#### SOUTH CENTRAL RAILWAY

SDGM's (Plg) Office, General Branch, Secunderabad.

No.G.276/2/WSSCR-5/2019-20

Dated: 09.09.2019

Sr.DME/DSL/GTL

Sub: Review of Staff Strength of Diesel Loco Shed at GTL.

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As approved by SDGM, the Central Planning Organization had conducted a detailed Work Study on the above-mentioned subject.

A copy of the Work study report is enclosed for kind perusal and implementation of the recommendation.

Encl: As above.

श्री वी एस राम राजू (Shri V.S.RAMARAJU) (सहायक कार्य अध्ययन अधिकारी)

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Copy to: PCME/SC, PCPO/SC & ADRM/GTL for kind information please. Sr.DPO/GTL for kind information please

### **SOUTH CENTRAL RAILWAY**

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"îðÚðá ¡³ÚðÚðĐð òÜÑðð÷¾á
WORK STUDY REPORT ON REVIEW OF STAFF
STRENGTH OF
DIESEL LOCO SHED AT GUNTAKAL

द्वारा मार्गदर्शित GUIDED BY

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# iðØððÜ ACKNOWLEDGEMENT

The work study team is thankful to the Sr.DME, DME, ADME, SSE/Loco (Mechanical), SSE/Electrical, all other shop Supervisors and staff of Diesel Loco Shed, Guntakalfor their assistance and guidance, extended to the work study team during the conduct of this study.

# òãðòÏð METHODOLOGY

The Work Study department has applied the following techniques for completion of the Work Study.

- 1. Collection of the details of workload particulars.
- 2. Interaction with Staff and Officers on the Division
- 3. Observation of the pattern of working.
- 4. Critical examination of the existing system of working and
- 5. Assessment of manpower requirement for existing workload.

### ÞÑðÜ÷®ðð SYNOPSIS

SUBJECT: Review of staff strength of Diesel Loco Shed/Guntakal/ Guntakal division

AUTHORITY: As approved by SDGM/SC

STUDY No: WSSCR-5/2019-20

REFERENCE File No: G.276/2/WSSCR-5/2019-20

AREA OF ACTIVITY: Diesel Loco Shed/ Guntakal/ Guntakal division

To meet the challenges of increased traffic and improved efficiency of loco motives, Indian Railways took upon it to enhance the productivity and procured latest sub- assemblies like:

- Microprocessor control system,

- Fuel-efficient engine kits,
- Roller Bearing Suspension system and
- A/C auxiliary motors etc., are fixed and also
- Up gradation of HP of locomotive is to haul heavy loads.
- Modifications done to ensure enhanced trip Schedules to locos.
- -Modifications carried out to achieve reliability and improve Performance with better fuel efficiency.
- ➤ With a view, to right size the organization, the Central Planning cell of South Central Railway has taken up Work-study on the "Review of Staff Strength of Diesel Loco Shed/GTL".
- Staff strength in DSL Sheds for Locos maintenance has to be reviewed On the basis of Indian Railways Average bench marking, actual staff deployment taking into account Outsourcing of some of the activities.
- ➤ The team had critically analyzed the activities performed especially at maintenance and additional workload at Shed to arrive at the actual requirement of manpower. The study also highlighted that a part of the non-core activity at the Shed is outsourced resulting in the effective management of manpower.
- Due to modernization, certain activities become redundant and some of the maintenance work contracted out. Due to this, the stress of workload comes down. To ensure the optimum utilization of manpower, to bring down the staff cost and for achieving the productivity of manpower, the work-study cell reviewed the staff strength as per IR average for requirement of manpower for Diesel Shed activities.

### Holding of locos:

S.No	Rolling Stock	Number of locos
1.	WDM3A	29
2.	WDM3D	29
3.	WDG3A	71
4.	WDS6	03
	Total	132

### > April-2019 IR average and benchmarking is as follows:

S.No.	IR Average	IRBM	MPR of DLS/GTL
1	4.06 Men per loco	2.86 Men per	4.45 Men per loco
		loco	

### > SAVE Position of Diesel Loco Shed:

S.No.	Sanction	Actual	Vacancy
1	594	568	26

### > Requirement of staff as per practical observation:

Requirement of staff in terms of IR Average :	1	
IR Average of April 2019		4.06 men/loco
Total no. of locos		132
Staff required as per IR Average	132X <sup>2</sup>	1.06 = 535.92 Say
		536
Staff to be added to IR Average as per practi	cal observati	on:
DTTC Staff		10
Running Staff		6
Ministerial Staff (Per)		23
As per practical observation Total Staff to be added to IR		39
Average:		
Total staff requirement:		536+39=575
Total sanctioned strength		594
Staff excess to the requirement		594-575=19

> In view of the above aspects, the following recommendation is made.

#### **Recommendation:**

It is recommended to surrender 19 Posts from book of sanctions of DLS/GTL which are excess to the requirement.

## ¡ÏÚððÚð- 1 CHAPTER – I

### 1.1 ÑßçðÃððãðĐðð INTRODUCTION:

- 1.2 Indian Railways holds the status of being a premier transport service provider to the Nation. It is entrusted with the responsibility of carrying the bulk of freight and passenger traffic across the length and breadth of the country, serving national interests with a social centric objective in spite of the demanding task of remaining financially viable. The organization has been successful in lending impetus to the Nation economic and industrial progress on the strength of the sustained approach towards technology up-gradation of infrastructure.
- 1.3 Continuous updating and designing of job description, reduction in number of categories for job enrichment through multi-skilling /qualification and responsibilities are the need of the day. Review of the work methods and sequences regularly, so as to create group for execution of job whenever new technologies are introduced.
- 1.4 Manpower is the biggest component of the expenditure of Indian Railway; rightsizing of manpower to reduce unit cost is an effective way to increase efficiency of Indian Railways. With this end in view, the Indian Railways has embarked on outsourcing various non-core activities and the staff hither to engage in such activities are being redeployed in areas concerned with operational & safety aspects. With the outsourcing of non-core activities, the staffs are placed in better places where their services are beneficially & effectively utilized, instead of keeping them in non-core activities, especially when such services are available in the open market at affordable rates.
- 1.5 Keeping the above said objectives in view, SDGM/SC has desired to review the working of various Sheds in the South Central Railway and accordingly the Planning Organization has conducted work-study on review of staff strength of Diesel loco shed at Guntakal.

# ¡<u>ÏÚððÚð-2CHAPTER - II</u> 2.1 ãðÃðáÙððĐð çðü±ð¿ĐððÃÙð"î Áðûμðð **EXISTING SCENARIO:**

- 2.2 Diesel loco shed/GTL was Established in 1964.. At present DLS/GTL is holding 132 locos.
- 2.3 Now, As per Railway Board Policy directives, Electric Locos are going inducted into Diesel Loco shed, for which electrification of some lines is going on. Very soon electric locos will be maintained for which staff of this shed is being trained at Electric Loco Shed.
- 2.4 Diesel Traction Training Centre Under the control of Sr. DME/DLS/GTL and offering the following courses with Hostel facility and Hostel maintenance is completely outsourced.
  - 1. Refresher course for LPs/ALPs and Maintenance staff,
  - 2. Induction courses for Maintenance staff,
  - 3. Pre-Promotional course for Maintenance staff.
- **2.5** SAVE position of Diesel Loco Shed/GTL as on 01.01.2019:

S.No	Category	Scale of pay	М	echanio	cal	E	Electrica	l
		•	San	Act	Vac	San	Act	Vac
1	Supervisory							
	SSE	9300-34800+4600	24	21	3	15	13	2
	JE	9300-34800+4200	12	8	4	9	8	1
	SSE/Drawing	9300-34800+4600	0	0	0	1	1	0
		Sub Total	36	29	7	25	22	3
2	<b>Artisan</b> -Skilled							•
	Sr.Technician	9300-34800+4200	44	46	-2	30	35	-5
	Technician - I	5200-20200+2800	89	85	4	63	48	15
	Technician -II	5200-20200+2400	15	16	-1	9	23	-14
	Technician -III	5200-20200+1900	118	90	28	52	22	30
		Sub Total	266	237	29	154	128	26
3	Artisan-Un Skille	ed				•		
	Khalasi Helper	5200-20200+1800	50	82	-32	12	30	-18
		Sub Total	50	82	-32	12	30	-18
4	Ancillary					•		
	Sr.Technician	9300-34800+4200	-	_	-	9	8	1
	Technician-I	5200-20200+2800	-	-	-	17	13	4
	Technician-II	5200-20200+2400	-	-	-	3	5	-2
	Technician-III	5200-20200+1900	-	-	-	3	0	3
		Sub Total	-	-	-	32	26	6
5	C & M Section							
	CMS	9300-34800+4600	-	-	-	7	4	3
	CMA	9300-34800+4200	-	-	-	2	2	0
		Sub Total	-	-	-	9	6	3
6	DTTC/GTL							
	DDI(Rng)	9300-34800+4200	-	-	-	02	02	0
	DDI	9300-34800+4600	-	_	-	04	05	-1
	DDI	9300-34800+4200	-	-	-	04	01	03
		Sub Total	-	-	-	10	08	02
		<b>Grand Total</b>	352	348	04	242	220	22

<b>Combined Grand Total</b>	Sami FO4	Act: E60	Vac. 26
(Mech + Elec & incl. other staff)	San: 594	ACL: 508	Vac: 20

### 2.6 Loco holding of DLS /GTL:

S.No	Rolling Stock	Number of locos
1	WDM3A	29
2	WDM3D	29
3	WDG3A	71
4	WDS6	03
	Total	132

### 2.7 Activities carried out at different sections:

Name of the section	Activity
Heavy repair mechanical	Mechanical heavy schedules, out of course repairs.
Heavy repairs Electrical	Electrical heavy schedules, out of course repairs, alternators and other electrical components, load testing etc.
Light / Heavy repair Mechanical	Mechanical Maintenance schedules, heavy schedules, trouble shooting on line, out of course repairs.
Light Repair Electrical	Electrical maintenance schedules, trouble shooting on line.
Component repair	Overhauling light components of Locos.
Air brake	Air brake maintenance schedules, heavy schedules, trouble shooting on line, out of course repairs.
Under truck	Maintenance schedules, heavy schedules, out of course repairs.
Light repair Mechanical	Mechanical maintenance schedules, trouble shooting on line.
Stores	Chasing of materials, issuing materials, lubricants & other store transactions.
Control Room staff	Maintenance of phone clerk duties in control room.
Ancillary	Carpentry, painting, black smithy, special/innovative works, cleaning etc.
Laboratory	Assisting of laboratory test.
Transport & Misc.	Drivers to vehicles, movement of coaches/ locos in &out from shed and medically de-categorized staff.
Mgt. Information System	Maintenance of loco management information system.
Other staff	Loco movement operational work/ shift, maintenance of boiler room, Tool room etc.

### 2.8 Special features of Diesel Loco Shed/ GTL:

- > Green Co Certification
- > IMS surveillance audit was successfully conducted

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# <u>¡ÏÚððÚð -3</u> CHAPTER-III

### 3.0 ¡ðâðð÷÷µðĐððÃÙð"î òãðäâð÷æðÂð CRITICAL ANALYSIS

- **3.1** Staff strength in DSL Sheds (Locos maintenance) has been reviewed on the basis of benchmarking and actual staff deployment, taking into account of Outsourcing of some of the activities.
- 3.2 Application of Benchmarking Norms: Benchmarking is based on dynamic and comparative analysis and thus is a very useful tool to manage efficient deployment of staff and monitor effects of improvement in working practices, use of new technologies and level of outsourcing. Railway Board in successive meetings has directed all units to achieve average of Indian Railway Benchmark. Keeping optimum utilization in view, Efficiency directorate/Railway Board has collected detailed data of various activities of Indian Railways has done extensive exercise and arrived two Benchmarks i.e. IR Average Benchmark and IR Benchmark.
- 3.3 In view of adoption of benchmarking on Railways, Railway Board advised to adopt first Indian Railway Average Benchmarking and further Indian Railway Benchmarking.
- 3.4 Due to modernization, certain activities become redundant and some of the maintenance work contracted out. Due to this, the stress of workload comes down. To ensure the optimum utilization of manpower, to bring down the staff cost and for achieving the productivity of manpower, the work-study cell reviewed the staff strength as per IR average for requirement of manpower for Diesel Shed activities and other miscellaneous activities in order to bring nearer to Indian Railway Average Benchmarking.
- **3.5** Periodicity of schedule attention of locos in the GTL shed:

### 3.5.1 ALCO Locos:

S.NO	Type of Schedule	Periodicity
1	Trip-I Schedule	15 days
2	T-30/40 Schedule	30 days/ 40days
3	M-2 Schedule	60 days
4	M-4/M-8/M-16/M-20	4months/8months/16months/20month
	Schedule	S
5	M-12 Schedule	12months
6	M-24/M-72 Schedule	24 months/72 months
7	M-48 Schedule	48 months
8	POH Attention	96 months

# 3.6 The following activities are outsourced at Diesel Loco Shed /GTL. 3.6.1Details of activities under Outsourced/AMC:

S.No	Name of the work	Remarks
1	Housekeeping at Diesel Loco shed, Guntakal	Contract work
2	Loco cleaning at Diesel Loco shed, Guntakal	Contract work
3	Components cleaning at Diesel Loco shed,	Contract work
	Guntakal	

S.No	Name of the work	Remarks
4	Maintenance of Fire Extinguishers for a period of	Contract work
	21 months	
5	AMC of Spectrometer	AMC
6	AMC of Dynamic balancing machine	AMC
7	AMC for ETP(Effluent Treatment Plant)	AMC
8	Hazardous waste disposal.	Contract work
9	MEP 660 maintenance by M/s Medha	AMC
10	Overhauling of actuator unit M96 maintenance by	Contract work
	M/s Medha	
11	Overhauling of actuator unit M48 maintenance by	Contract work
	M/s Medha	
12	Control unit maintenance by M/s Medha	Contract work
13	Lorry Transport contract	Contract work
14	Washing and Ironing of Linen at DTTC	Contract work
15	Supply of river sand sieved and dried to DLS/GTL.	Contract work
16	Fuel Level Sensors	Contract work
17	Up gradation of M/s Medha from 2 & 2A to 2b	Contract work

3.6.2Details of activities under proposal for Outsourced/AMC

S. No	Name of the work	Remarks
1	AMC for Auxiliary Power Unit	AMC
2	AMC for Medha make REMMLOT system.	AMC

3.7 Holding of locos:

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	S. No	Rolling Stock	Number of locos				
	1.	WDM3A	29				
	2.	WDM3D	29				
Ī	3.	WDG3A	71				
Ī	4.	WDS6	03				
Ī	_	Total	132				

### 3.8 Requirement of staff as per practical observation:

Requirement of staff in terms of IR Average :				
IR Average of April 2019	4.06 men/loco			
Total no. of locos		132		
Staff required as per IR Average	Staff required as per IR Average 132X <sup>2</sup>			
		536		
Staff to be added to IR Average as per practical observation:				
DTTC Staff	10			
Running Staff	6			
Ministerial Staff (Per)		23		
As per practical observation Total Staff to be	39			
Average:				
Total staff requirement:		536+39=575		
Total sanctioned strength	594			
Staff excess to the requirement	594-575=19			

In view of the above aspects, the following recommendation is made.

**3.9 Recommendation:** It is recommended to surrender 19 Vacant Posts from book of sanctions of DLS/GTL of Guntakal Division.

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# <u>¡ÏÚððÚð-4</u> CHAPTER –IV

# 4.0 òãðÃÃðóÚð ÑðòÜÂððÙð FINANCIAL IMPLICATIONS:

SI. No	Category	Sc	ale	No.	Mean Pay		Emolumen ts P.M (in Rs.)	Total Emolument
		From	То	of posts		DA 12%		s P.A (in Rs.)
1	Technicians	19900	63200	19	41550	4986	884184	10610208
			TOTAL	19			F	Rs. 10610208

On implementing the recommendations, the financial savings would be to the Rupees 106.10 lakh per annum

# <u>¡ÏÚððÚð-5</u> CHAPTER –V

### 5.0

S No.	Recommendation	Para No.
1	It is recommended to surrender 19 vacant Posts of from book of sanctions of DLS/GTL of Guntakal Division	3.9

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