

Minutes of Meeting of CMPE's Conference held on 14.06.2017

1.0 The meeting was called to discuss the issues related to failures of HHP locomotives, reduction in fuel expenditure by 10%. EDME (Tr.) welcomed all participants and stressed over action plan to reduce over reduction of failures.

2.0 Address by Member Traction:

S.N	Action	By	Time Schedule
2.1	Member Traction emphasized over 10% saving of fuel expenditure. He directed all Railways to ensure leak proof dispatch of diesel loco, RCD to be made leakage proof and to ensure all steps to reduce consumption of Diesel oil.	All Z. Rlys	Immediate
2.2	Member Traction also emphasized over fitment of APU. He directed all Railways to fit APU on faster pace.	All Z. Rlys DMW	Immediate
2.3	Railways have to work to achieve Zero failures. Action plan should be prepared and be implemented to achieve this.	All Z. Rlys	Immediate
2.4	There have been many cases of punctuality loss on account of crew mismanagement. A serious attempt should be made to educate all crew regarding complications of cab changing, loco starting and shutting down of locomotive. Failure because of Mismanagement by crew is basically because of failure of management.	All Z. Rlys	Immediate
2.5	Source code of AC-AC traction / propulsion system of locomotive should be taken from the OEMs. A set of officers and supervisors should be trained to understand the source code and make any modifications when required.	All Z. Rlys RDSO DLW	Immediate
2.6	Railways are also directed to do Right Powering. Member Traction clarified that policy of Right Powering has been approved by Railway Board. In view of accelerated electrification, Diesel loco will get released, these released locos should be utilized in Right Powering to enhance mobility over Indian Railway.	All Z. Rlys	Immediate
2.7	All CMPEs ensure engine shutting down whenever locos are not required.	All Z. Rlys	Immediate

3.0 Address by Addl. Member (Elect.)

S.N	Action	By	Time Schedule
3.1	AM/L while addressing all CMPEs has indicated that loco failures in 1 st quarter of 2017-18 has been significantly high. While analyzing failures, it has been observed that failures in HHP	All Z. Rlys	Immediate

S.N	Action	By	Time Schedule
	locomotives are double to the failures in ALCO locomotives. However, total number of HHP locomotives is half to the number of ALCO locomotives.		
3.2	Many failures in HHP locomotives are on account of electrical and electronics component. There have been many transient failures in Traction Control and CCB 2.0. These troubles gets rectified These cases should be investigated in the details and complete action plan to be devised and implemented.	All Z. Rlys RDSO	Immediate
3.3	Minister of Railway has directed to set a corporate objective of 10% deduction in diesel consumption. All efforts should be put in, to achieve this goal.	All Z. Rlys	Immediate
3.4	AM/L has emphasized to shut down idle locomotives religiously. He further stated that there has been a system of shutting down locomotive on advice of Dy. SS or Yard master only. The same system should be changed. Now onwards the locomotive should be shut down. The locomotive should be kept in idle running mode only on advice of Dy. SS or Yard master. Severe action should be taken on responsible staff keeping locomotive idle in engine running condition.	All Z. Rlys	Immediate
3.5	A critical review for requirement of RCD should be carried out. Wherever, electrification has been completed, RCDs should be closed down. In addition to this RCDs having less fuel issuance should also been critically review and should be closed down.	All Z. Rlys	Immediate
3.6	Each Railway is advised to close down atleast 10% of RCDs of their railways.	All Z. Rlys	Immediate
3.7	AM/L also directed that for opening of new RCD Railway Board approval should be sought in future.	All Z. Rlys	Immediate
3.8	AM/L also stated that as per directives received, An audit of Diesel Sheds and Fuelling points has been planned. The same should be completed on priority and action should be taken to identify areas to save HSD consumption.	All Z. Rlys RDSO	Immediate
3.9	There has been target of 5% blending of HSD with Bio-diesel. However the Indian Railways could achieve only 1%. All Railways should put their effort to achieve 5% blending. Necessary blending storage facility should be demarcated and blending should be started on priority.	All Z. Rlys IROAF	Immediate
3.10	Fitment of APU has been very slow. All Railways should work out feasibility of fitment of APU in diesel sheds and workshop. The same should be submitted to Railway Board and RSP should be allocated accordingly.	All Z. Rlys DMW	Immediate
3.11	Working of APU and its utilization should be strictly monitored at shed level. APU should be treated as integral component of	All Z. Rlys	Immediate

S.N	Action	By	Time Schedule
	locomotive and any defects or non-functioning of APU to be rectified before dispatch of locomotive from Diesel shed.	RDSO	
3.12	Addl. Member Elect. has emphasized that with introduction DLF/MARHAURA. DLW/DMW & RDSO should prepare action plan to inculcate high quality engineering and should also develop as export oriented manufacturing unit.	DLW/DMW RDSO	Immediate
3.13	AM/L mentioned that there has been change of traction in many Railways. Railways should also prepare to run train with electric traction. Loco pilots, loco pilot shunters etc should be trained on electric traction.	All Z. Rlys	Immediate
3.14	Barauni Diesel shed should be taken over from RVNL and All efforts should be made to make the shed functional before 31.07.2017.	ECR	31.07.2017
3.15	Sanctioned Expansion work of Diesel shed should be executed with facilities of electric loco maintenance. While executing these works, a separate OHE line for electric loco maintenance should also be constructed. JPO issued by RDSO may also be referred in this regard.	All Z. Rlys	Immediate

4.0 Address by AM/budget:

S.N	Action	By	Time Schedule
4.1	AM/budget stressed over saving in fuel expenditure. She advised all CMPEs to take all efforts to reduce inventory and consumption of HSD.	All Z. Rlys	Immediate
4.2	AM/Budget advised all CMPE to review the RCD and maximum number of RCDs should be closed in liaison with CFTM.	All Z. Rlys	Immediate

5.0 Action plan presentation by DLW:

CME/DLW gave a detailed presentation over action plan to reduce failures within 180 Days and also over failures reported by Zonal Railway.

S.N	Action	By	Time Schedule
5.1	CME/DLW indicated that in comparison to 2015-16 in year 2016-17, 180 days failure has reduced down from 200 to 161 cases. There has been nearly 20% improvement.	DLW	Immediate
5.2	Power pack, air brake system, contactor, Relay, cable (LT) & switch has been major assembly which failed.	DLW	Immediate
5.3	Out of 34 cases of power pack 17 cases are because of cylinder liner failure. Out of these 17 cases, 12 are GE make cylinder	DLW	Immediate

S.N	Action	By	Time Schedule
	liner. While detail analysis Mae waist profile has been found deviated, metallurgical deviation has also been observed and hardness pattern has also been noticed specified limit.		
5.4	Fitment of GE liner has been stopped since Jan 16. Total 3590 Cylinder liners have been rejected. M/s GE is being persuaded to replace the existing stock of cylinder liner available with Diesel Sheds.	DLW	Immediate
5.5	There has been 05 failures in EMD make cylinder liner. Leakages from brazed joints have been observed. 94 EMD make cylinder liners have also been rejected due to sharp edge at air inlet port.	DLW	Immediate
5.6	CAPL make cylinder liner are being fitted. 132 locomotives fitted with CAPL make cylinder liner are working on line and no failures have been reported till date.	DLW	Immediate
5.7	Engine testing schedule has also been enhanced from enhance from 3 hr 35 min to 8 hrs 20 min.	DLW	Immediate
5.8	There have been 06 failures of Cylinder head of EMD make. Crack at Water outlet port, Crack at Fire Face Area, No spines found in fire face cooling area, Metallurgical deviation found as Type 'B' graphite against Type 'A' specified. In EMD make cylinder head.	DLW	Immediate
5.9	Joint process audit with EMD/USA conducted at DLW, in Feb 17. EMD has agreed for warranty replacement. Fitment of EMD make stopped since 28.12.16.	DLW	Immediate
5.10	DLW has been asked to circulate locomotive wise details of such Cylinder heads of EMD make to Diesel sheds.	DLW	Immediate
5.11	Fitment of Cooper make started since 29.12.16. 152 locomotives have been fitted and till date no failures have been reported.	DLW	Immediate
5.12	There have been 04 failures of EMD piston ring also. Excessive end gap & light passing is observed on circumference in EMD supplied conventional piston ring sets. Abnormal wear of Piston ring causing direct contact of Piston with the liner has also been observed.	DLW	Immediate
5.13	175 loco sets of EMD supplied Piston ring sets rejected.	DLW	Immediate
5.14	Modified design Low lube oil Piston ring sets have been introduced. Field performance and LFR has been reported satisfactory.	DLW	Immediate
5.15	Railways and Diesel sheds explained their concern regarding unavailability of power assembly. DLW has been advised to enhance power assembly output to 3500 in a year. Furthermore, it has also been advised that feasibility of rate contracts for overhauling of power assembly may be explored with OEMs.	DLW	Immediate

S.N	Action	By	Time Schedule
5.16	All Railways have been advised to study spectrographic lube oil analysis to prevent failures of power assembly items. While reporting failure of power pack components, the last spectrographic analysis details of lube oil analysis should also be sent.	All Z.Rlys DLW	Immediate
5.17	There have been 03 cases of turbo super charger assembly.	DLW	Immediate
5.18	Quality audits conducted at DLW. Squareness checking of threaded holes of Idler gear support assembly has been introduced at DLW, to arrest jumper bolt breakage.	DLW	Immediate
5.19	Heat treatment specified in the OEM's drawing was inadequate for upgraded material. Heat-treatment process modified, stress relieving temperature increased from 640°C to 925°C.	DLW	Immediate
5.20	Process audits of Indigenous vendors conducted. 100% conformity achieved during sample checks.	DLW	Immediate
5.21	Design Bulletin dt.11/05/15 issued for procedure of fitment and matching of turbocharger on HHP engines at Diesel sheds.	All Z.Rlys DLW	Immediate
5.22	Four Training programs conducted for 33 Diesel sheds Officers and Staff for training on mounting, preventive maintenance and upkeep of HHP Turbo Superchargers.	All Z.Rlys DLW	Immediate
5.23	RICE BLASTING is being done for turbo supercharger in UBL shed, other sheds should send their team to study and to adopt.	All Z.Rlys DLW	Immediate
5.24	SJUG shed has deputed staff to DLW to learn fitment of TSC, other shed may also depute to SGUJ diesel shed to learn TSC fitment.	All Z.Rlys DLW	Immediate
5.25	In fuel oil system there has been 10 failures of MUI and 5 failures of fuel pump.	DLW	Immediate
5.26	MUI has failed mainly because of oil contamination and ingress of foreign particles.	DLW	Immediate
5.27	All diesel shed submit vetted demand for MUI injector test stand, DLW will compile and do the procurement.	DLW	Immediate
5.28	DLW has started blowing of Fuel oil header and fuel oil line assemblies.	DLW	Immediate
5.29	Instruction Bulletin issued for MUI calibration and maintenance. The railways should follow the same. Joint audit with interstate/UA carried out at UBL and KJM shed.	All Z.Rlys DLW	Immediate
5.30	Fuel pump were failing because of inverter burnt and defective. Fuel pump has been relocated. Higher rating of Fuel pump is now being fitted since Sept. 2016. All future procurement from DLW and from Railway should be done on this specification only.	All Z.Rlys DLW	Immediate

S.N	Action	By	Time Schedule
5.31	There has been failure of fuel hose assembly. Fuel hose with universal joint (free rotation) has been developed and provided. Design bulletin also issued. All Railways should change these pipes to this design.	All Z.Rlys DLW	Immediate
5.32	There have been failures in radiator assembly of LLOYD make. 62 no radiators of defective lot has been replaced by LLOYD. DLW will circulate details of lot and loco wise fitment details for replacement of unit already fitted in locomotive.	All Z.Rlys DLW	Immediate
5.33	4 tube located at all the corners have been dummied.	DLW	Immediate
5.34	There have been failures of governor on account of less solenoid resistance. Woodward USA team is working on modifications of solenoid. 25 solenoids have been supplied and are under trial at TKD and KYN.	DLW NR, CR	Immediate

6.0 Action plan presentation by RDSO:

S.N	Action	By	Time Schedule
6.1	ED/MP/RDSO gave a brief presentation about action plan to reduce failures of HHP locomotive.		
6.2	There have been failures of GP relay and EFCO relay. RDSO has issued instruction bulletin no MP.MOD.EC.04.09.15 REV-00 dated 11.11.2016. The same should be followed by Railway.	All Z. Rlys	Immediate
6.3	GR relay to be tested as per IB. All relays to be replaced after 18 years of life.	All Z. Rlys	Immediate
6.4	There have been failures in contactors. To reduce these failures RDSO has introduced higher rating (325 Amm from 250 Amp) contactors.	All Z. Rlys	Immediate
6.5	The diesel sheds have been advised to change tips once in 6 years. Siemens has provided Siemen make radiator fan contactor in 10 locos.	All Z. Rlys	Immediate
6.6	GOC shed has done modification in relay; the same should be adopted by all Railways.	All Z. Rlys	Immediate
6.7	SGUJ has developed one mili volt drop test for contactors the same should be studied and RDSO may study and issue maintenance instruction Bulletin accordingly.	RDSO	Immediate
6.8	Heinemann make circuit breakers were failing. Its fitment has been stopped since June 16. M/s Siemens has been advised to replace all type of circuit breakers in loco by AIRPAX model. All Railways should confirm the compliance of same.	All Z. Rlys RDSO DLW	Immediate
6.9	Failure of radiator fan circuit breaker also discussed. Siemens 400 N model has been standardized for RFCB across all AC-AC	All Z.Rlys	Immediate

S.N	Action	By	Time Schedule
	system vendors.	RDSO	
6.10	There have been 21 failures of electronic cards. SIBAK KLIP in Siemens System has been single largest contributor to these failures. Grounding of negative voltage of SIBAS KLIP with loco body has been started. All shed to get these exercise completed. Till date only 287 loco have been completed out of 434 locomotives.	All Z. Rlys	Immediate
6.11	RDSO has issued Instruction Bulletin to take precautions before any welding activity in locomotive. All couplers are required to be opened. SWR/KJM has made one video. The same may be collected and used for training maintenance staff.	All Z. Rlys	Immediate
6.12	There have been 14 failures of sensors.	RDSO	Immediate
6.13	For Fitment of Speed sensor of Jacquett make M/s Siemens and M/s MEDHA have been advised. Speed sensor has also been covered in AMC of AC-AC Traction system.	RDSO	Immediate
6.14	To arrest failures in MRPT sensor, M/s SIEMENS have been allowed to reduce power supply from 24 V to 15 V. The drive has been completed.	RDSO	Immediate
6.15	Because of problems in TCC phase module, there have been 23 failures. RDSO has advised M/s Siemens to depute technical team from SIEMENS/Germany to attend coordination meeting at RDSO for investigation and for quick resolutions of the design issues.	RDSO	Immediate
6.16	M/s EMD and M/s SIEMENS have been advised to submit action plan to switch over to axle control from existing truck control system. Siemens have given their target date as Sept. 2018. AM/L advised ED/MP/RDSO to advise the firm to reduce the target date.	RDSO	Sept. 2018
6.17	There have been 28 failures in CCB 2.0 and 28 failures in CCB 1.5.	RDSO	Immediate
6.18	CCB 2.0 OF M/s Knorr Bremse is similar in HHP and ABB electric loco. There has been problem of dust ingress in HHP loco. S.S. Airbrake pipeline has been introduced in HHP loco.	RDSO	Immediate
6.19	Recently Instruction Bulletin to address issue of CCB 1,5 and CCB 2.0 has been issued. The same should be incorporated by all Diesel sheds.	All Z. Rlys	Immediate
6.20	MTR advised CMPE/NFR to take administrative control of crew from CRSE/F&O. Similar exercise in other Railway should also be done.	All Z. Rlys	Immediate

7.0 Presentation by Sr.DME/UBL

S.N	Action	By	Time Schedule
7.1	Sr.DME/UBL indicated that M/s EMD has supplied cylinder head with pressed type water jacket dummy plug. There have been failures with this. The firm is required to adhere to threaded type water jacket dummy plug. CME/DLW is advised to take this issue with the firm.	DLW	Immediate
7.2	Sr.DME/UBL raised issue of wheel Disc crack. A committee consisting of CMPE/SWR, CMPE/SER and Dir/RDSO is constituted to investigate these failures in UBL, SBI, BGKT and SGUJ diesel shed. The committee should submit report before 31.07.2017.	RDSO, SER, SWR	31.07.2017
7.3	Sr.DME/D UBL also pointed that DLW have been fitting various make of additional cut out cock of various design having different open/close position. DLW was advised to standardize the design with spring loaded design.	DLW	Immediate
7.4	It is also pointed that tube type intercooler in ELGI compressors are not efficient as compared to channel type intercooler. The same to be studied in detail by DLW and DLW should standardize design. Incompatibility of ELGI compressor with GD compressor has also been pointed, the same should also be studied by DLW.	DLW DMW	Immediate
7.5	Sr.DME/D/UBL also pointed that the diesel loco holding of sheds is increasing without any augmentation to staff strength. Railway Board is requested to advise uniform guideline for outsourcing of Governor, MUI, air brake valves, and air compressor overhauling.	EDME(Tr.)	Immediate

8.0 Presentation by Sr. DME/SBT

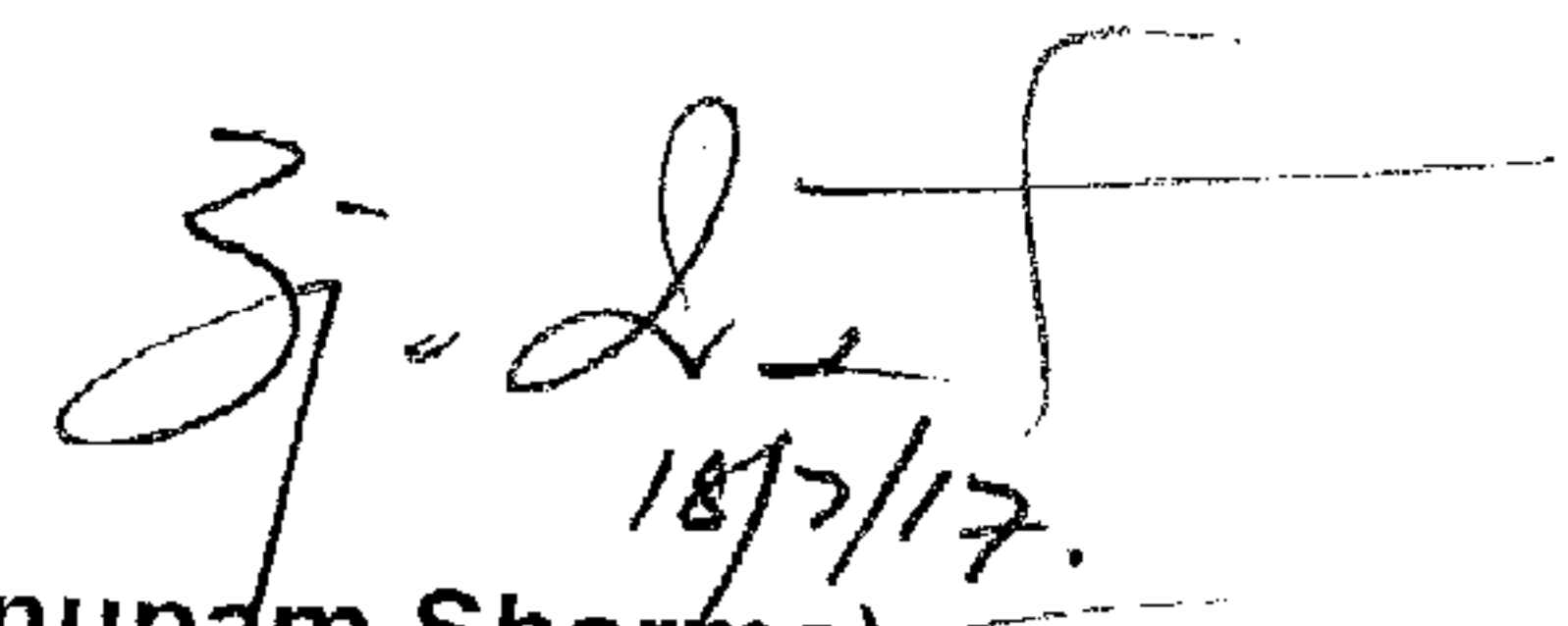
S.N	Action	By	Time Schedule
8.1	SBT Sr.DME pointed that many Diesel locomotive are logged wrongly over FOIS as dead or failed, especially at 00:00 hrs. and it remain so for next 5-6 hours. This causes loss of FOIS outage to Diesel shed. In accumulation each shed use to make loss of nearly 3-4 loco outage daily because of such actions. All CMPE are advised to monitor such activities through power controller of the division and avoid such wrong logging.	All Z. Rlys	Immediate
8.2	Sr.DME/D/SBI has indicated that there have been large cases of Cylinder head valve guttering. The diesel shed has started compression pressure in 180 Days in locomotive.	RDSO	Immediate
8.3	EDME/Tr. advised all Railways to report all failures of valves to DLW.	All ZRlys	Immediate

S.N	Action	By	Time Schedule
8.4	EDME/Tr. pointed that many sheds are not having standard tools for HHP locomotive maintenance. For instance, GTL Diesel shed is working with 30 % tooling item. All Railways to ensure proper planning of tooling and DLW to ensure centralized procurement of the tooling.	DLW	31.08.2017

9.0 Meeting ended with vote of thanks to the Chair.

10.0 All concerned are advised to take necessary action accordingly and submit compliance to Board's Office.

11.0 List of participants is enclosed as annexure.


 18/7/17.
 (Anupam Sharma)
 Exec. Dir. Mech. Engg. (Traction)
 Railway Board.

No. 2016/M(L)/466/ 19

New Delhi, dated, 18.07.2017

Forwarded to:

- (i) MTR, AM(L) - for kind information.
- (ii) CEEs/ CMPEs of all Zonal Railways.
- (iii) CME/ DLW.
- (iv) CAO/ DMW
- (v) EDS(MP)/RDSO.