)	Sanction	Actual as on 12.11.19	Vacancy	Excess
SSE	4600	0	2	0	2
JE	4200	0	0	0	0
Sr. Technician	4200	2	2	0	0
Tech. Gr. I/P	2800	6	1	5	0
Tech. Gr. II/P	2400	3	0	3	0
Tech. Gr. III/P	1900	2	15	0	13
HELPER/P	1800	0	11	0	11
Total		13	31	8	26

According to the above scale check statement issued by DPO/TVC, there is no pinpointing of SSEs, JEs and Helpers in this section. Net staff strength is in excess by 18.

2.7.2 JURISDICTION OF SSE/POWER/ERS SECTION:

This section's jurisdiction is 78.13 Kms. between KRAN-ERS-VAY-TRTR.

2.7.3 STATIONS IN THE SSE/ELEC/P/ERS's JURISDICTION:

There are Fourteen (14) stations in this Section as listed below.

S.No.	Station Name	Station Code	At Km.
1	KORATTIANGADI	KRAN	69.04
2	KARUKUTTY	KUC	73.49
3	ANGAMALI	AFK	78.31
4	CHOWARA	CWR	84.21
5	ALUVA	AWY	87.43
6	KALAMESSERI	KLMR	93.59
7	IDAPPALLI	IPL	98.28
8	ERNAKULAM TOWN	ERN	104.40
9	ERNAKULAM JUNCTION	ERS	106.90
10	KUMBALAM	KUMM	07.71
11	ARUR	AROR	12.81
12	EZHUPUNNA	EZP	18.23
13	THURVUR	TUVR	23.30
14	VAYALAR	VAY	26.97

2.7.4 ASSETS OF THIS SECTION:

1. No. of stations	-	14
2. No. of Level crossing gates (manned & unmanned gates)	-	40
3. No. of power line crossings	-	27
4. No. of service connections	-	57
5. No. of staff Quarters	-	431
6. No. of service buildings	-	127
7. No. of sub-station	-	04
8. No. of pumps	-	98
9. No. of UPS	-	30

10. No. of generators	-	15
11. No. of Retiring Rooms	-	05
12. No. of ORH	-	01
13. No. of Running Rooms	-	02
14. No. of Rail kalyana mandapam	-	01
15. No. of Transformers	-	07
16. No. of HT earths	-	52
17. No. of LT earths	-	473
18. No. of Lights	-	4502
19. No. of ceiling fans	-	3427
20. No. of Air Circulator Fans	-	43
21. No. of Pre-Cooling Charging Points	-	53
22. No. of Pvt. Stalls	-	84
23. No. of PRS	-	07
24. No. of UTS	-	10
25. No. of Posts	-	494
26. No. of AC Plants	-	48
27. No. of Water Coolers	-	20
28. No. of Geysers	-	10
29. No. of High Masts	-	11
30. No. of Tower Light	-	01
31. No. of Fire Extinguishers	-	12
32. No. of Rolling Inspection Lights	-	16

2.7.5 DETAILS OF POWER SIDE ATTENTION:

Sl.No.	Year	No.of Failure/Maintenance
1	2017	7589
2	2018	6090
2	2019 (upto April 2019)	2200
Grand Total (3 years)		15879

Average p.m. (15879/28)	567.10
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2.7.6 OUTSOURCING:

Sl. No.	Details of Contractor	Details of Agreement
1	M/s. Unique Diesel p. ltd, Kochi-18	AMC of DG Set @ ERS V/E.29/II/AMC/160KVA/ERS dt.17/01/2019
2	M/s. Sunitha Sales and Services p.ltd, Thripunithura	AMC of DG Set @ ERN V/E.29/II/AMC/62KVA/ERN dt.22.08.2016
3	M/s. Calicut Diesel P Ltd	AMC of DG Set @ AWY V/E.29/II/AMC/30KVA/AWY dt.29.02.2016

2.8 SSE/POWER/ERM & IPN SECTIONS:

2.8.1 STAFF STRENGTH OF THIS SECTION:

S.A.V.E Statement of staff working in this section is as below:

SAVE' STATEMENT of SSE/E/ERM & IPN as on 21.02.2019					
Category	Grade Pay (Rs.)	Sanction	Actual as on 12.11.19	Vacancy	Excess
SSE	4600	0	8*	0	8*
JE	4200	0	0	0	0
Sr. Technician	4200	1	3	0	2
Tech. Gr. I/P	2800	3	2	1	0
Tech. Gr. II/P	2400	0	1	0	1

Tech. Gr. III/P	1900	2	4	0	2
HELPER/P	1800	0	4	0	4
Total/ERM & IPN		6	22	1	17
*7 SSEs of ERM are earmarked for working at TL &AC.					

According to the above scale check statement issued by DPO/TVC, there is no pinpointing of SSEs, JEs and Helpers in this section. Net staff strength is in excess by 16 in this section.

2.8.2 JURISDICTION OF SSE/POWER/IPN & ERM SECTION:

This section's jurisdiction contains 3 maintenance yards

1. Eranakulam Marshalling Yard (ERM) -Coaching Maintenance.
2. Ernakulam Goods Yard (ERMG)- Wagon Maintenance.
3. Irumpanam Good Yard (IPN)- Wagons & Tank Maintenance.

ERM and ERMG spread over 110 acres of land and IPN 16 acres of land. In addition to the above maintenance of Break Down Van also falls under the jurisdiction of SSE/E/IPN.

2.8.3 ASSETS OF THIS SECTION:

- | | | |
|---|---|-----|
| 1. No. of Yards | - | 03 |
| 2. No. of Level crossing gates
(manned & unmanned gates) | - | NIL |
| 3. No. of power line crossings | - | NIL |
| 4. No. of service connections | - | 02 |
| 5. No. of staff Quarters | - | 208 |
| 6. No. of service buildings | - | 24 |
| 7. No. of sub-station | - | 02 |
| 8. No. of pumps | - | 15 |
| 9. No. of UPS | - | NIL |
| 10. No. of generators | - | 28 |
| 11. No. of Railway Institutes | - | 02 |

12. No. of Transformers	-	04
13. No. of HT earths	-	22
14. No. of LT earths	-	291
15. No. of Lights	-	1851
16. No. of ceiling fans	-	717
17. No. of Pre-Cooling Charging Points	-	15
18. No. of Battery Chargers	-	10
19. No. of Posts	-	494
20. No. of AC Plants	-	nil
21. No. of Water Coolers	-	04
22. No. of Geysers	-	nil
23. No. of High Masts	-	nil
24. No. of Tower Light	-	27
25. No. of Fire Extinguishers	-	10
26. No. of Rolling Inspection Lights	-	nil

2.8.4 DETAILS OF POWER SIDE ATTENTION:

Sl.No.	Year	No.of Failure/Maintenance
1	2017	3396
2	2018	2978
2	2019 (upto April 2019)	1136
Grand Total (3 years)		7510
Average p.m.(7510/28)		268.21

2.8.5 OUTSOURCING:

Sl. No.	Details of Contractor	Details of Agreement
1	M/s. Diesel Engineering Works,	AMC of DG Set @ ERM KVA ART

	Tripunithura, Ernakulam	V/E.29/II/AMC/15KVA/ART-ERM dt.14.1.2018
2	M/s. Diesel Engineering Works, Tripunithura, Ernakulam	AMC of DG Set @ ERM Sub-Station 250KVA V/E.29/II/AMC/DG Set/ALLP & ERM dt.03.09.2018
3	M/s. Diesel Engineering Works, Tripunithura, Ernakulam	AMC of DG Set @ IPN Sub-Station 62.5 KVA V/E.29/II/AMC/DG Set/TVC Dn dt.23.04.2018

2.9 SSE/POWER/TCR SECTION:

2.9.1 STAFF STRENGTH OF THIS SECTION:

S.A.V.E Statement of staff working in this section is as below:

SAVE' STATEMENT of SSE/E/TCR as on 21.02.2019					
Category	Grade Pay (Rs.)	Sanction	Actual as on 12.11.19	Vacancy	Excess
SSE	4600	0	1	0	1
JE	4200	0	0	0	0
Sr. Technician	4200	0	2	0	2
Tech. Gr. I/P	2800	4	2	2	0
Tech. Gr. II/P	2400	2	1	1	0
Tech. Gr. III/P	1900	2	4	0	2
HELPER/P	1800	0	7	0	7

Total	8	17	3	12
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According to the above scale check statement issued by DPO/TVC, there is no pinpointing of SSEs, JEs, Sr.Tech. and Helpers in this section. There is a net excess of 9 staff in this section.

2.9.2 JURISDICTION OF SSE/POWER/TCR SECTION:

This section's jurisdiction is 80 Kms. between SRR-DINR & TCR-GUV.

2.9.3 STATIONS IN THE SSE/ELEC/P/TCR's JURISDICTION:

There are Thirteen (13) stations in this Section as listed below.

S.No.	Station Name	Station Code	At Km.
1	VALLATHOL NAGAR	VTK	4
2	MULLORCARAI	MUC	7
3	WADAKKANCHERY	WKI	16
4	MULANGUNATHUKAVU	MGK	23
5	POONKUNNAM	PNQ	30
6	TRICHUR	TCR	32
7	OLLUR	OLR	39
8	PUDUKKAD	PUK	45
9	NELLAI	NYI	52
10	IRINJALKUDA	IJK	56
11	CHALAKKUDI	CKI	62
12	DIVINE NAGAR	DINR	65
13	GURUVAYOOR	GUV	22

2.9.4 ASSETS OF THIS SECTION:

1. No. of stations	-	13
2. No. of Level crossing gates (manned & unmanned gates)	-	32
3. No. of power line crossings	-	31
4. No. of service connections	-	54

5. No. of staff Quarters	-	227
6. No. of service buildings	-	71
7. No. of sub-station	-	03
8. No. of pumps	-	26
9. No. of UPS	-	22
10. No. of generators	-	05
11. No. of Retiring Rooms	-	14
12. No. of ORH	-	01
13. No. of Running Rooms	-	02
14. No. of Rail kalyana mandapam	-	NIL
15. No. of Transformers	-	05
16. No. of HT earths	-	39
17. No. of LT earths	-	632
18. No. of Lights	-	3179
19. No. of ceiling fans	-	839
20. No. of Air Circulator Fans	-	18
21. No. of Pre-Cooling Charging Points	-	13
22. No. of Pvt. Stalls	-	57
23. No. of PRS	-	05
24. No. of UTS	-	12
25. No. of Posts	-	372
26. No. of AC Plants	-	26
27. No. of Water Coolers	-	10
28. No. of Geysers	-	04
29. No. of High Masts	-	08
30. No. of Tower Light	-	02
31. No. of Fire Extinguishers	-	09
32. No. of Rolling Inspection Lights	-	NIL

2.9.5 DETAILS OF POWER SIDE ATTENTION:

Sl.No.	Year	No.of Failure/Maintenance
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1	2017	3055
2	2018	2698
2	2019 (upto July 2019)	1303
Grand Total (3 years)		7056
Average p.m.(7056/31)		227.61

2.9.6 OUTSOURCING:

Sl. No.	Details of Contractor	Details of Agreement
1	SS Electricals- Wiring of station building at Punkunnam	AMC of DG Set @ KTYM VEG/OT/06/2018-19 for Rs.6,62,155/-
2	Sri Sakthi Electricals- Platform elimination improvement work	AMC of DG Set @ KTYM V/E.61/11/TCR PF Lights/80-90 for Rs.9,60,000/-
3	Sri Sakthi Electricals- electrification of new quarters	AMC of DG Set @ KTYM V/E.Agt/11/17-18 for Rs.8,66,991/-
4	Diesel Engineering Works,TRTR	AMC of DG Set 15 KVA @ CKI & TCR V/E.29/11/AMC/DGSET/TVC for Rs.1,65,500/-
5	M/s.Sunitha Diesel, Cochin	AMC of DG Set 15 KVA @ CKI & TCR V/E.29/11/AMC/62.5 KVA DGSET/TVC for Rs.49,680/-

2.10 DUTIES PERFORMED IN THIS SECTION:

2.10.1 DUTIES PERFORMED BY THE ELECTRICAL STAFF:

- Arrangement of Power Supply to the Whole Section
- Pumps are being operated wherever Station Staff are not specifically deputed for that purpose and maintenance of all pumps in this section.
- Operating AT Panels and Maintenance in this whole section.
- Electrical Maintenance of all Staff Quarters including DRM Bungalow and Officer's Quarters.
- Correspondence with TNEB.
- Maintenance of DG Set and Transformers, which are not included in the AMC.
- Maintenance of AC Plants and Water Coolers, which are not included in the AMC.
- Lighting and Power Supply arrangements during Special Functions held at Divisional Offices.
- Observations of power line crossings.
- Maintenance of Solar Water Heaters and Geysers, which are not included in the AMC.
- Observation and Solar Panel and Plant.
- Electrical maintenance of all Stations, LC Gates, Service Buildings including DRM Office.
- Electrical maintenance of all UPS at UTS, PRS and Divisional Office.
- Attending to Electrical works when Vacation and Occupation of Quarters.
- Maintaining and attending fuse calls in co-ordination with EB.
- Handing over bill receipts and collecting acknowledgements for the same.
- Initiating penalty for late payment of the Power Bills.

- Fan OH work.
- Monthly meter reading in Staff Quarters, Outsider supply and private stalls, to post in EMIS module for recovery.
- Collection of materials from stores and firms.
- Frequently used items e.g. FL, Choke, PVC Tape, HSD Oil and Lube Oil are procured from imprest cash duly obtaining special sanction.

2.10.2 DUTIES OF SSE/ELECTRICAL:

- Observation of the rules and circulars issued by the CEE from time to time and ensuring that all the staffs under his charge updated with relevant rules and working method and efficiently performing their allotted duties.
- Inspection notes of higher authorities are duly received and immediate action to be initiated.
- Looking after the day to day maintenance activities of all electrical items in their sections.
- Looking after the maintenance, operation and utilization of all electrical assets related to electrical energy in their area of jurisdiction.
- Maintaining all the stores activities like as indenting the indents, collection of materials for section, attention of purchase order (P.O.), challan.
- Attention of daily positions of all parameters which is installed in the section.
- Attending major complaints like pump, transformer failure etc.
- Regular inspection of ongoing departmental work and contractors work in the section.
- Conducting Inspection periodically-routine, night and surprise inspection.
- Welfare measures to the staff- Issuance of PASS/PTO, other Forms/Applications etc.
- Regular maintenance of Registers and Files.
- Deployment of staff for lookout duties as and when necessary.
- Updating section assets records.
- Preparation of monthly statements, preparation of outsider and temporary supply meter reading statement.

- Proposal for new work.
- Inspection of all power line crossings.
- Conducting of Safety Check Drive of Ceiling Fans in all quarters, Stations Service Buildings and Shelter Areas once in a year.

Joint inspection

- Joint inspection of CLS Panel with SSE/Signal, once in a year.
- Joint inspection of CLS Panel with SSE/Tele, once in a year.
- Joint inspection of CLS Panel with SSE/PSI, once in a year.
- Joint inspection with SSE/Works- Qrs. New Buildings, once in a year.
- Joint Inspection with CCI & TI in regard to their departmental assets requiring power supply & UPS.
- Joint Inspection of the Station Premises, with SIG Group: SS, SSE/Works, TI, SSE/SIG, RPF, CCI.
- Joint Inspection with CCI- Cycle stands, Private stalls, Commercial offices, Advertisements & Hoardings which require Power, Sign Boards etc.

Stores

- Preparation of indent and collection of materials for maintenance purpose.
- Preparation of indents as pre-section requirement.
- Certification of bills and returns of supplied materials.
- Updating of Daily Book of Receipt (DBR) and Daily Book of Issues (DBI).
- Updating Revenue, Consumable, released and T&P ledgers.
- Preparation of returns of stores for T&P, Revenue, consumables and released ledgers.
- Preparation of DS8 to dispose scrap & DS8 of materials
- Sending letters regarding sectional requirements to divisional office.
- Issue of materials to staff for maintenance.
- Managing and coordinating with various inspecting officials from stores, personnel, accounts, audit etc.
- Preparation of challans for materials issued.
- Self-stock verification.

2.10.3 DUTIES OF TECHNICIAN/POWER:

(Specific) Looking after the Efficient maintenance of all the existing installations is in good and working condition and also ensures that all the safety appliances related to the works spot is in good and working condition and they work on site with 2 or 3 nos. of Helpers according to the distribution of work/failure which is distributed by the SSE/JE.

2.11 DETAILS OF POWER CONSUMPTION:

2.11.1SSE/POWER/ALLP SECTION:

ALLP DEPOT CONSUMPTION DETAILS 2017-19												
	Mar-19	Feb-19	Jan-19	Dec-18	Nov-18	Oct-18	Sep-18	Aug-18	Jul-18	Jun-18	May-18	Apr-18
SECTOR	ALLP	ALLP	ALLP	ALLP	ALLP	ALLP	ALLP	ALLP	ALLP	ALLP	ALLP	ALLP
Coaching	629	742	530	732	510	428	510	450	470	525	645	650
Yards	324	422	304	415	240	1920	160	190	195	202	225	214
Railway stations	9889	11637	9760	11637	10211	11090	10190	10790	10895	11093	11997	12397
Goods shed	403	440	318	438	255	118	102	110	120	170	196	202
Running rooms	425		375		320	252	307	310	320	410	460	463
Pumping stations	5822	6884	6797	6441	5787	7079	5499	5444	5349	5591	5758	5528
Health Unit	170	280	227	280	180	155	102	99	93	105	112	110
Others	5044	6151	5869	6168	5930	5552	5061	5078	4775	4940	5018	5030
Total Railway services	22706	26556	24180	26111	23433	26594	21931	22471	22217	23036	24411	24594
Colonies	7964	7694	7216	7788	8313	8774	7588	7573	8627	8939	10058	9057
Outsiders	11362	10164	11316	10867	10296	9430	10193	9695	8287	10727	10427	10995
Avg.AT supply for 6 station	9390	9390	9390	9390	9390	9390	9390	9390	9390	9390	9390	9390
Avg.AT supply for 20 LC gates	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
Grant total	53922	56304	54602	56656	53932	56688	51602	51629	51021	54592	56786	56536
CONSUMPTION FOR THE YEAR 2018-19											6,57,270	

	Mar-18	Feb-18	Jan-18	Dec-17	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17
SECTOR	ALLP	ALLP	ALLP	ALLP	ALLP	ALLP						
Coaching	660	710	750	536	620	680	670	700	600	830	850	900

Yards	205	215	245	150	180	176	150	172	158	167	140	150
Railway stations	13245	11666	13900	12300	13000	13131	10200	12090	11350	13600	10536	15000
Goods shed	190	175	210	180	220	190	190	225	210	220	180	2810
Running rooms	461	435	490	470	580	550	510	610	590	680	670	550
Pumping stations	4549	4418	4935	4268	3954	4943	4630	6284	4455	6701	5222	5685
Health Unit	130	147	190	140	170	250	210	275	250	300	400	430
Others	5263	5133	6313	6265	6480	5889	5290	6109	6904	6977	6590	6259
Total Railway services	24703	22899	27033	24309	25204	25809	21850	26465	24517	29475	24588	31784
Colonies	8038	9826	9298	8297	9852	9126	10649	9787	10164	10695	10980	9718
Outsiders	8634	11768	9397	8148	9970	8659	9264	9071	7811	8300	10431	9138
Avg.AT supply for 6 station	9390	9390	9390	9390	9390	9390	9390	9390	9390	9390	9390	9390
Avg.AT supply for 20 LC gates	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
Grant total	53265	56383	57618	52644	56916	55484	53653	57213	54382	60360	57889	62530
CONSUMPTION FOR THE YEAR 2017-18											678337	
GRAND TOTAL 2017-19 (24 MONTHS)											13,35,607	
AVERAGE P.M.											55,650.29	

2.11.2 SSE/POWER/KTYM SECTION:

KTYM DEPOT CONSUMPTION DETAILS 2017-19												
Sector	Mar-19	Feb-19	Jan-19	Dec-18	Nov-18	Oct-18	Sep-18	Aug-18	Jul-18	Jun-18	May-18	Apr-18
SECTOR	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM
Coaching						840	0	0	0		0	
Yards	820	890	896	892	871		838	746	810	826	894	903
Railway stations	24876	26331	26688	27985	25799	24650	20921	19940	20461	26128	24153	24202
Goods shed	410	420	440	460	420	635	650	782	800	870	891	900
Running rooms	1685	1610	1600	1603	1685	1610	1512	1390	1310	1360	1101	1069

Pumping stations	3482	3474	3489	3558	3206	3109	3110	3132	2978	2944	3048	2961
Health Unit	926	930	930	936	901	800	826	840	812	870	845	820
Others	3775	4208	4346	4524	3820	3700	3700	3576	3760	3812	3958	3990
Total Railway services	35974	37863	38389	39958	36702	35344	31557	30406	30931	36810	34890	34845
Colonies	11030	10172	9480	10655	10592	9393	8992	8858	9835	9918	9462	11270
Outsiders	15884	15980	16775	17363	15183	16016	16240	12194	12679	15103	18449	20069
Avg.AT supply for 9 station	14085	14085	14085	14085	14085	14085	14085	14085	14085	14085	14085	14085
Avg.AT supply for 9 LC gates (13 from Jan)	1625	1625	1625	1625	1125	1125	1125	1125	1125	1125	1125	1125
Grand Total	78598	79725	80354	83686	77687	75963	71999	66668	68655	77041	78011	81394
CONSUMPTION FOR THE YEAR 2018-19											919781	

KTYM consumption 2017-18 (in kWh)												
Sector	Mar-18	Feb-18	Jan-18	Dec-17	Nov-17	Oct-17	Sep-17	Aug-17	Jul-18	Jun-17	May-17	Apr-17
SECTOR	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM	KTYM
Yards	870	767	892	680	660	873	859	880	830	661	1038	1172
Railway stations	28181	26229	27750	31867	27423	24603	30085	27675	20725	25180	26349	24852
Goods shed	910	914	920	952	940	980	996	1070	1100	1170	1191	1123
Running rooms	1156	1160	1185	1240	1310	1400	1435	1415	1480	1540	1601	1510
Pumping stations	2946	2939	3330	3468	3208	2880	3048	2854	2950	3714	3137	3073
Health Unit	892	952	960	945	971	993	945	1100	1214	1318	1310	1204
Printing press		0	0			0		4022	0	0		0
Others	4149	4313	4435	4587	4637	4074	4060	0	3757	4179	3944	3890
Total Railway services	39104	37274	39472	43739	39149	35803	41428	39016	32056	37762	38570	36824
Colonies	10318	11063	11010	10644	11182	12057	11254	12277	11858	13694	10997	12114

Outsiders	15347	18653	18241	16946	15077	14793	15186	16941	16101	19102	19926	20236
Avg.AT supply for 9 station	14085	14085	14085	14085	14085	14085	14085	14085	14085	14085	14085	14085
Avg.AT supply for 9 LC gates	1125	1125	1125	1125	1125	1125	1125	1125	1125	1125	1125	1125
Grand Total	79979	82200	83933	86539	80618	77863	83078	83444	75225	85768	84703	84384
CONSUMPTION FOR THE YEAR 2017-18											987734	
GRAND TOTAL 2017-19 (24 MONTHS)											1907515	
AVERAGE P.M.											79479.79	

2.11.3 SSE/POWER/ERS SECTION:

[illegible]

Grand Total	264182	276358	266172	275438	262635	265719	258258	253107	252928	277597	283961	311224
CONSUMPTION FOR THE YEAR 2018-19											3247579	

ERS consumption 2017-18 (in kWh)												
	Mar-18	Feb-18	Jan-18	Dec-17	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17
SECTOR	ERS	ERS	ERS	ERS	ERS	ERS	ERS	ERS	ERS	ERS	ERS	ERS
Diesel shed	14825	21576	18700	17470	17910	15970	15030	14658	19473	17918	17267	18492
Yards	4600	5100	7634	4664	4472	4287	4073	3889	4996	5896	5377	6122
Railway stations	47366	52366	54666	46666	48858	47658	46583	46066	48513	50038	48731	46449
Goods shed	3349	5149	6649	5206	5446	5076	4649	4358	5279	6383	5750	6398
Running rooms	14614	18614	19814	16414	17886	17086	16069	15342	16707	17642	16425	17427
Pumping stations	12919	14919	14715	8815	13235	11975	11228	10515	11331	12418	10907	11626
Health Unit	927	1049	1049	749	1035	695	525	504	849	1230	1324	1950
Others	26671	32128	36543	28343	34170	28118	31470	31067	33203	35714	33482	35674
Total Railway services	125271	150901	159770	128327	143012	130865	129627	126399	140351	147239	139263	144138
Colonies	37922	41235	39710	36942	40117	37523	39942	41340	39022	43104	46309	51350
Outsiders	88527	88512	46327	44727	47187	46193	46193	45969	37124	40440	48224	45667
Avg.AT supply for 13 station	20345	20345	20345	20345	20345	20345	20345	20345	20345	20345	20345	20345
Avg.AT supply for 8 LC gates	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Grant total	273065	301993	267152	231341	251661	235926	237107	235053	237842	252128	255141	262500
CONSUMPTION FOR THE YEAR 2017-18											3040909	
GRAND TOTAL 2017-19 (24 MONTHS)											6288488	
AVERAGE P.M.											262020.33	

2.11.4SSE/POWER/IPN & ERM SECTION:

IPN DEPOT CONSUMPTION DETAILS 2018-19												
	Mar-19	Feb-19	Jan-19	Dec--18	Nov-18	Oct-18	Sep-18	Aug-18	Jul-18	Jun-18	May-18	Apr-18
SECTOR	IPN	IPN	IPN	IPN	IPN	IPN	IPN	IPN	IPN	IPN	IPN	IPN
Wagon depot	4422	4372	4266	5660	6300	7805	3775	4062	4268	3775	4527	4227
Coaching	15804	15095	14022	16076	10027	13077	11846	12846	12846	11846	13846	14310
Yards	4003	4025	4739	6193	5635	6493	4714	5052	5063	4714	5294	5767
Pumping stations	4251	4308	4377	5949	0	329	5717	4900	5193	5717	5334	5203
Workshops	0	0	0	0	0	0	0	1567	0	0	0	0
Others	2455	4367	2311	2544	3400	2240	3188	415	1027	3188	1737	1126
Total Railway services	30935	32167	29715	36422	26253	29944	29240	28842	28397	29240	30738	30633
Colonies	11873	12973	3823	11172	11887	11563	12986	11866	12246	12986	12986	13530
AT Supply for ERS Cabin C,D&E	4575	5320	4678	4875	5213	4952	5232	4498	4689	5100	4985	4810
Grant total	47383	50460	38216	52469	43353	46459	47458	45206	45332	47326	48709	48973
CONSUMPTION FOR THE YEAR 2018-19											561344	

IPN consumption 2017-18 (in kWh)												
	Mar-18	Feb-18	Jan-18	Dec-17	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17
Wagon depot	4227	3427	4572	4581	2965	3935	3770	3160	3862	3880	2903	3820
Coaching	5310	5980	6420	6610	6187	6462	6930	7300	6424	6231	6340	6320
Yards	5767	5813	6967	6415	8717	5762	5608	8483	6005	5114	6858	6068
Pumping stations	5203	5114	5488	5533	1566	6859	7189	7305	6795	6258	6266	7775
Others	1126	2350	2480	3125	3824	4041	3598	3823	3501	3203	4671	3142
Total Railway services	21633	22684	25927	26264	27489	27059	27095	30071	26587	24686	27038	27125

Colonies	13530	13658	13363	13178	13228	12517	14878	13532	11726	14550	15342	15990
AT Supply for ERS Cabin C,D&E	4300	4210	4530	5200	4870	4900	5010	4045	4600	4890	4760	4590
Grand Total	39463	40552	43820	44642	45587	44476	46983	47648	42913	44126	47140	47705
CONSUMPTION FOR THE YEAR 2017-18											535055	
GRAND TOTAL 2017-19 (24 MONTHS)											1096399	
AVERAGE P.M.											45683.29	

2.11.5SSE/POWER/TCR SECTION:

TCR DEPOT CONSUMPTION DETAILS Nov 2017-Oct 2018												
	Mar-19	Feb-19	Jan-19	Dec-18	Nov-18	Oct-18	Sep-18	Aug-18	Jul-18	Jun-18	May-18	Apr-18
SECTOR	TCR	TCR	TCR	TCR	TCR	TCR	TCR	TCR	TCR	TCR	TCR	TCR
Railway stations	33152	38017	25228	34628	29911	30222	23896	28067	27927	29408	34249	29928
Goods shed	400	400	400	375	400	450	400	0	400	450	400	500
Running rooms	1438	597	733	1161	1164	1206	964	999	1119	1320	1397	1415
Pumping stations	5033	4743	5917	4403	4882	4135	4312	3458	3993	4337	3368	4071
Health Unit	326	279	258	458	507	567	450	400	430	460	453	661
Others	8936	9749	11333	9494	10631	10378	9976	8569	8174	10841	11065	12262
Total Railway services	49285	53785	43869	50519	47495	46958	39998	41493	42043	46816	50932	48837
Colonies	13762	11513	12655	11227	12432	12077	11902	9670	11701	14272	14015	16504
Outsiders	35678	35437	40712	33500	37201	34750	36540	25976	32555	36517	36661	41178
Avg.AT supply for 10 station	15650	15650	15650	15650	15650	15650	15650	15650	15650	15650	15650	15650
Avg.AT supply for 11 LC gates	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Grand Total	115750	117760	114261	112271	114153	110810	105465	94164	103324	114630	118633	123544
CONSUMPTION FOR THE YEAR 2018-19											1344765	

	TCR consumption 2017-18 (in kWh)											
	Mar-18	Feb-18	Jan-18	Dec-17	Nov-18	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17
SECTOR	TCR	TCR	TCR	TCR	TCR	TCR	TCR	TCR	TCR	TCR	TCR	TCR
Transshipment points	0	0	0			0		0	0	0	0	35335
Railway stations	29201	28358	33812	26301	34844	25656	34180	29914	26556	25819	33914	550
Goods shed	450	500	450	500	500	500	500	400	500	600	500	1442
Running rooms	1207	1180	1737	1866	2279	1221	1231	925	853	1137	1260	3849
Pumping stations	2981	3669	3682	4286	3512	4275	3536	3598	3841	3119	3970	0
Hospitals	0	0	0			0		0	0	0	0	839
Health Unit	447	639	457	591		568	550	532	540	750	590	0
Printing press	0	0	0			0		0		0	0	14143
Others	12026	11851	11343	12122	10256	11838	12273	11521	11536	15857	11685	56158
Total Railway services	46312	46197	51481	45666	51391	44058	52270	46890	43826	47282	51919	1550
Colonies	13422	13422	12342	16120	12847	14032	14333	14176	13863	14518	15436	30733
Outsiders	30564	32782	28702	35483	28221	32619	30892	30581	28307	29897	30993	88441
Avg.AT supply for 10 station	15550	15550	15550	15550	15550	15550	15550	15550	15550	15550	15550	15550
Avg.AT supply for 11 LC gates	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
Grand Total	107148	109251	109375	114119	109309	107559	114345	108497	102846	108547	115198	137574
CONSUMPTION FOR THE YEAR 2017-18											1343768	
GRAND TOTAL 2017-19 (24 MONTHS)											2688533	
AVERAGE P.M.											112022.20	



CHAPTER III

3.0 CRITICAL ANALYSIS

3.1 GENERAL ANALYSIS:

Indian Railway is the biggest transportation Service Industry and largest employer owned by the Government of India. In the last decade, Railways has been struggling to generate higher surplus. Consequently, the operating ratio has consistently been higher than 90% for more than a decade. In 2017-18, the ratio worsened to 98.4%, which is the worst since 2000-01, when ratio was 98.3%. Operating ratios of Indian Railways is tabulated as under:

Year	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Operating Ratio (%)	75.94	90.46	95.28	94.59	94.85	90.19	93.6	91.3	90.05	96.2	98.4	96.2 (RE)	95.0 (RE)

Generally Operating Ratio of 80% or lower is considered desirable in Railways. But IR's Operating Ratio is yet to reach appreciable manner. To achieve the maximum "economy in operation" and maximize the productivity rightsizing of man power is the prime tool since staff cost has been taking a Lion's share in the Indian Railways Budget Expenditure.

The Committee on Restructuring Railways had observed that the expenditure on staff is extremely high and unmanageable. This expense is not under the control of Railways and keeps increasing with each Pay Commission revision. It has also been observed that employee costs (including pensions) is one of the key components that reduces Railways' ability to generate surplus, and allocate resources towards operations.

3.2 STAFF REQUIREMENT:

Staff requirement is calculated based upon latest techniques in practice. As Yard stick circulated is supposedly old and we cannot always rely on that, the Railway Board has framed a new concept 'Benchmarking', to calculate workforce requirement. This concept is Zero based, very useful in comparing units, as data of each unit is compared meticulously. It is very helpful in identifying problematic/slacking units by comparison, and

allows other units to improve upon their score, with that of best unit in a phased and planned manner by setting different targets, achieving the Best Benchmark thereby finally. This work study team has, keeping this in view, based upon data and field study has arrived at numbers pertaining to requirement of staff of this section after thorough analysis.

- 3.3 The Division wise Man Power Ratio (MPR) per thousand units based upon September 2019 issued by the Directorate of Efficiency & Research , RB, (Copy placed as Annexure III) is given below:

Dn	MAS	PGT	TPJ	MDU	TVC	SA	Current IR Average	Current Bench Marking
MPR	0.18	0.14	0.17	0.18	0.16	0.14	0.22	0.07 BKN. Divn of NWR

This TVC division falls under Divisions consuming less than 2,30,000 Units.

3.4 **AVERAGE MONTHLY CONSUMPTION:**

Average monthly consumption in units (in Kwh) for the six sections from April'2017 to March'2019 (24 months) is as below:

SSE/POWER/ALLP	:	55,650.29
SSE/POWER/KTYM	:	79,479.79
SSE/POWER/ERS	:	2,62,020.33
SSE/POWER/IPN & ERM	:	45,683.29
SSE/POWER/TCR	:	1,12,022.20

The average power consumption for the above six sections jurisdiction per month are considered datum for manpower arrival by applying IR Bench Marking in the following paragraphs.

3.5 **POWER SIDE-STAFF REQUIREMENT AS PER BENCHMARKING:**

The work load of Power Maintenance is quantified in terms of Power Consumption of the Unit concerned.

Staff requirement of Power-Side is calculated as below:

BASIS	Yardstick	Benchmark (BKN Division/NWR- NR: 0.07)	BM-IR Average (0.22)
CALCULATION	Average monthly consumption X 0.20/1000	Average monthly consumption X 0.07/1000	Average monthly consumption X 0.22/1000

However it is to be noted here that all the sections of Trivandrum Division, pinpointing of SSEs, JEs and Helpers are not done, instead utilization of staff at respective sections is being followed.

(Yard Stick-As per the Railway Board's Circular No.2001/Elect/(G)/138/3 dated 16.03.2006, 0.20 staff per '000 units)

3.5.1 STAFF REQUIREMENT:

BASIS	Yardstick	Benchmark (BKN Division/N WR-NR: 0.07)	BM-IR Average (0.22)
CALCULATION	Average monthly consumption X 0.20/1000	Average monthly consumption X 0.07/1000	Average monthly consumption X 0.22/1000
STAFF REQUIRED for SSE/POWER/SECTIONS			
ALLP (Average Monthly Consumption:5 5650.29 kWH)	11.13 Say 11	3.89 Say 4	12.24 Say 12
KTYM (79479.79)	15.89 Say 16	5.56 Say 6	17.48 Say 17
ERS (262020.33)	52.40 Say 52	18.34 Say 18	57.64 Say 58

IPN & ERM (45683.29)	9.13 Say 9	3.19 Say 3	10.05 Say 10
TCR (112022.20)	22.40 Say 22	7.84 Say 8	24.64 Say 25
TOTAL	110	39	122

SSEs/JEs of the sections are entrusted with supervision of TL, POWER and AC activities, hence their role is not limited to the supervision of POWER duties alone.

As already mentioned there is no sanction for SSEs, JEs and Helpers/Power in these sections, as pinpointing is not done by Division. However, total sanction as on 21.02.2019 for these 06 sections is 42 (excluding SSEs, JEs and Helpers) and total actual as on 12.11.2019 is 92 which includes SSEs, JEs and Helpers.

It is to be noted that the Staff strength required based upon yard stick and IR-Average is over and above the current sanction and actual strength of respective sections. It is also ascertained that staff strength calculated based upon MPR-Benchmarking is slightly lesser than the actual strength, using which SSEs of respective sections are performing their duties at optimal level with available manpower. Hence the division may take necessary steps for pinpointing of staff to each section concerned and to increase the sanctioned strength to equal to that of present actual strength. Hence, this work study team, on need basis, allows to continue to the actual strength.

Recommendations:

--- NIL ---



CHAPTER IV**4.0 PLANNING BRANCH's REMARKS ON CO-ORDINATING OFFICER's VIEWS:**

5.0 FINANCIAL SAVINGS:**---NIL---**

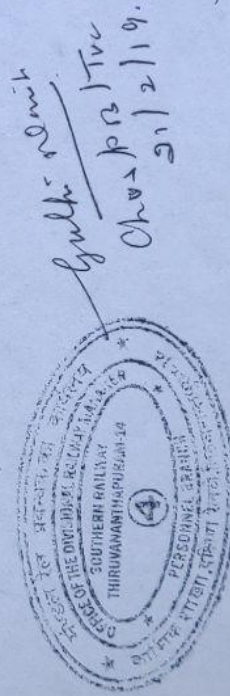
SAVE STATEMNT

ANNEXURE – I

Vacancy Position of Elec/ PowerCadre- Depot wise as on 21.02.2019																								
Sl No.	Depot	SSE			JE			Sr.Tech			Tech-I			Tech-II			Tech-III			Helper			Total	
		S	A	V	S	A	V	S	A	V	S	A	V	S	A	V	S	A/P	V	S	A	V		
1	ALLP		1		1	0	1	2	1	1	2	0	2	3	2	1		0		8	5	3		
2	KTYM		1		0	2	2	0	2	0	2	1	0	1	2	2	0		5	7	10	-3		
3	ERS		2		0	2	1	1	6	1	5	3	0	3	2	3	-1		21	13	28	-15		
4	ERM		7		0	1	2	-1	3	2	1	0	0	0	1	-1		0	4	12	-8			
5	IPN		1		0	0	0	0	0	0	0	0	0	0	2	0	2		2	2	5	-1		
6	TCR		1		0	0	2	-2	4	3	1	2	0	2	2	1	1		0	8	7	1		
	Total		13		1	6	7	-1	17	7	10	8	0	8	11	9	2		28	42	65	-23		

SSE & JE- Elec/AC/ Genl

No Pinpointing has been done



STATION WISE POSITION OF POWERSIDE AS ON 12.11.2019

ANNEXURE II

no printing in Power side.

दक्षिण रेलवे

SOUTHERN RAILWAY

STATION WISE POSITION OF POWER SIDE TECHNICIANS IN ELECTRICAL BRANCH AS ON 12/11/2019

I. Technician(Power)

Name of post	NCJ	TVC	W/TVC	KCVL	QLN	ALLP	KTYM	ERS	ERM	IPN	TCR	Cnl+ DEE/O	G.Total
Sr.Tech/P	4	8	0	0	4	0	2	2	2	1	2		25/26
Tech/Gr.I/P	1	2+1*	0	0	2	1	0	1	1	1	2		12/51
Tech/Gr.II/P	2	7	1	0	2	1	2	0	0	1	1		17/07
Tech/Gr.III/P	5	8	0	0	2	3	3	15	0	4	4		44/20**
Total	8	20	1	0	8	3	4	18	5		5		98/104

*One Tech.Gr.I/P selected through LDCE is undergoing JE training.

Sanction = 103 + 1** = 104 (One post created in Tech.Gr.III/Power from 25/01/2019)

Actual = 98

Vacancy = 104 - 98 = 6 Nos.

II. Helpers (Power & Train Lighting)

Name of post	NCJ	TVC	W/TVC	KCVL	QLN	ALLP	KTYM	ERS	ERM	TCR	Cnl+ DEE/O	Grand Total
Helper/Power	11	6	2	0	10	6	2	11	4	7	4**	63
Helper/Train Lighting	35	46	0	24	0	5	0	0	24	0	0	136
Total	46	54	2	24	10	11	2	11	28	7	4	199

**4 Helpers working at Control office (TL-1, P-2) & 1 at DEE/O/G/TVC, Total=4)

Sanction = 187 (TL-123 + Power-64)

Actual = 199

Helpers under SNP-2 (Sri.S.Satheesh @QLN &

Vacancy = -12 Nos.

(Sri.Anidas @NCJ now at KCVL)

III. SSE/JE (TL, AC & P)

Depot	NCJ	TVC	W/TVC	KCVL	QLN	ALLP	KTYM	ERS	ERM	IPN	TCR	TOTAL
SSE	3	11	3	3	1	1	1	2	7	1	1	35
JE	4	3	0	4	1	0	1	0	0	0	0	14

SSE/Sanction = 37 //

JE/Sanction = 19

Actual = 35 //

Actual = 14

Vacancy = 02 //

Vacancy = 05

IV. Drawing Cadre.

Name of post	Sanction	Actual	Vacancy
SSE/Drawing	3	2	1
JE/Drawing	2	1	1

V. Ministerial

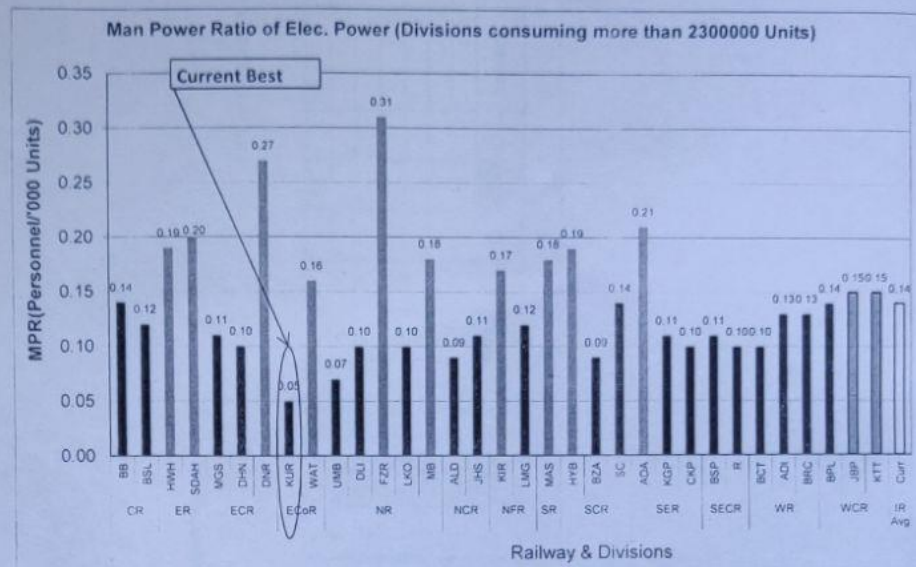
Sl. No.	Name of the post	Sanction	GS S	A	V	TRD S	A	V	OP S	A	V	Remarks
1	Ch OS	37	04	03	01	03	02	01	00	00	00	2 Vacancy (out of which 1 ST Shortfall)
2	OS	15	09	07	02	06	02	04	00	02	+02	LDCE-20%, PQ-80%
3	Sr.Clerk	05	02	00	02	03	02	01	00	00	00	DRQ-20%, Graduate Quota-13 1/3% and PQ-66 2/3%
4	Clerk	03	02	04	+02	01	02	+01	00	00	00	
Total		30	17	14	03	13	08	05	00	02	+02	

*guthi reat
char patti
22/11/19*

BENCHMARKING REPORT-SEPTEMBER 2019

ANNEXURE III

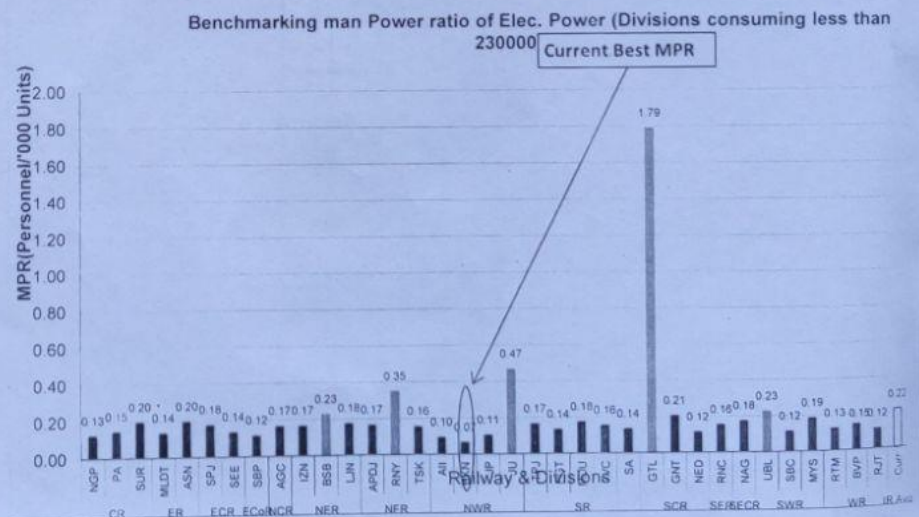
ELEC. POWER STAFF IN DIVISIONS



CURRENT IR AVERAGE: 0.14 Men per '000 Units.

CURRENT Man Power Ratio: KUR division of ECoR is at 0.05

EXCEEDING THE AVERAGE: 12 Divisions are above the current IR average.



CURRENT IR AVERAGE: 0.22 Men per '000 Units.

CURRENT Man Power Ratio: BKN div. of NWR is 0.07

EXCEEDING THE AVERAGE: 05 Divisions are above the current IR average.

CO-ORDINATING OFFICER'S VIEWS

ANNEXURE III