

# विद्युत (कर्षण वितरण)

## **ELECTRICAL TRACTION DISTRIBUTION**

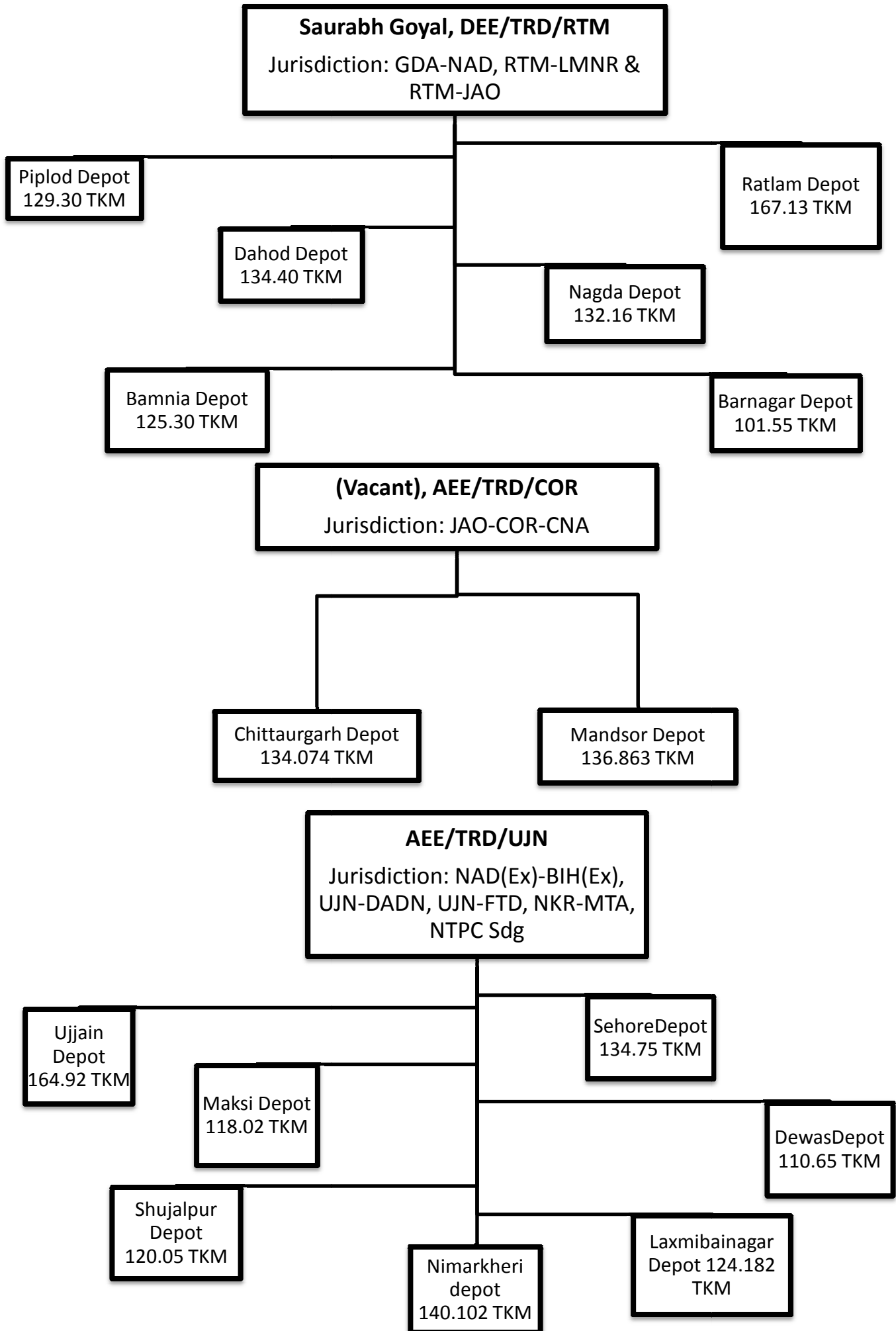


**INTRODUCTION :-** Ratlam Division has been drawing electric power supply for hauling passenger and goods trains on electric traction in Madhya Pradesh and Gujarat State area from the Grid Sub-Stations of State Electricity Board at 132 KV supply at 16 Traction Sub-Stations which are located by the side of Railway tracks generally at a distance of 45-70 Km from each other.

Electrification work approx. 100 % (BG) Route kms of Ratlam Division has been completed.

**Sr. DEE/TRD/RTM** is looking after the maintenance of AC/TRD system. He is assisted by DEE/TRD/RTM and AEE/TRD/UJN..

# Depot-Wise Jurisdiction



## ASSETS

### ➤ CORE ASSETS OF RATLAM TRD UNIT:

1.	Electrified Track Kilometers	2010 TKM
2.	Traction Sub Station (TSS)	17 Nos.
3.	Sectioning and Paralleling Posts (SP)	19 Nos.
4.	Sub Sectioning and Paralleling Posts (SSP)	57 Nos.
5.	OHE Depots	15 Nos.
6.	PSI Depots	13 Nos.

### ➤ CADRE POSITION:

<i>Post</i>	<i>Cadre</i>	<i>Available</i>	<i>Vacant</i>
Supervisor	69	62	07
Technician	249	197	52
Helper	186	76	110
<b>Total</b>	<b>504</b>	<b>335</b>	<b>169</b>

### *Electrification details-*

SrNo	Financial Year	Section	Line	RKM	TKM
1	2019-20	Ratlam-Fatehabad	Single	78.82	90.35
2	2019-20	Fatehabad-Laxmibainagar	Single	33.24	37.16
3	2019-20	Ratlam-Jaora	Single	32.97	42.78
4	2019-20	Jaora-Mandsor	Single	51.24	58.51
5	2019-20	Mandsor-Nimach	Single	49.24	61.57
		<b>Total</b>		<b>245.51</b>	<b>290.37</b>
6	2020-21	Nimach-Chanderiya	Single	64.59	134.07
7	2020-21	Shambhupura-Nimbahera doubling + Q line	Double	3.625	19.32
8	2020-21	Nimarkheri-Mathela	Single	46.19	55.84
9	2020-21	Sanawad-Nimarkheri	Single	11.59	15.9
10	2020-21	Gambhir Bridge doubling	Double	1.83	1.83
11	2020-21	Ujjain-Karchha doubling	Double	11.25	15.32
		<b>Total</b>		<b>139.075</b>	<b>242.28</b>
12	2021-22	NTPC siding, Nimarkheri	Single	38	77
13	2021-22	Hindustan Zinc Ltd, Chanderiya	Single	1.744	6.321
14	2021-22	Aditya Birla Cement, Shambhupura	Single	6.39	16.162
15	2021-22	Lafarge (Vuvoco Vistas) Gambhiri Road	Single	3.179	7.114
16	2021-22	Nimbahera Yard	Double	1.73	4.3
17	2021-22	Nimbahera-Bisalwaskala	Double	15	26.5
		<b>Total</b>		<b>66.043</b>	<b>137.397</b>
16	2022-23	Bisalwaskala-Nimach	Double	9.403	12.15
17	2022-23	Karchha-Barlai	Double	36.39	55.37
		<b>Total</b>		<b>45.793</b>	<b>67.52</b>

**Summary:**

- **2019-20:** 245.51 RKM, 290.37 TKM
- **2020-21:** 139.08 RKM, 242.28 TKM
- **2021-22:** 49.31 RKM, 106.60 TKM
- **2022-23:** 45.793 RKM, 67.52 TKM

➤ **Details of Electrified Siding in Ratlam Division:**

SN	Name of Siding	Station	TKM	Current Status
1	IOCL	Bangrod	2.5	Existing electrified
2	Grasim	Nagda	2	Existing electrified
3	BPCL	Bakniya Bhauri	4	Existing electrified
4	IOCL	Bakniya Bhauri	1.5	Existing electrified
5	RPCL	Bakniya Bhauri	4	Existing electrified
6	IOCL	Mangliya Gaon	0.2	Existing electrified
7	BPCL	Mangliya Gaon	1	Existing electrified
8	Bank Note Press	Dewas	2.2	Existing electrified
9	Hindustan Zinc Ltd.	Chanderiya	6.321	Newly electrified
10	Lafarge (Nuvoco Vistas)	Gambhiri Road	7.114	Newly electrified
11	Aditya Birla Cement	Shambhupura	16.162	Newly electrified
12	Wonder Cement	Gambhiri Road	18.895	Newly electrified
13	J.K. Cement	Gambhiri Road	11.10	Newly electrified
14	J.K. Cement	Nimbahera	3.105	Newly electrified
15	Vikram Cement	Jawad Road	14.958	Electrification in progress
16	Birla Cement	Chanderiya	7.379	Electrification in progress
17	RSWM	Namli	0.824	Newly electrified
18	NTPC	Nimarkheri	77	Newly electrified

**PRIVATE SIDINGS OF RATLAM-CHANDERIYA SECTION:**

S.No.	Name of siding	Serving station	TKM	TDC	Remarks
1	M/s Hindustan Zinc Ltd	CNA	6.321	Electrified on 01.01.2022	--
2	M/s Aditya Cement Siding	SMP	16.162	Electrified on 07.01.2022	
3	M/s Lafarge (Nuvoco Vistas) Cement Siding	GRF	7.114	Electrified on 07.01.2022	
4	JK Cement siding	NBH	3.105	Electrified on 09.05.2022	
5	M/s JK Cement siding	GRF	11.1	Electrified on 31.03.2022	
6	M/s Wonder Cement Siding	GRF	18.895	Electrified on 01.06.2022	
7	M/s NSPN	NKR	75	Electrified on 15.11.2021	
8	Birla Cement Works	CNA	7.29	June'23	Work under progress will be completed by 15-June-2023
9	Ultratech Cement Siding (M/s Vikram Cement)	JWO	14.958	-	Siding passes through highway, therefore permission for providing height gauge before wiring is yet to be given by MPRDC.
10	M/s CONCOR	TIHI	2.25	Electrified on 12.03.2023	--

➤ **TOWER WAGONS:**

S.N	TW NO.	DEPOT	LAST POH	DUE POH	LAST IOH	DUE IOH	LAST UST	DUE UST
1	4W/M-II/ERU/34	DWX	01-08-2019	01-08-2023	06-05-2022	05-05-2025	23-04-2023	22-04-2024
2	4W/M-III/ERU/57	MKC	01-04-2017	01-04-2023	01-05-2021	01-05-2023	25-03-2023	24-03-2024
3	4W/M-IV/PTL/58	LMNR	01-01-2018	01-01-2024	01-07-2021	01-07-2024	15-06-2022	14-06-2023
4	4W/M-IV/PTL/137	LMNR	01-01-2020	01-01-2026	01-04-2023	01-04-2024	17-01-2023	16-01-2024
5	4W/M-IV/PTL/138	NKR	01-07-2020	01-07-2026	01-07-2020	01-07-2023	04-04-2023	03-04-2024
6	DHTC/US/SE/102	BNG	03-09-2022	03-09-2028	03-09-2022	03-09-2025	17-01-2023	16-01-2024
7	DHTC/US/DE/07	DHD	01-06-2019	01-06-2025	16-08-2022	15-08-2025	14-02-2023	13-02-2024
8	DETC/OB/SE/1876	BMI	11-07-2022	11-07-2028	11-07-2022	11-07-2025	07-07-2022	06-07-2023
9	DETC/OB/SE/201	UJN	08-05-2018	08-05-2024	01-06-2021	01-06-2024	04-07-2022	03-07-2023
10	DETC/OB/SE/215	SJP	New Tower Wagons Commissioned in 2021-22	19-06-2025	02-01-2023	01.01.2026	04-12-2022	03-12-2023
11	DETC/US/DE/200033	SEH		10-01-2027	New Tower Wagons Commissioned in 2021-22	10-01-2024	06-10-2022	05-10-2023
12	DETC/US/DE/18027	MDS		25-03-2027		25-03-2024	02-02-2023	01-02-2024
13	DETC/US/DE/2021-02	COR		27-10-2027		27-10-2024	18-10-2022	17-10-2023
14	DETC/US/DE/246	RTM		20-01-2028		20-01-2025	30-09-2022	29-09-2023
15	DETC/US/DE/250	NAD		14-03-2028		14-03-2025	19-11-2022	18-11-2023
16	DETC/US/DE/254	PPD		17-06-2028		17-06-2025	26-02-2023	25-02-2024

**FAILURE ANALYSIS**

➤ **PUNCTUALITY CASES IN LAST THREE YEARS:**

➤ **ASSET FAILURES:**

FY 2021-22	FY 2022-23	FY 2023-24 (Upto July 23)
11	26	05

**160 Kmph Project**

- Section Involved: **RTM-NAD**
- Total TKM : **86**
- **TKM** without curve : **60** (Presently available for OHE modification)
- **TKM** of curve portion : **26 (Total no. of Curve-25)**

**TRD works in involved in 160 Kmph Project:**

1. Provision of feeder
2. Increasing tension in OHE from 1000 Kgf to 1200 Kgf
3. Provision AEC & BEC
4. Modification in PSI (being done by Construction)