

EASTERN RAILWAY

WORK STUDY REPORT ON

REVIEW OF RUNNING STAFF FOR DIESEL TRACTION OVER EASTERN RAILWAY

(STUDY NO. WSER – 02/20-21)

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AUTHORITY

As approved by the competent authority, the subject workstudy has been undertaken by the GM's Efficiency Cell during the current financial year.

TERMS OF REFERENCE

The subject workstudy has been conducted with the following terms of references-

1. Evaluate the existing workload based on Crew Link.
2. Revision of Leave Reserve (LR) & Training Reserve (TR).
3. Rationalisation of work load.

METHODOLOGY:

During work study, the study team adopted the following methodology to ascertain the requirement of staff at different Power Shed based on their existing workload.

1. Consideration of the workload of Power Running Staff of Diesel Traction.
2. Consideration of Division-wise Crew Link of Diesel Traction.
3. Consideration of Division-wise Diesel Loco Holding.
4. Discussion with respective Technical personnel regarding concerned study.

SUMMARY OF RECOMMENDATION

Sl. No.	Recommendation	Para ref.
1	It is recommended by the study team that the Revised Sanctioned Strength of Power Running staff of Diesel Traction over Eastern Railway would be 3218 Posts as against the Present Sanctioned Strength of 3751 Posts. Thus, the resulting (3751 – 3218) i.e. 533 Posts are identified as Surplus	2.5.0

CHAPTER - I

1.0.0. INTRODUCTION:

- 1.1.0.** Indian Railway is the life-line of nation for providing Transportation facility over the length and breadth of country. Its vision is to provide efficient, affordable, customer-focused and environmentally sustainable integrated transportation solutions and to be the vehicle of inclusive growth, connecting regions, communities, ports and centres of industry, commerce, tourism and pilgrimage across the country.
- 1.2.0.** India's railway network is recognised as one of the largest railway systems in the world under single management and moreover, it is among the world's largest rail networks.
- 1.3.0.** Indian Railway is not a mere operation. It is an industry. It is a prime mover of India's Infrastructure. Railway men have to reorient and perform at all times in every conceivable situation. The commitment, dedication and application to the job is the fabric that binds Indian Railway men concern for safety and well-being at all levels and operations of Railways.
- 1.4.0.** The Railway organisation has gradually changed its policy according to its needs and availability of resources. It has transmitted its power from Steam to Diesel and then to Electric for moving vehicle. Diesel Power Sheds are located at various locations to provide the Loco Pilot (Goods & Passenger), shunting staff, other maintenance staff and supporting staff for movement/maintenance of vehicle/loco.
- 1.5.0.** Eastern Railway comprises 04 divisions viz. Sealdah, Howrah, Asansol & Malda Division.
- 1.6.0.** Eastern Railway has recently completed several electrification projects and by this year end, more than 90% Electrification is going to be completed. Thus, utilization of Diesel Power will be gradually diminished in several sections over Eastern Railway.
- 1.7.0.** Eastern Railway has also introduced some new trains from new terminal at Kolkata. Therefore, distributions of staff against the new workload as well as identification of redundant activities are required to evaluate.
- 1.8.0.** One of the Key Role player of Train Operation is Loco Pilots of different categories. Thus, proper assessment of sanctioned post is very important in respect of safety & punctuality of Train / Freight operation in one hand and optimization of working expenses on the other.
- 1.9.0.** Keeping in mind of the above, GM's Efficiency Cell has been engaged to conduct the subject work study to find out the actual requirement of Power Running staff of Diesel Traction.

CHAPTER - II

2.0.0. Existing Scenario & Critical Analysis

2.1.0. The cadre position of Loco Crew pertaining to Diesel Traction over Eastern Railway is tabulated below.

Cadre		Division					Total
		HWH	SDAH	ASN	MLDT	HQ	
LPM	S/S	81	48	16	80	0	225
	MOR	41	35	7	49	0	132
	Vac.	40	13	9	31	0	93
LPP	S/S	96	3	15	98	0	212
	MOR	90	2	11	81	0	184
	Vac.	6	1	4	17	0	28
LPG	S/S	452	170	253	287	0	1162
	MOR	415	130	245	186	0	976
	Vac.	37	40	8	101	0	186
LPS	S/S	38	39	71	72	0	220
	MOR	10	36	50	45	0	141
	Vac.	28	3	21	27	0	79
ALP	S/S	661	232	299	489	0	1681
	MOR	509	160	277	417	0	1363
	Vac.	152	72	22	72	0	318
CLI	S/S	44	17	22	34	4	121
	MOR	19	11	16	16	4	66
	Vac.	25	6	6	18	0	55
Drafted Supervisor	S/S	47	31	26	26	0	130
	MOR	14	24	7	9	0	54
	Vac.	33	7	19	17	0	76
S/S (Division wise)		1419	540	702	1086	4	3751
MOR (Division wise)		1098	398	613	803	4	2916
Vac. (Division wise)		321	142	89	283	0	835

S/S :Sanctioned Strength; **MOR** : Men-On-Roll; **Vac.** : Vacancy.

2.2.0. A Zero based review of Running Crew has been carried out in ongoing paragraphs considering the following points,

2.2.1. The requirement of Running crew for coaching services has been carried out based on crew links and for Freight services the requirement has been worked out @ 7.05 crew per Loco holding (DU) including Leave Reserve (LR) & Training Reserve (TR). For which, there is ample scope to reduce this yard stick from 7.05 crew per DU to 6.50 crew per DU which is followed everywhere in India. Though, presently it is not taken into consideration. Therefore, there is no change of Goods crew requirement and proposed Goods crew are kept as it is.

2.2.2. For coaching services like Mail / Express, Passengers, Shunter, Assistant. Driver, the Leave Reserve (LR) and Training Reserve (TR) reduced to 15% of the total Link Requirement from last year 43% [@ of 30% & 10% respectively] has been considered.

This has been done by taking into account of 30 days LAP, 10 days CL, 10 days HLAP and average 12 days refresher course in a year, which is equal to 62 days i.e. $62 / 365 = 16.9\%$.

However majority of the staff does not avail all the leaves i.e 30 days LAP, 10 days CL, 10 days HLAP in a year. Taken this into consideration, LR & TR @ 15% of the link requirement has been considered.

2.2.3. For Motorman LR and TR is considered as 20% of the link requirement. Since M/Exp. And Passenger trains can also be operated by selected LPG in case of emergency.

Considering the above mentioned points, the division– wise assessment for existing requirement of Running Crew has been done in the paragraphs below.

2.3.0. The Division-wise requirement of crew is analysed in foregoing paras. Category-wise analysis of actual requirement of crew over Divisions has been worked out after considering LR & TR are illustrated as under,

2.3.1. **FOR HOWRAH DIVISION:**

The Category-wise actual requirement of crew over Howrah Division is analysed below. The respective 'Crew Links' are annexed as 'Annexure A -1 to 10'.

(a) **LOCO PILOT MAIL / EXP. (LPM)**

i) **Pure DSLLPM** :Bare Crew required is as follows.

Lobby	Link No	Crew link during last review		Revised crew link	
		No of trains	Bare Crew required	No of trains	Bare Crew required
HWH	1	22	23	22	23
	2	6		6	
	3	14	5	14	5
BWN	4	8	10	4	5
AZ	5	4	4	4	4
	5A	2	2	2	2
RPH	6	2	2	2	2
Total		58	46	58	41

Therefore, bare requirement of LPM = 41

However, On-roll in pure LPM is 31 at present, hence it is fixed as = 31
And additional 10 will be managed by pure LPP.

The LR & TR (@15%) for LPM will be maintained in cadre of LPP.

ii) **DSL Converttee LPM:**

Lobby	Link No	Crew link during last review		Revised crew link	
		No of trains	Bare Crew required	No of trains	Bare Crew required
HWH	1	12	11	12	11
	2				
BWN	3	2	1	2	1
RPH	4	2	2	2	2
Total		16	14	16	14

Therefore, bare requirement of DSL Converttee LPM = 14

This will be operated by converttee LPM = 10 (On-roll at present)
And rest 4 will be operated by converttee LPP.

The LR & TR (@15%) will be given in cadre of LPP.

(b) LOCO PILOT PASSENGER (LPP):**i) Pure DSL:**

The Crew requirement is as follows.

Lobby	Link No	Crew link during last review		Revised crew link	
		No of trains	Bare Crew required	No of trains	Bare Crew required
HWH	7	2	2	2	2
BWN	8	6	5	-	-
RPH	9	24	21	6	7
AZ	10	18	13	4	4
KWAE	11	15	9	7	5
Total		65	50	19	18

Therefore, bare requirement of LPP = 18

Requirement on vice of LPM = 10

So, Total LPP = 18 + 10 = 28

Now, adding 15% LR, i.e. $28 \times 1.15 = 32.20$

As mentioned earlier, 15% LR& TR of pure Mail/Exp. LPM = $31 \times 15\% = 4.65$,

Hence, total Pure DSL LPP required = $32.20 + 4.65 = 36.86 = 37$ nos

Out of required 37 DSL LPP,

It is fixed to 23

And remaining 14 will be managed by Converttee LPP.

Therefore, DSL LPP = 23 nos.

ii) DSL Converttee:

Lobby	Link No	Crew link during last review		Revised crew link	
		No of trains	Bare Crew required	No of trains	Bare Crew required
HWH	1	8	11	8	10
BWN	2	-	-	8	9
RPH	3	1	1	12	9
AZ	4			4	3
KWAE	5	2	2	10	7
Total		11	14	42	38

As above, the bare requirement of DSL converttee LPP = 38,

As mentioned earlier, requirement on vice of DSL Converttee LPM = 4

Therefore, Total bare LPP required = $(4 + 38) = 42$

Including LR & TR (@ 15%) = $42 \times 1.15 = 48.3$

In addition, LR & TR(@ 15%) of 10 converttee LPM = $10 \times 0.15 = 1.5$

Also, as mentioned above, on vice of pure LPP = 14

Adding all above, Total Converttee LPP required = $48.3 + 1.5 + 14 = 63.8 = 64$

Therefore, Revised converttee LPP = 64 nos.

(c) LOCO PILOT GOODS (LPG):

Goods loco Driving Unit (DU) holding for 2019-20 is considered=58.43 for DSL and converttee LPG.

i) Pure DSL& Dual:

Considering, Total Pure DSL LPG DU = 44.68 and 7.05 crew per DU,
Requirement of Pure DSL& Dual LPG = $44.68 \times 7.05 = 315$ nos.

ii) DSL converttee LPG:

Considering Holding for DSL converttee = 14.18 DU and 7.05 crew per DU,
Hence requirement of converttee LPG = $14.18 \times 7.05 = 100$ nos.

Therefore, Total LPG = 315 + 100 = 415 nos.

(d) DRAFTED SUPERVISOR:

Requirement of Drafted supervisor is as,
For Divisional work = 20
For HQ TLC work = 5

Therefore, Total = $20 + 5 = 25$ nos.

(e) LOCO PILOT SHUNTING (LPS):

Shunter requirement is fixed as = 20 (already 10 LPS in On-roll and LPGs are working.)

(f) ASSTT. LOCO PILOT (ALP):

For M/Exp. = 41 nos

For Passenger trains = $23 + 64 = 87$ nos.

For Goods trains = 375 nos. (rest LPG work without Asstt. in Shunting work in fixed Station as per revised GR & SR)

Adding all above, ALP = $41 + 87 + 375 = 503$ nos

Therefore, Total ALP required = 503 nos.

(g) CHIEF LOCO INSPECTOR (CLI):

For LPs (@ 1 for 25) = $(41 + 87 + 415) = 543/25 = 21.72$

For LPS & ALP (@1 for 50) = $(20 + 503) = 523/50 = 10.46$

For Sr. DME = 1

For CTLIC (@1/CNL)(HWH) = 1

For Sr. DSO = 1

For HWH & RPH Lobby (@1 each) = 2

Adding all above, Total = $(21.72 + 10.46 + 1 + 1 + 1 + 2) = 37.18$,

However, based on ground requirement, it is fixed into = 32 nos, rest workload will be managed by CLI given for ALPs.

- 2.3.2. Summarising the above analysis, proposed revised sanctioned strength as against the existing sanctioned strength of Crew in Diesel stream over **Howrah Division** has been assessed as under,

Designation		Present Sanction	Revised Sanction	Surplus
Loco Pilot Mail / Exp. (LPM)	DSL/Dual	52	31	21
	Converttee	29	10	19
Loco Pilot Passenger (LPP)	DSL/Dual	46	23	23
	Converttee	50	64	-14
Loco Pilot Goods (LPG)	DSL/Dual	436	315	121
	Converttee	16	100	-84
Loco Pilot Shunting (LPS)		38	20	18
Asstt. Loco Pilot (ALP)		661	503	307
Chief Loco Inspector (CLI)		44	32	20
Drafted Supervisor		47 = 42 + 5 (HQ)	25 = 20 + 5 (HQ)	22
Total		1419	1123=1118 + 5 (HQ)	296

2.3.3. **FOR SEALDAH DIVISION:**

The Category-wise actual requirement of crew over Sealdah Division is analysed below. The respective 'Crew Links' are annexed as 'Annexure B -1 to 3'.

(a) **LOCO PILOT MAIL / EXP. (LPM):**

i) **Pure DSL LPM** :Bare Crew required is as follows.

Lobby	Link No	Crew link during last review		Revised crew link	
		No of trains	Bare Crew required	No of trains	Bare Crew required
BGA	1	12	18	12	18
	2	12	8	16	9
	3	2	2		
Total		26	28	28	27

Therefore, bare requirement of LPM = 27

However, LPM is fixed as = 28 (as on date Man-on-roll and excess one will be utilized in Elect. Converted Trains.)

The LR & TR (@15%) for LPM will be given in cadre of LPP

ii) **Trains operated by DSL converttee LPM in Electric traction:**

Following trains have already been taken over from DSL traction to electric traction, for which DSL converttee crew requirement is as under,

Train No	Freq.	From	To	Bare crew required
13173/75 & 13174/76	Daily	SDAH	MLDT	3
12373/74	3 days	SDAH	RPH	1
Total				4

Bare requirement = 4

However, it is Fixed as = 7 (as per present Man-on-roll)

LR & TR @15% will be considered and given in LPP.

(b) **LOCO PILOT PASSENGER (LPP):**

Lobby	Link No	Crew link during last review		Revised crew link	
		No of trains	Bare Crew required	No of trains	Bare Crew required
BGA	P1	2	2	2	2
Total		2	2	2	2

Therefore, bare requirement = 2

It is fixed = 2, as on date Man-on-roll.

The calculation of LR & TR is as under,

Total bare coaching Crew Link (LPM+LPM converttee+LPP) = 27+4+2 = 33

Now adding 15% LR & TR on above = $33 \times 1.15 = 37.95 = 38$ nos.

Total assessed requirement for (LPM+LPM converttee+LPP) = 28+ 7 + 2 = 37 nos.

Short fall = 38 – 37 = 1 will be managed by senior screened LPG.

(c) LOCO PILOT GOODS (LPG) :

i) Pure DSL LPG :

Goods loco Driving Unit (DU) holding for 2019-20 is considered = 15.46

So, requirement of LPG = $15.46 \times 7.05 = 109$,

Therefore, Total LPG = 109 + 1 (as mentioned above) = 110 nos.

ii) DSL converttee LPG :

Considering Holding for DSL converttee = 2.83 DU and 7.05 crew per DU,

Hence requirement of converttee LPG = $2.83 \times 7.05 = 20$ nos.

(d) DRAFTED SUPERVISOR:

Place	Requirement	Remarks
Divisional TLC control	8	TLC/P-4 & TLC/G – 4
SDAH lobby	5	ATFR – 4, S/notice -1
RHA lobby	4	ATFR – 4
HQ CNL	5	HQ/TLC
Total	22	
Requirement including LR&TR @ 12.5%	24.75 = 25	

(e) LOCO PILOT SHUNTING:

LPS requirement = 39 (same as existing sanction)

(f) ASSTT. LOCO PILOT:

Requirement for M/Exp. = $28 + 7 = 35$

For Pass. = 2

For Goods = 118 (rest LPs will work without ALPs in fixed station as per revised GR & SR correction)

Adding all above, Total = $35 + 2 + 130 = 167$ nos.

Thus, total ALP required = 167 nos.

(g) CHIEF LOCO INSPECTOR:

For LP (@ 1 for 25) = $35 + 2 + 130 = 167 / 25 = 6.68$

For LPS& ALP (@ 1 for 50) = $(39 + 167) = 206 / 50 = 4.12$

Safety Counsellor = 01

For Sr. DME = 01

For CCNL of Lobby SDAH & RHA = 2

For CTLIC/SDAH = 1

Adding all above, Total = $6.68 + 4.12 + 1 + 1 + 2 + 1 = 15.8$

Which is fixed at = 14, rest 2 will be manage by CLI of ALPs.

2.3.4. Summarising the analysis made in para 2.4.3., proposed revised sanctioned strength as against the existing sanctioned strength of Crew in Diesel stream over **Sealdah Division** has been assessed as under,

Designation		Present Sanction	Revised Sanction	Surplus
Loco Pilot Mail / Exp. (LPM)	DSL/Dual	38	28	10
	Converttee	10	7	3
Loco Pilot Passenger (LPP)	DSL/Dual	3	2	1
	Converttee	0	0	0
Loco Pilot Goods (LPG)	DSL/Dual	170	110	60
	Converttee	0	20	-20
Loco Pilot Shunting (LPS)		39	39	0
Asstt. Loco Pilot (ALP)		232	167	65
Chief Loco Inspector (CLI)		17	14	3
Drafted Supervisor		31 = 26 + 5 (HQ)	25 = 20 + 5 (HQ)	6
Total		540	412=407 + 5 (HQ)	128

2.3.5. **FOR ASANSOL DIVISION:**

The Category-wise actual requirement of crew over Asansol Division is analysed below. The respective 'Crew Links' are annexed as 'Annexure C -1 to 7'.

(a) **LOCO PILOT MAIL / EXP. (LPM):**

DSL LPM: Bare Crew required is as follows.

Lobby	Link No	Crew link during last review		Revised crew link	
		No of trains	Bare Crew required	No of trains	Bare Crew required
UDL	1	16	4	14	4
ASN	2	6	3	4	3
MDP	3	2	2	2	2
Total		24	9	20	9

Therefore, bare requirement of LPM = 9

Since, at present Man-on-roll is 7, hence it is fixed as = 7

And rest 2 will be operated by LPP.

The LR & TR (@15%) is given in LPP.

(b) **LOCO PILOT PASSENGER (LPP):**

Requirement of DSL LPP –

The Crew requirement is as follows.

Lobby	Link No	Crew link during last review		Revised crew link	
		No of trains	Bare Crew required	No of trains	Bare Crew required
MDP	4	16	10	18	12
Total					12

Bare requirement of LPP = 12

Requirement on vice of LPM = 2

So, Total LPP = 12 + 2 = 14

Considering LR & TR (@ 15%) = 14 x 1.15 = 16.1

Now considering TR & LR (@ 15%) of M/Exp. LPM = 7 x 0.15 = 1.05

Hence, Total LPP = 16.1 + 1.05 = 17.15 = 18 nos

Since at present Man-on-roll = 11, so it is fixed as = 11

Therefore, LPP = 11 and rest 7 will be managed by senior screened LPG.

(c) LOCO PILOT GOODS (LPG):**i) Pure & Dual DSL LPG:**

Goods loco Driving Unit (DU) holding for 2019-20 is considered = 20.56.
Therefore, LPG required = $20.56 \times 7.05 = 145$ nos

Total LPG will be required = 145 nos.

ii) DSL Converttee LPG:

Total DU for DSL converttee is considered = 14.18
Hence, Requirement of LPG = $14.18 \times 7.05 = 100$ nos.

(d) DRAFTED SUPERVISOR:

Place	Requirement	Remarks
Divisional TLC control	4	TLC/P& G – 4
UDL lobby	5	ATFR – 4, S/notice -1
MDP Lobby	4	ATFR – 4
Total	13	
Requirement including LR @ 12.5%	14.62 = 15	

(e) LOCO PILOT SHUNTING (LPS) :**Shunting in Yard PTs –**

(UDL Empty Yd. – 1.00, UDL Dep. Yd. – 2.00, UDL UP Yd -2.00,
UDL Hump – 2.00, ASN Pass. Yd. PT. – 1.00) = 8.00 per Shift
Therefore, LPS required in Shunting in Yd. = $8 \times 3 = 24$

Shunting in UDL DSL shed = 2/Shift = 6

Manning Coaching / Yd Loco at UDL -1/shift, MDP – 1/shift = $6 + 1 = 7$

Adding all above, Total LPS = $24 + 6 + 7 = 37$

Now considering for Rest = $37/6 = 6$

So, Total required LP(S) = $37 + 6 = 43$ nos.

Considering LR & TR (@ 15%) = $43 \times 1.15 = 49.45 = 50$ nos.

Therefore, Total LPS required = 50 nos.

(f) ASSTT. LOCO PILOT (ALP):

ALP required for DSL LPs = $(LPM - 7 + LPP - 11 + LP(G) - 245) = 263$

Therefore, Total ALP = 263 nos.

(g) CHIEF LOCO INSPECTOR (CLI):

Adding all above, For LP (@ 1 for 25) = $(7+11+245) = 263/25 = 10.52$

For LPS& ALP (@ 1 for 50) = $(50 +263) /50 = 313/50 = 6.26$

For CTLC/ASN = 1

For Sr. DME = 1

For MDP lobby =1

For Sr. DSO = 1

Adding all above, Total = $10.52 + 6.26 +1 + 1 + 1 + 1 = 20.78$

It is fixed into = 18 nos. and rest CLI will be manage by CLI given for ALPs.

- 2.3.6. Summarising the analysis made in para 2.4.5., proposed revised sanctioned strength as against the existing sanctioned strength of Crew in Diesel stream over **Asansol Division** has been assessed as under,

Designation		Present Sanction	Revised Sanction	Surplus
Loco Pilot Mail / Exp. (LPM)	DSL/Dual	10	5	5
	Convertee	6	2	4
Loco Pilot Passenger (LPP)	DSL/Dual	15	9	6
	Convertee	0	2	-2
Loco Pilot Goods (LPG)	DSL/Dual	214	145	69
	Convertee	39	100	-61
Loco Pilot Shunting (LPS)		71	50	21
Asstt. Loco Pilot (ALP)		299	263	36
Chief Loco Inspector (CLI)		22	18	4
Drafted Supervisor		26	15	11
Total		702	609	93

2.3.7. **FOR MALDA DIVISION:**

The Category-wise actual requirement of crew over Malda Division is analysed below. The respective 'Crew Links' are annexed as 'Annexure D -1 to 14'.

(a) **LOCO PILOT MAIL / EXP. (LPM):**

Lobby	Link No	Crew link during last review		Revised crew link	
		No of trains	Bare Crew required	No of trains	Bare Crew required
MLDT	1	10	12	10	12
	2	9	4	9	4
SBG	3	13	15	13	15
	4	8	8	8	8
BGP	5	6	6	6	6
JMP	7	9	5	9	5
	8	2	2	2	2
Total		60	50	60	50

Therefore, Bare requirement = 50

The LR & TR (@15%) for LPM will be given in cadre of LPP

i) Trains already taken over on Electric traction:

Lobby	Link No	Crew link during last review		Revised crew link		Remarks
		No of trains	Bare Crew required	No of trains	Bare Crew required	
MLDT	2A	-	-	2	3	Link Transfer from SDAH to MLDT
BGP	9	6	6	6	6	Link transfer from DSL to Electric
Total		6	6	8	9	

Therefore, Bare requirement of DSL Converttee LPM = 9 nos

LR & TR @15% will be considered and given in LPP.

(b) LOCO PILOT PASSENGER (LPP):**i) Pure DSL LPP:**

Lobby	Link No	Crew link during last review		Revised crew link	
		No of trains	Bare Crew required	No of trains	Bare Crew required
MLDT	1	2	2	4	4
SBG	2	12	11	12	11
	3	10	12	10	12
	4	8	10	8	10
BGP	5	10	7	10	8
JMP	6	16	13	16	13
	7	16	13	16	13
Total		74	68	73	71

So, bare requirement = 71

Including LR & TR (@%15) – $71 \times 1.15 = 81.65$ nos.

In addition, LR & TR (@ 15%) of LPM = $50 \times 0.15 = 7.5$ nos.

Therefore, Total LPP required = $81.65 + 7.5 = 89.15 = 90$ nos.

ii) DSL Converttee LPP:

Lobby	Link No	Crew link during last review		Revised crew link		Remarks
		No of trains	Bare Crew required	No of trains	Bare Crew required	
MLDT	3	2	2	2	2	
SBG	8A	-	-	2	2	Link transfer from HWH to MLDT after traction change in electric.
Total				4	4	

Bare requirement = 4

Including LR & TR (@ 15%) = $4 \times 1.15 = 4.6$

LR & TR of converttee LPM = $9 \times 0.15 = 1.35$

Therefore, Total Converttee LPP = $4.6 + 1.35 = 5.95 = 6$ nos.

(c) LOCO PILOT GOODS (LPG):**i) Pure DSL& Dual:**

Goods loco Driving Unit (DU) holding for 2019-20 is considered = 33.61

LPG required = $33.61 \times 7.05 = 236.95 = 237$

Therefore, Total LPG = 237

ii) DSL Converttee LPG:

Goods loco Driving Unit (DU) Holding of converttee LPG = 7.09

So, LPG required = $7.09 \times 7.05 = 49.98 = 50$ nos

Tower wagon LPG requirement = 25

Therefore, Total converttee LPG = $50 + 25 = 75$ nos

Hence, Total LPG = $237 + 75 = 312$ nos

(d) DRAFTED SUPERVISOR:

Place	Requirement	Remarks
Div. TLC/CNL	4	TLC/P -4
MLDT lobby	4	ATFR – 4
SBG lobby	4	ATFR – 4
BGP lobby	4	ATFR – 4
JMP Lobby	4	ATFR – 4
Total	20	

(e) LOCO PILOT SHUNTING:

LPS required at JMP shop (2/shift) + 1 = 7 nos.

LPS required at MGLE to PDCL (1/shift) = 3 nos.

LPS required at TDLE to NTPC (1/shift) = 3 nos.

LPS required at CLG shunting (1/shift) = 3 nos.

LPS required at JMP shed shunting (3/shift) = 9 nos.

Manning locos at SBG -2/shift, JMP -1/shift, MLDT-4/shift, BGP-1/shift = 8/shift = 24

Adding all above, Total = 49 nos.

Considering rest (@1 per 6) = $49 + 7.8 = 57.43$

Considering LR & TR (@15%) = $66.04 = 66$ nos.

Total LPS required = 66 nos.

(f) ASSTT. LOCO PILOT (ALP):

Requirement for M/Exp. = 59

For Pass = 96

For Goods = 297

For booking supervisor (@4, MLDT, BGP, JMP & SBG lobby) = 16

CMS operator at MLDT = 4

TLC & Power /CNL = 10

Adding all above, Total = $59 + 96 + 297 + 16 + 4 + 10 = 482$ nos.

Total ALP required = 482 nos.

(g) CHIEF LOCO INSPECTOR (CLI):

For LP (@ 1 for 25) $(59+96+287) = 442/25 = 17.68$

For LPS& ALP (@ 1 for 50) $= (66 + 482) = 548/50 = 10.96$

Safety Counsellor = 01

For Sr. DME = 01

For Lobby CCNL (MLDT, SBG) = 2

For CTLC/MLDT = 1

For Running Room in charge (MLDT) = 01

Therefore, Total = 17.68 + 10.96 + 1 + 1 + 2 + 1 + 1 = 34.64 = 35 nos.

To set up TLC origination in MLDT division, 5 CLI/Senior cum suitable Loco Pilot Monitor as screened by Sr. DEE (OP) shall function as CTLC/TLC at MLDT.

- 2.3.8. Summarising the analysis made in para 2.4.7., proposed revised sanctioned strength as against the existing sanctioned strength of Crew in Diesel stream over **MLDT Division** has been assessed as under,

Designation		Present Sanction	Revised Sanction	Surplus
Loco Pilot Mail / Exp. (LPM)	DSL/Dual	80	50	30
	Converttee	0	9	-9
Loco Pilot Passenger (LPP)	DSL/Dual	98	90	8
	Converttee	0	6	-6
Loco Pilot Goods (LPG)	DSL/Dual	281	237	44
	Converttee	6	75	-69
Loco Pilot Shunting (LPS)		72	66	6
Asstt. Loco Pilot (ALP)		489	482	7
Chief Loco Inspector (CLI)		34	35	-1
Drafted Supervisor		26	20	6
Total		1086	1070	16

2.3.9. FOR HQ (ER) :

Head Qr. FP	Sanction	Drafted Supervisor	CLI
	Present Sanction	10*	04
	Proposed Sanction	10*	04
	Variation	00	00

* Drafted Supervisor Total = 10 (HWH – 5 & SDAH – 5)

No additional requirement of D/Sup. & CLI.

2.4.0. Summarising the above para nos. 2.3.2., 2.3.4., 2.3.6., 2.3.8. & 2.3.9., Revised sanctioned strength of Power Running Staff of Diesel Traction over Eastern Railway has been calculated to 3218 posts as against the existing sanctioned strength of 3751 posts, resulting surplus of 533 posts.

Category		Division										Total		
		HWH		ASN		SDAH		MLDT		HQ				
		Sanctioned Strength	Revised Sanction Strength	Sanctioned Strength	Revised Sanction Strength	Sanctioned Strength	Revised Sanction Strength	Sanctioned Strength	Revised Sanction Strength	Sanctioned Strength	Revised Sanction Strength	Sanctioned Strength	Revised Sanction Strength	Surplus
LPM	Dsl/ Dual	52	31	10	5	38	28	80	50	0	0	180	114	66
	Convt.	29	10	6	2	10	7	0	9	0	0	45	28	17
LPP	Dsl/ Dual	46	23	15	9	3	2	98	90	0	0	162	124	38
	Convt.	50	64	0	2	0	0	0	6	0	0	50	72	-22
LPG	Dsl/ Dual	436	315	214	145	170	110	281	237	0	0	1101	807	294
	Convt.	16	100	39	100	0	20	6	75	0	0	61	295	-234
LPS		38	20	71	50	39	39	72	66	0	0	220	175	45
ALP		661	503	299	263	232	167	489	482	0	0	1681	1415	266
CLI		44	32	22	18	17	14	34	35	4	4	121	103	18
Drafted Supervisor		47	25	26	15	31	25	26	20	0	0	130	85	45
Total		1419	1123	702	609	540	412	1086	1070	4	4	3751	3218	533

*HQ Drafted Supervisor HWH - 5, SDAH - 5

2.5.0.Recommendation:

Consequent upon the analysis made in the table above, it is recommended by the study team that the Revised Sanctioned Strength of Power Running staff of Diesel Traction over Eastern Railway would be 3218 Posts as against the Present Sanctioned Strength of 3751 Posts. Thus, the resulting (3751 – 3218) i.e. 533 Posts are identified as Surplus.

CHAPTER - III

3.0.0. FINANCIAL APPRAISAL:

According to the recommendation made in Para 2.5.0., the annual financial savings achieved on account of surrendering of 533 posts of Power Running staff of Diesel Traction over Eastern Railway is tabulated below.

(Figures are in Rs.)

Category	GP	Level	Mean pay	Mean Pay with Pay element @30%	D.A. @ 17%	Total pay/ month	No. of posts surrendered	Annual savings
ALP	1900	2	41,550	54,015	9183	50,733	266	16,19,38,300
LPS	2400	4	53,300	69,290	11779	65,079	45	3,51,42,822
LPM, LPG, LPP, D/Supv.	4200	6	73,900	96,070	16332	90,232	204	22,08,87,691
CLI	4600	7	93,650	1,21,745	20697	1,14,347	18	2,46,98,876
TOTAL							533	44,26,67,689

Thus, the annual financial against surplus of 533 (Five hundred thirty-three) Posts of ALP, LPS, LPM, LPG, LPP, D/Supv. & CLI worked out as minimum 44.27 Crores (Approx.).