1. DIESEL ORGANISATION

1.1 DIESEL LOCO EFFECTIVE HOLDING as on 31.07.2025.

Shed / Shop	HHP		ALCO		SHUNTING LOCO	Total
	WDG_4	WDG_{4D}	WDG_{3A}	WDM_{3D}	WDS_6	
BNDX	76	47	07	01	07	138
DLS / SRC	0	0	0	00	10	10
KGPW	0	0	0	00	04	04
Total	76	47	07	01	21	152

1.2 FUELLING INSTALLATION (RCDs)

Division	Station	Supplier	Storage Tank Capacity (in KL)	Avg. issue (KL/Day) up to July (2025-26)
KGP	**SRC**	Reliance	140	9.48
	KGP		1693	12.98
ADA	**BJE**	IOCL	140	11.42
RNC	**HATIA**		280	8.65
CKP	**TATA**		140	14.00
	BNDM		997	19.16

2.0 PERFORMANCE HIGHLIGHTS

2.1 AVAILABILITY SERVICE BASE (FREIGHT)

Parameter	2024-25		2024-25 (up to July'24)		2025-26 (up to July'25)	
	RB Target	Actual	RB Target	Actual	RB Target	Actual
Diesel loco Availability	97.49	106.62	96.15	100.58	54.35	123.68
% extra outage over RB Target	9.36%		4.60%		127.57%	

2.2 DIESEL LOCOS ASSET FAILURES

Failure Type	Year	No. of Failures	FRPCPM
Territorial Basis	2024-25	35 (HR-29, FR-06)	2.11
	2025-26 (up to July)	15 (HR- 14, FR-01)	2.45
Ownership Basis	2024-25	29	1.82
	2025-26 (up to July)	17	2.91

MAIN PARAMETERS	WDM3A	WDM3D	WDG3A	WDG4	WDS6
Length over buffer (mm)	15862	17350	17850	19964	15290
Length overall (mm)	17132	18632	19132	21244	16572
Wt of Loco in Working order (T)	112.8	117	123	126	126
Wheel Dia (mm)	1092	1092	1092	1092	1092
Adhesion Factor (%)	27	33	30.8	41	27
Max axle load (T)	18.8	19.5	20.5	21	21
Starting Tractive effort (Maximum) in Ton	30.4	38.6	37.8	55	34
Wheel Arrgt.	CO-CO	CO-CO	CO-CO	CO-CO	CO-CO
Speed (Max.)	120 Km/hr	120	100 Km/hr	100	62.5
Arrgt. of cylinder	45 deg. V type, 16 cyl	45 deg. V type, 16 cyl	45 deg. V type, 16 cyl	45 deg. V type, 16 cyl	Inline Vertical 6 cyl
Make and type	DLW 251B (UPRATED)	251 C uprated	251 C uprated	710 G3B	251D
HP (Std. UIC condition)	3100	3300	3100	4000	1400
Input to Traction in HP	2749 at site	2900-3000 at site	2750 at site	3781 at site	1300 at site
Working on	4 Stroke diesel engine	4 Stroke diesel engine	4 Stroke diesel engine	2 Stroke diesel engine	4 Stroke diesel engine
RPM (Rated)	1050	1050	1050	900	1100
RPM (idle)	400	350	350	200	400
Bore and stroke in mm	228.6 x 266.7	228.6 x 266.7	228.6 x 266.7	230.19 x279.4	228.6x266.7
Compression ratio	12.5:1	11.75:1	11.75:1	16:01	12.5:1
Turbocharger	GE7S1716/ ABB VTC304-VG15/ NAPIER NA295IR	High capacity turbo charger of ABB TPR-61,GE SD,HS 5800 NGT	High capacity turbo charger of ABB TPR-61,GE SD,HS 5800 NGT	EMD Model 'G'	--
Turbo Wt in Kg	GE-828 ABB - 850	HS- 370 -390 ABB- 446 GE- 650	HS- 370 -390 ABB- 446 GE- 650	953	--
Mean Piston speed m/sec	9.33	9.33	9.33	8.38	9.78
BMEP (kg/cm sq)	15.041	15.041	15.041	11.23	16.35
Fuel tank in lit	5000	Detachable 5000	Detachable 6000	Detachable 6000	5000
L O sump capacity in lit	1270	1025	1025	950	530
Water Pump capacity	2457l/m AT 1050rpm	2457 l/m at 1050 rpm	2457 l/m at 1050 rpm	3785 l/m at 900 rpm	1360 l/m at 1100 rpm
Water tank capacity in lit	1210	1210	1210	1154	645
Water Pump type	Centrifugal	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan Drive	Eddy current clutch	Eddy current clutch	Eddy current clutch	Ac motor	Eddy current clutch
Gear ratio	65:18:00	65:18:00	74:18:00	90:17:00	65:18 / 74:18
Brakes (Loco)	Air, Hand, dynamic Brake (IRAB-I)	Air, Hand, dynamic Brake (IRAB-I)	Air, Hand, dynamic Brake (IRAB-I)	Air, Hand, dynamic Brake (IRAB-I)	Dual, hand
Brakes (system)	PANEL MOUNTED IRAB1	panel mounted IRAB-1	panel mounted IRAB-1	KNORR/NYB CCB equipment	WABCO,28 LV-1
Compressor	KPC/ELGI /KCW-523/623/LG3CDB	LG3CDB	LG3CDB	3CD Gardner Denver	6CD4UC (expressor)
Fuel Injection	Direct	Direct	Direct	Unit Injector	Jerk Direct
Transmission	AC-DC	AC-DC	AC-DC	AC-AC	DC-DC
Traction motor	BHEL TM4906AZ / 4907BZ	TM5002	TM4907	Siemens ITB 2624	BHEL 165