

Northern Railway SPAD CASES

Summary of SPAD cases over NR (2022-23, 2023-24, 2024-25)									
Div	Railway Reported			Division Reported			Grand Total		
	22-23	23-24	24-25 Upto Nov	22-23	23-24	24-25 Upto Nov	22-23	23-24	24-25 Upto Nov
DLI	0	0	0	0	2	0	0	2	0
FZR	0	0	1	1	2	1	1	2	2 (SJNP, RLS)
LKO	0	1	1	0	1	2	0	2	3 (KVG, BSB, AMS)
MB	0	1	0	3	1	0	3	2	0
UMB	0	0	0	4	2	0	4	2	0
DFCC	0	0	0	0	0	3	0	0	3 (SIRN & KRJN, RE)
Total	0	2	2	8	8	6	8	10	8

SPAD over NR (as per SIMS)

2023-24 (Apr to Nov)	2024-25 (Apr to Nov)
2	2 (LKO & FZR)

SPAD over NR (Not in SIMS)

2023-24 (Apr to Nov)	2024-25 (Apr to Nov)
4	3 (FZR-1, LKO-2)

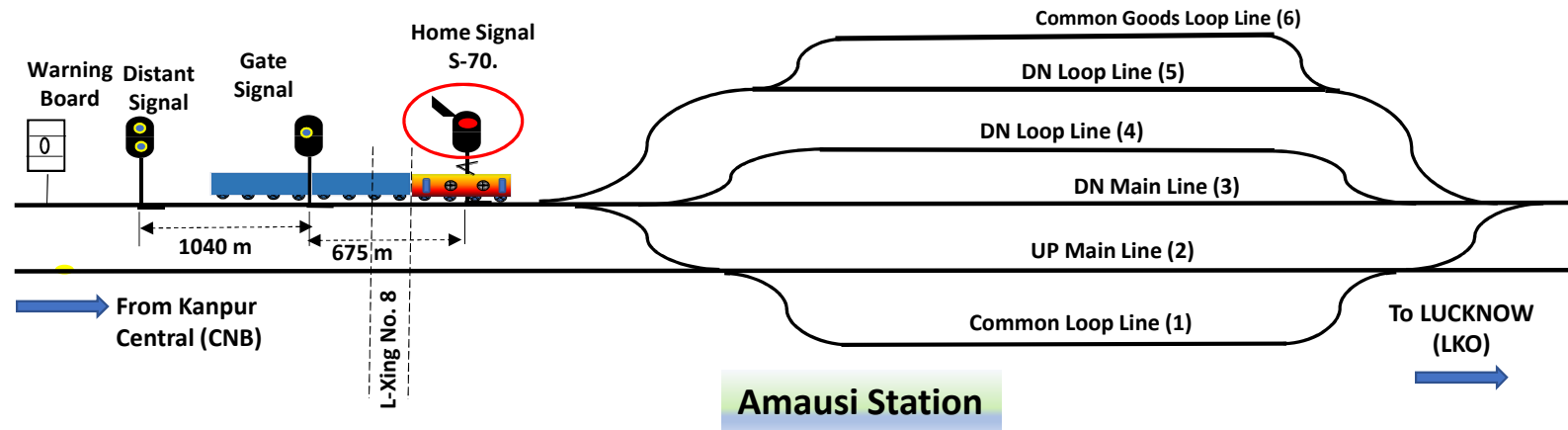
SPAD (DFCC/EDFC/WDFC)

2023-24 (Apr to Nov)	2024-25 (Apr to Nov)
0	3 (DFCC-1, EDFC-1, WDFC-1)

SPAD over NR (as per SIMS)

2023-24 (Apr to Nov)	2024-25 (Apr to Nov)
2	2

SPAD of Train No.15026 (ANVT-MAU), Loco 30242/GZB at Amausi (AMS) in LKO Division on 11.11.2024



Site:

- Section: CNB-LKO,
- Block section: POF-AMS
- Station: Amausi (AMS)
- Signal system- Color light on Double line in Absolute system.
- Last Signal sighting was done on 16/17.07.2024 between CNB-LKO by Signal Sighting committee.
- MV no 2114299/MAU/NER dated 10.11.24/LHB Rake/Load-22=44/BP-100% but as per Joint note BP found also 100% and validity 4000 km/36hrs.
- Continuity certificate no. 2116072 issued by ANVT /NR on date 11.11.24,
- Weather and Visibility was Clear.
- Total duty at time of SPAD-04'14''
- No Mandatory course of crew is overdue.

SPAD of Train No.15026 (ANVT-MAU), Loco 30242/GZB at Amausi (AMS) in LKO Division on 11.11.2024

Details of events:

- LP Sign ON at CNB at 18.50 hrs after taking 03.51 hrs rest at CNB (out station).
- At 20.04 hrs train departed from CNB.
- At 21.16 hrs train passed PPF (Piparsand).
- Train was planned by traffic via South Line from AMS because DN/KV load was departing from North Line from AMS.
- Home Signal of AMS was kept in ON position for train 15026.
- At 21.20 hrs LP of train 15026 passed Home Signal of AMS in “ON” Position (RED) and stopped approx. 35 meters beyond home signal at 21:20:37 hrs.
- Loco pilot started back his train at 21:32:08 hrs and stopped before Home Signal at 21:32:50 hrs train after travelling 37 metres backward journey in 42 sec.
- LP passed gate signal at 67 kmph and at 21:19:51 hrs and passed home signal at 28 kmph at 21:20:28 hrs and speed became ‘0’ at 21:20:37 hrs (in 09 seconds).
- BA test of crew is found negative.

SPAD of Train No.15026 (ANVT-MAU), Loco 30242/GZB at Amausi (AMS) in LKO Division on 11.11.2024

Analysis as per SPM details:

- At 21:20:37 train stopped approx. 35 meters beyond Homes after passing signal in ON position.
- At 21:32:08 hrs LP started back the train.
- At 21:32:50 hrs train stopped again after travelling 37 metres back in 42 sec.
- Distance between Warning Board and Distant Signal = 400 meters.
- Distance between Distant Signal and Gate Signal = 1040 meters.
- Distance between Gate Signal & Home Signal = 675 meters.
- Approx. speed of train while passing gate signal = 67 kmph (Time 21:19:51).
- Approx. speed of train while passing home signal = 28 kmph (Time 21:20:28).
- Speed became '0' at 21:20:37 hrs (in 09 seconds).

SPAD of Train No.15026 (ANVT-MAU), Loco 30242/GZB at Amausi (AMS) in LKO Division on 11.11.2024

Some important Points related to SPAD:

1. Speed of train was 67 at Distant Signal which was showing caution aspect.
2. Distant signal is also a Gate Signal which was forewarned by another Distant Signal, here also the speed was 67 kmph.
3. Crew did not reduce speed to 50 kmph while passing single yellow Gate signal.
4. After observing RED Home Signal, LP late applied brake and emergency brake was applied at 21:20:20 hrs at speed 46 kmph.
5. Crew was booked after taking 03.51hrs out station rest at CNB by NCR.
6. DN Home signal at km No. 11/32-32, and Gate Signal at km No. 12/16-18. There is a neutral section at km No. 12/24-26.

SPAD of Train No.15026 (ANVT-MAU), Loco 30242/GZB at Amausi (AMS) in LKO Division on 11.11.2024

Cause of SPAD

As per JA grade Inquiry report:

- (a) Primary cause of accident is negligence of LPM Along with this, ALP did not take timely and sufficient action to stop the train when it passed the Yellow Gate-cum-Distant signal at high speed.
- (b) Equally responsible is the Crew Controller, CNB, Prayagraj Division, NCR for doing under-rest booking of LPM by using Rest Modification facility in Crew management system (CMS).
- (c) The role of nominated CLI in this SPAD is significant since he could have prevented the SPAD by being more proactive in his approach towards LPM who is a Category B' LPM.
- (d) Apart from this, under- rest crew booking by CNB Lobby could have been prevented if LKO lobby had timely sent spare crew to CNB Lobby.
- (e) TM/LKO is held blameworthy for failing to prevent push back of train no. 15026 without proper authority.

Responsibility

Primary Responsibility:

- 1. LPM for late application of Brake and overshooting Down Home Signal S-20 of AMS.
- 2. ALP for not timely applying RS Valve.
- 3. Crew Controller, CNB, Prayagraj Division, NCR for doing under-test booking.

Secondary Responsibility:

- 1. CLI for not taking proactive action for Category B' LPM under him.
- 2. SNC/LKO for not providing spare crew to CNB lobby.

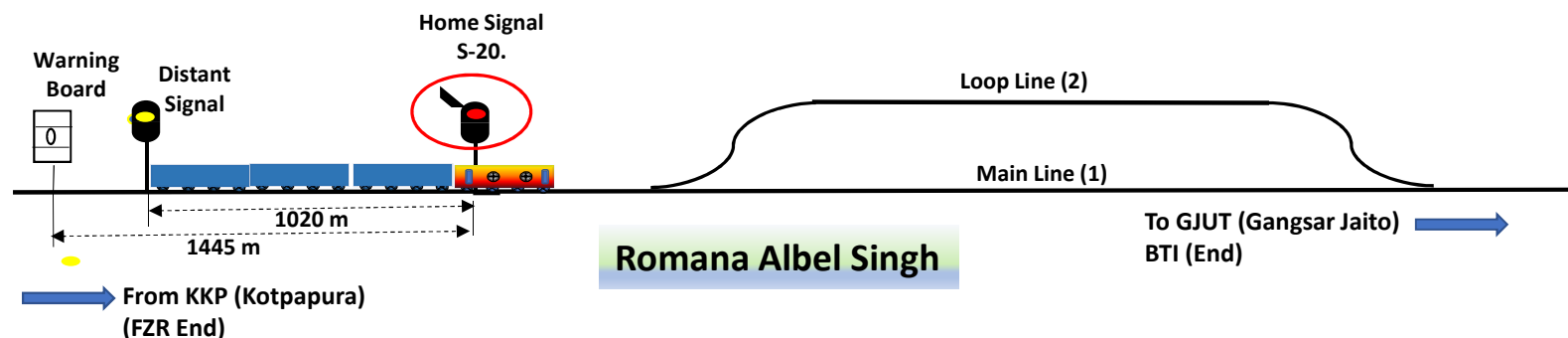
Blameworthy: TM for failing to prevent push back.

Action Taken: SF-5 issued on 26.11.2024 to LPM, ALP and CLI.

Recommendations

1. CLIs should be proactive in counseling their allotted LPs, especially the Category "B" LPs.
2. The guidelines regarding the use of Regenerative Braking must be brought out in clear terms indicating when/where to use and when/where not to use and the same must be included in CLI counseling.
3. The hand of ALP must automatically rest on RS valve on seeing a yellow signal. Counseling of ALPs in this regards needs to be effective and this must be checked through footplates and ambush checks.
4. In normal times, the booking of the crew should be done as per the link and the FIFO should not be resorted to for crew booking. In case of shortage of crew, higher management should intervene immediately to address the situation.
5. Although the provision for rest modification exists in CMS, it should not be resorted to by Crew controllers without proper authority and knowledge of higher officials.

SPAD of DN FZP/UDB FG Load, Loco 49398/WDG-4/GIMB at Romana Albel Singh station in FZR Division on 17.11.2024



Details of Site:

- MACL (Multiple Aspect Color light) Signalling territory on Single line in Absolute Block system.
- Signal Sighting was done 07.10.2024.
- Weather: Dense fog in section and Visibility was about 10-20 meters.
- Lime marking was available and fog signal post was painted.
- Total duty at time of SPAD: 03:44 hours.
- BA test of LP & ALP was done and found negative.
- No mandatory course of crew is overdue.
- FSD no.2/FZR was in working order.
- MV-5 no. 50000713503/KJGY/UMB/dt.08.11.24 (Validity 20+5 Days/Load: BCNL/42+BK-Van (3650Tonnes)).
- Brake power found 100% as per jointly checked.

SPAD of DN FZP/UDB FG Load, Loco 49398/WDG-4/GIMB at Romana Albel Singh station in FZR Division on 17.11.2024

Details of events:

- At 20:30 hrs LP signed ON at FZR and departure LE at 21.35 from FZR.
- At 21:50 hrs LE received at FZP in line No. 4 on Calling ON signal. Loco 49398/GIMB attached directly at 22:20 hrs on DN FZP/UDB FG load, pressure ready & departure at 23:25 hrs. Weather was heavy foggy.
- From 00:47 to 01:04 hrs (17'') train controlled at KKP for crossing of train 14507 & 14619 and departed from KKP at 01:05 hrs.
- At 01:06 hrs train No. DN FZP/FG (load-42 BCNL+1BK-Van=3650Tonnes), working with DSL Loco 49398 /GIMB passed KKP.
- Train was being controlled at RLS Home Signal No. S-20 (signal was red) due to crossing of Light Engine 27282 for FDK which arrived in line No. 1 at 01:12 hrs.
- But LP of DN/FZP/UDB FG load stopped his train approx. 50 meters beyond passing home signal of RLS (Romana Albel Singh) in RED condition at 01:14 hrs.
- At 01:19 hrs train backed within Home signal.
- At 01:45 hrs train received on "Calling ON" signal.
- At 02:00 hrs train arrived RLS.
- At 02.05 hrs relief crew sent from FZR by train No. 14624 for DN FZP/FG load.

SPAD of DN FZP/UDB FG Load, Loco 49398/WDG-4/GIMB at Romana Albel Singh station in FZR Division on 17.11.2024

Analysis as per SPM details:

- At 01:04:15hrs, train dep. ex KKP.
- At 01:10:00hrs, train gained speed 63kmph and BP-5kg/cm².
- At 01:12:46hrs, Distant signal of RLS was Yellow passed at 49kmph speed.
- At 01:14:04hrs, after travelled 260 meters LP applied brake, BP dropped 4.79kg/cm² to 4.43kg/cm² and speed reduced (30kmph to 26kmph).
- At 01:14:04hrs, While train was approaching near Home signal S-20, FSD GPS network was not available resulted LP could not judge the distance of Home signal. Then suddenly, LP observed the Red Home Signal no.S-20 which was on curve (S-type-2.07 degree).
- At 01:14:14hrs, after travelled 79 meters LP applied Emergency brake at 26kmph (ALP also applied RS Valve).
- At 01:14:21hrs train passed Home signal of RLS (Romana Albel Singh) in RED condition at 22kmph speed.
- At 01:14:23hrs Home signal track occupied (T19).
- At 01:14:36hrs train stopped after passing Homer signal (50.36 meters).
- At 01:17:23hrs, LP tried to move back the train.
- At 01:18:16hrs, Train started to move backward.
- At 01:19:02hrs track clear inside Home signal.
- At 01:19:12hrs Home signal cleared.
- At 01:19:18hrs, train stopped.
- At 01:48hrs train restarted on Calling ON signal.
- At 02:01:10hrs train arrived at RLS station.

SPAD of DN FZP/UDB FG Load, Loco 49398/WDG-4/GIMB at Romana Albel Singh station in FZR Division on 17.11.2024

Cause of SPAD & Responsibility

As per JA Grade Inquiry Report

- (1) LPG is held responsible for his lapses in not maintaining speed as per signal aspects, not taking a cautious approach in the foggy weather and belated application of brakes that led to passing DN Home Signal (S-20) of RLS station at "ON" position while working DN FZP-UD/FG on 17.11.2024. He violated the provisions of GR 3.78 (1) (a), GR- 3.80(1) of G&SR, Northern Railway.
- (2) ALP is held responsible for not showing necessary alertness in foggy weather and belated operation of RS valve that led to passing DN Home Signal (S-20) of RLS station at "ON" position while working DN FZP-UD/FG on 17.11.2024. He violated the provision of GR 3.78 (1) (a), GR-3.80 (1) of G & SR, Northern Railway.

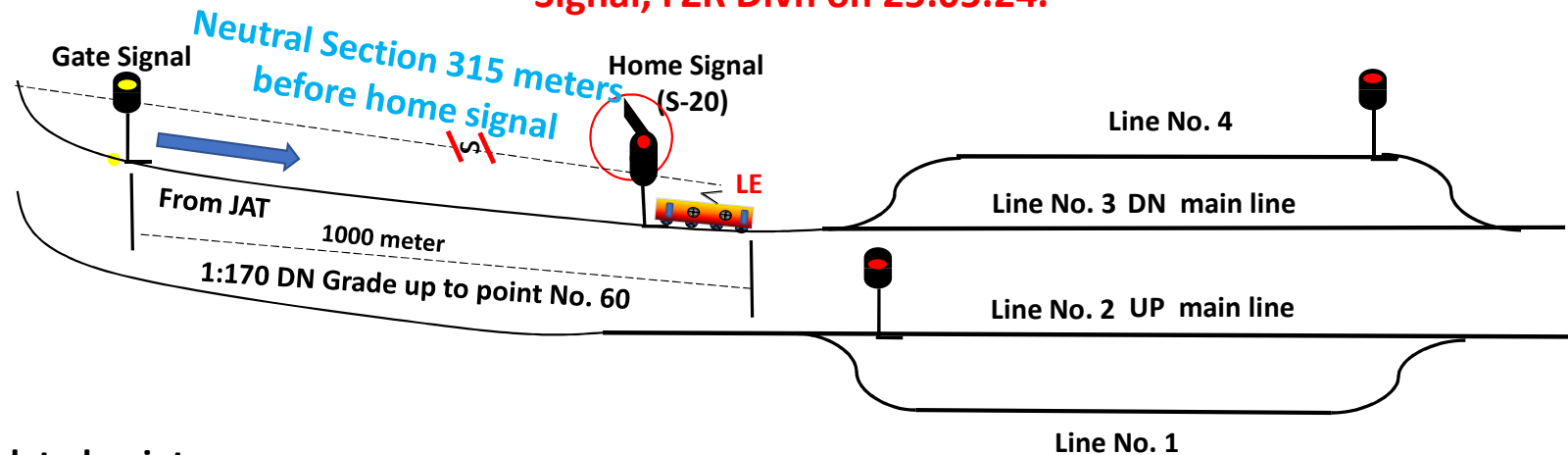
Recommendations

1. Intensive and repeated counselling of running staff should be done regarding train working in foggy weather during winter season.
2. Intensive counselling of ALPs should be done to eliminate the hesitation to operate the emergency brake valve in case of emergency or in case loco pilots do not reduce the speed of train according to the aspect of signals or other obstructions.
3. Lobby in-charges and CC's to ensure proper functioning of FSD sets before issuance to the LP's
4. Simulator trainings for understanding of train dynamics, brake management to be conducted specially for Loco Pilots identified with poor driving techniques.
5. Availability of walkie Talkie sets in adequate numbers should be ensured, so that it is issued to each and every LP and TM.
6. Strict prohibition on usage of mobile phones by crew during journey needs to be ensured, unless in case of emergency as per guidelines.
7. The quality and effectiveness of the counselling by the CLIs need to be reviewed and improved.

SPAD over NR (Not in SIMS)

2023-24 (Apr to Nov)	2024-25 (Apr to Nov)
4	3 (FZR-1, LKO-2)

Detail of SPAD of Light Engine 43691/WAG-9, ET / WCR (New Loco from BLW 30.04.24) at SJNP (Sujanpur) Home Signal, FZR Divn on 25.05.24.



Site and related points:

- Weather and visibility was clear.
- SJNP home signal clearly visible from more than 500 meters.
- There is neutral section at km No.06/22 which is located 315 meter before Home Signal No. S-20 and DJ close board is located at km No. 06/20.
- Distance between home signal No. S-20 and Gate signal is 1000 meters
- Down Gradient 1:170 upto point no.60 and then 1:400 in Yard.
- FSD & VCD was available in Loco and was in working order.
- Total duty-**05'07"** at the time of SPAD case.

Brief Report of Incidence:

Light Engine 43691/WAG-9/ ET/WCR dep. ex BHRL at 6.58hrs for PTKC arrived at 07.05hrs and left at 07.48hrs as Banking Engine of UP BBM N Load and which reached BBM N at 09.47hrs. Loco detached from load and dep. as Light engine for PTKC at 10.05hrs, run through passed ex MDPB at 11.07hrs and said light engine passed Home signal of SJNP at ON position at about 11.12hrs and stopped after passing 31 meters. T-806 served to LP and light engine arrived at 11.17hrs in line no.04 of SJNP.

Details of Events

- At 06.07hrs LP Sign ON at PTK, sent spare PTK to BHRL by road to work Light engine as banking engine for BBM N load.
- At 06.25hrs, LP took over charge of loco no.43691/ET,
- At 06.58hrs Light Engine dep. from BHRL to PTKC arrived at 07.05hrs.
- At 07.48hrs Loco dep. from PTKC as Banking engine of UP BBM N load and reached BBM N at 09.47hrs and loco detached and Light engine dep. at 10.05hrs ex BBM N for PTKC,
- At 11.04hrs, SM/SJNP granted line clear to MDPB for DN Light engine.
- At 11.07hrs, Light engine through passed ex MDPB,
- This Light engine was planned to receive on line no.4 of SJNP which was occupied by EP LDH which dep. at from SJNP at 11.06hrs and cleared the line no.4 at 11.11hrs.
- After clearance of line no.4, SM/SJNP while initiating the lowering of DN Home Signal S-20 for line no.4 (in between, at 11.12hrs LP passed SJNP DN Home signal S-20 at ON position and stopped after passing 31 meters and also back the loco) observed the Red indication on Panel. Then SM/SJNP immediately contacted on VHF set to LP of Light engine/PTKC and LP confirmed that he had passed Home signal at ON position by mistakenly.
- As per ALP he was calling out signals aspect again and again to LP, also advised Neutral section and applied RS valve to stop loco before Home signal.

•**As per speedo graph:-**

- At 11.09.35hrs, Distant signal passed at **Double Yellow** aspect at 80kmph speed.
- At 11.10.40hrs, Gate signal passed at **Yellow** aspect at 80kmph speed.
- At 11.11.42hrs, DN Home Signal S-20 passed at **Red aspect** at 21kmph speed (as per data logger also),
- At 11.11.50hrs, LP stopped after passing DN Home Signal S-20 about 31 meters.

Parameters in Loco were checked and found ok:

- BP-5.00kg/cm², FP-06kg/cm², MR-9.8kg/cm²,
- SA-9 applied condition pressure was-3.5kg/cm²,
- Synchronization condition-BP dropped 1.5kg/cm² on FS service position and Synchronizing loco brake applied 2.5kg/cm².
- SA-9 applied time was 09 seconds (pressure 3kg/cm²).
- SA-9 Releasing time was 13 seconds (pressure 3kg/cm² to Zero kg/cm²).
- RS Valve in working condition.

Conclusion

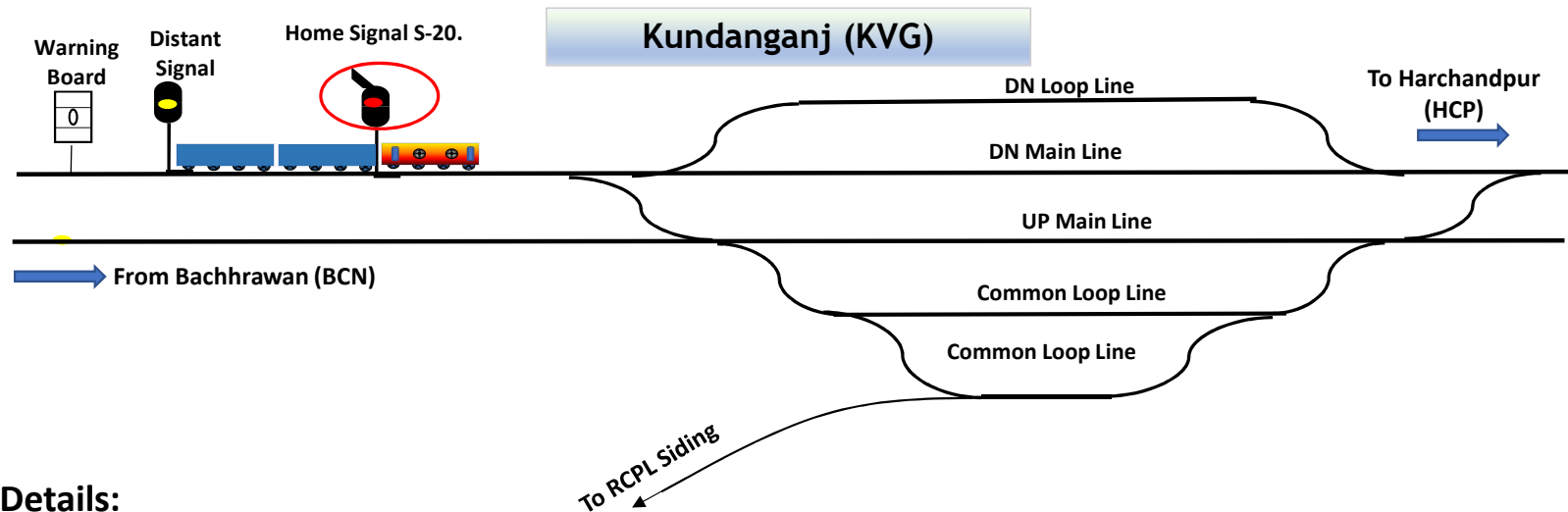
LP passed DN Hone signal at ON position due to brake late applied by LP as he was observing DJ closing on Neutral section

Responsibility: LP & ALP

Action Taken:

SF-5 issued on 25.06.24 to LPG, ALP CLI nominated as IO on 29.06.24 and D&AR inquiry submitted for further process.

SPAD of BCNE load, loco DSL 12343 at Kundanganj (KVG), LKO Division on 09.08.2024



Site Details:

- Signaling system- Color light on Double line (UTR-RBL) in Absolute system.
- KVG DN Distant signal (A-20) and DN Home signal S-20 is on straight line and visibility of signals are clear.
- Weather was low rainy shower.
- There is gradient 1 in 725 as per SWR from DN Distant signal.
- MV-5 no.50000680439/FL/JP/NWR/dt.23.07.24/Valid for 12.08.24/Load-42+1/1600Tonnes/BP-100% and GDR prepared at CGS on 23.07.24/Valid till 02.08.24.
- Brake power of load with loco found 100% as per joint signatories.
- No any repair was booked in Engine log book.
- No Mandatory course of crew is overdue.
- Distance travelled 56kms (LKOY-KVG).
- Total duty at the time of SPAD incident -05'46''

SPAD of BCNE load, loco DSL 12343 at Kundanganj (KVG), LKO Division on 09.08.2024

Details of events:

- LP Sign on at 18.45hrs at LKOY, CTO at 19.00 hrs and departure at 20.37 hrs for AMG.
- At km no.1076/3, brake power test conducted by LP and speed reduced from 40 to 20 kmph.
- At 21.32 hrs train arrived at AMG, loco reversed and again departed from AMG on last vehicle, due to brake van on loco side.
- At 22.45 hrs departure from AMG and between AMG-TPNR at km no.15/09 Brake power test conducted, speed reduced from 45 to 20 kmph.
- Dsl Loco was working in Long Hood.
- DN/E/BCNE load passed BCN (Bachhrawan) run through at 00.23 hrs and planned to receive in line No. 5 of KVG (Kundanganj) and after that it was to be placed for cement loading in RCPL siding.
- Train No. 04255 (PYGS – LKO Pass) which arrived at 00.32 hrs at KVG on line No. 4 and departed at 00.33 hrs, so, home signal (S-20) for DN/E/BCN load was could not OFF.
- KVG DN Distant signal was at Single Yellow passed at 50.5kmph speed and DN Home signal no.S-20 was at ON position for DN BCNE, track was wet due to weather was low rainy shower, between DN Distant and Home signal LP applied brake before 207meters, speed reduced(46.1kmph to Zero) , speed was about 28kmph while passing DN Home signal, but LP stopped his train by Loco+ BK-Van after passing DN Home signal at ON position about 45 meters at 0.31.05hrs as per LP.
- At 01.10 hrs SM/KVG sent memo to LP regarding SPAD.
- At 01.29 hrs on T-806, train received in line No.4.

Cause of SPAD:

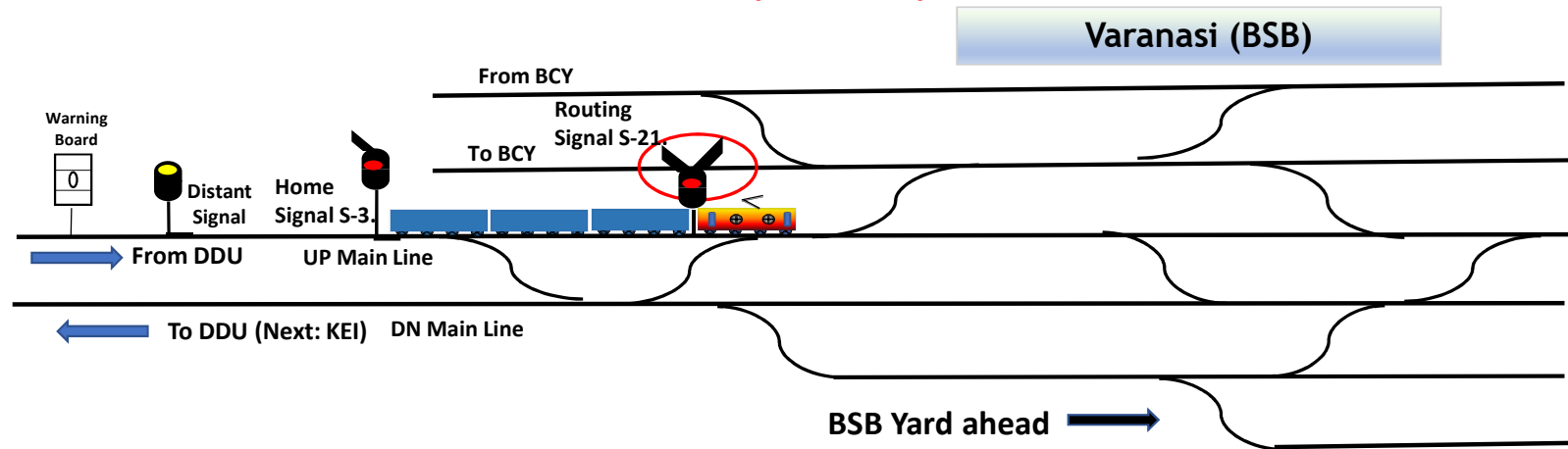
LP unable to stop his train before DN Home signal S-20 which was at ON position due to brake late applied by LP and said Signal could not be seen by ALP due to Loco was in long hood working and RS Valve did not operate by ALP.

Responsibility:

LP & ALP: Both were placed under suspension and revoked on 16.08.24 and working at stationary duty at LKOY.

Action Taken: (1) SF-5 issued on 23.08.24 to LPG, ALP and D&AR Inquiry is under process
(2) SF-11 issued to NCLI.

SPAD of UP/FGTP, Loco No. 34071 at BSB (Varanasi) station, LKO Division on 31.08.2024



Site Details:

Signalling system: Color light on Double line (DDU-BSB) in Absolute system.

- Signal no.S-3 and Routing signal no.S-21 is placed on straight line and visibility is OK and no any abnormality found regarding signal visibility.
- MV-5 no.50000682571/NKJ/JBP/WCR/dt.30.07.24 & Validity upto 02.09.24.
- UP FGTP Coal loaded-58+1BK Van (27 wagons conventional & 31 wagons BMBS)),
- Brake power of load with loco found 97.7% as per joint signatories.
- No any repair was booked in Engine log book.
- No Mandatory course of crew is overdue.
- Distance travelled 17kms (LKOY-KVG).
- Total duty at the time of SPAD incident: 02.07 hrs.

SPAD of UP FGTP, EP no.34071 at BSB(Varanasi), LKO Division on 31.08.2024

Details of events:

- LP Sign ON at DDU at 22:28hrs(After taken Rest-7:48hrs i.e. Sign OFF at 14:39hrs).
- At 23:50hrs, LP CTO of FGTP load.
- MV-5 no.50000682571/NKJ/JBP/WCR/dt.30.07.24 & Validity upto 02.09.24. Coal loaded-58+1BK Van in which 27 wagons conventional & 31 wagons BMBS),
- At 23:58hrs dep. ex DDU,
- At 0:02hrs, LP conducted Brake feel test,
- At 0:10hrs Brake Power test conducted at km no.756/A/23 at speed of 30kmph and reduced upto 15kmph.
- At 0:21hrs train no. UP FGTP passed ex VYN and at 0:32hrs ex KEI,
- No any problem observed DDU to KEI on enroute,
- Train no. FGTP load stopped at BSB Home signal no.3 for 11 minutes (0.40—0.51) due to signal was Red & Calling ON became OFF at 0:51hrs, at that time Train no.15003 was passing line no.3 for BCY and DEOS load was in line no.7 since 0:35hrs so, Signal no.S-21 could not lowered.
- Then Calling ON signal S-3 became OFF and Train no.15003 left from line no.3 ex BCY siding then Train no. UP FGTP was plan for departure from line no.3 to Main line.
- After Calling ON signal which is provided on BSB/Signal no.S-3 became OFF train moved and was to be stop at Routing signal no.21 but LP after passing Signal S-3, at 13kmph speed BSB/Routing Signal no.S-21 passed at ON position and stopped at km no.771/35 at 0:55hrs at about 138 meters.
- Signal no.S-3 and Routing signal no.S-21 is placed on straight line and visibility is OK and no any abnormality found regarding signal visibility.
- Brake power test found 95.7% by Joint signatories.

Cause of SPAD:

LP of Train no. UP FGTP load followed the aspect of Calling ON signal which is provided on Signal no.S-3 became OFF, train moved and was to be stop at Routing signal no.21 but LP after passing Signal S-3, Routing Signal no.S-21 passed at ON position and stopped at about 138 meters.

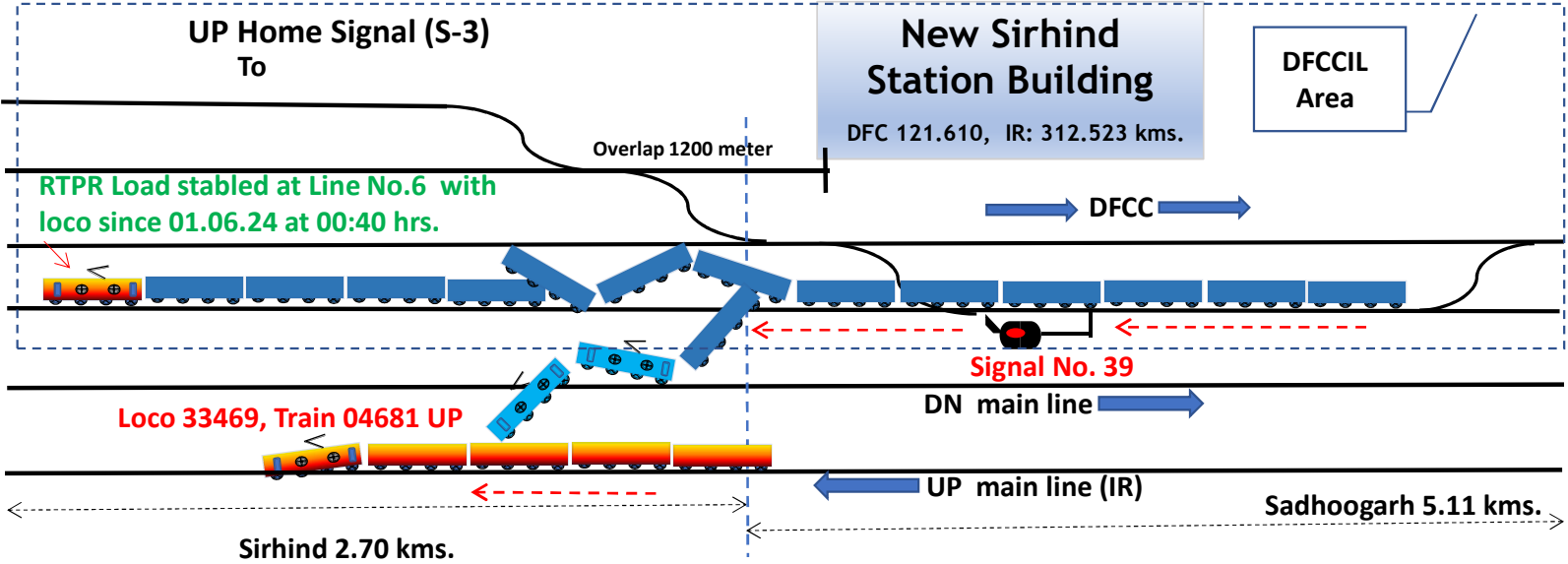
Responsibility:LP & ALP

Action Taken:(1) SF-5 issued on 18.09.24 to LPG, ALP. Defense Reply from both COs is awaited.
(2) SF-11 issued on 18.09.24 to NCLI.

SPAD (DFCC/EDFC)

2023-24 (Apr to Nov)	2024-25 (Apr to Nov)
0	3 (DFCC-1, EDFC-1, WDFC-1)

Collision & Derailment of loco no.33469/WAG9/CNB of Train no.04681 Exp between SIR-SDY on IR after SPAD of GVGN load, loco 60059/WAG-12/MELS at New Sirhind station (EDFC section) on 02.06.2024



Collision & Derailment of loco no.33469/WAG9/CNB of Train no.04681 Exp between SIR-SDY on IR after SPAD of GVGN load, loco 60059/WAG-12/MELS at New Sirhind station (DFCCIL section) on 02.06.2024

Brief Report of Incidence:

Train no.14681 passed SDY on UP line at 03.14hrs on 02.06.24. while approaching to SIR Home Signal on Red aspect, side collision of loco no.33469/WAG9/CNB was occurred at km no.312/21-23, with Electric loco 60059/WAG-12B of GVGN load. This GVGN load is received on line no.6 of DFCCIL New Line Sirhind(NSIR) at 03.17hrs, at the same time OHE supply got tripped.

At 03:22 hrs LP who was working in train 04681, reported to Control Office that at km No. 312/23A between SDY-SIR, train No. 04681, collided with already derailed loco 60059 resulted in derailment of loco.

Working LPG & ALP got seriously injured and sent to hospital for treatment.

Details of Events

- Total duty:**05:15** hours at the time of SPAD(Sign-ON at 22:00hrs at SRE on 01.06.24).
- 1st trip worked on this section on 27.05.24, PKYN/NPSB load and it was 2nd trip of LP.
- At 22:20hrs LP signed ON at SRE and moved spare to PKYN,
- At 22:35 hrs departure from SRE for PKYN by M/RPJ load.
- At 23:00hrs LP arrived PKYN, took over charge of Loco 60059, GVGN load, left PKYN at 23.45hrs.
- At 23:53hrs LP performed Brake Power test between PKYN-KNZN at km No. 1084/05-9 at the speed of 50 and speed reduced up to 30 kmph.
- There was plan of movement of Light Engine run through from SIRN.
- LP of GVGN load passed Signal No. 32 on YELLOW aspect and at 03.15hrs LP supposed to stop at Signal S-39 which was RED but LP could not stop and passed signal at about 36 kmph speed in RED condition resulted collided with Brake Van of RTPR load which was stabled at line No. 6 resulting 9 wagons got derailed and Loco 60059/WAG-12B/MELS fouled UP and DN mail line of IR and collided with loco 33469/WAG-9/CNB, working in train No. 04681 UP which was coming from SDY (Sadhoo Garh) passed last signal A/S-809 (Automatic signal) with single yellow aspect the speed of train was Approx. 46 kmph and dashing leading trolley of loco derailed by all wheels.
- LP & ALP of UP GVGN load got stuck inside the loco cabin of 60059 and were rescued by crew of 04681 with help of TTE and passengers through front lookout glass after breaking.

Details of Events

- Working LPG & ALP got seriously injured and sent to Patiala hospital by ambulance for treatment.
- LP of GVGN load passed Signal No. 32 on YELLOW aspect and at 03.15hrs LP supposed to stop at Signal S-39 which was RED but LP could not stop and passed signal at about 36 kmph speed in RED condition resulted collided with Brake Van of RTPR load which was stabled at line No. 6 resulting 9 wagons got derailed and Loco 60059/WAG-12B/MELS fouled UP and DN mail line of IR and collided with loco 33469/WAG-9/CNB, working in train No. 04681 UP which was coming from SDY (Sadhoo Garh) passed last signal A/S-809 (Automatic signal) with single yellow aspect the speed of train was Approx. 46 kmph and dashing leading trolley of loco derailed by all wheels.
- There was no S&T failure on IR track during the incident and Relay room was in closed position.
- As per data logger report of NSIR station and speedometer graph of loco no.60059, up GVGN LP passed Home signal S-1 in Yellow aspect with route indicator and not observed the Starter signal S-39 of line no.2 NSIR in Red aspect.
- As per statement of Train Manager GVGN load it was stated they by LP/ALP of UP GVGN load after their rescue from the loco that they miss the signal due to sleeping.

Details of Events

Conclusion: As per CRS Preliminary Report, Rear end collision of UP T.no.GVGN load with RTPR load at NSIR of EDFC and derailment of loco no.60059/SRE, 09 BOXNL of GVGN load and 04 wagons of RTPR load resulted in fouling of UP/DN M/Line of IR and collided with loco of T. no.04681 between SDY-SIR of UMB division is due to failure of Railway staff and system failures as follows:

- (1) Failure part of LP & ALP: Due to abnormal behavior and serious lapses exhibited by LP & ALP and finally disregarded the ON aspect of Intermediate Starter Signal S-39 and passed the signal at Danger causing rear end collision with stabled load RTPR on line no.6 at speed of 36kmph while running UP GVGN with loco no.60059/SRE.
- (2) Failure of other system at multiple levels which could have averted/reduced the extent of accident(VCD, Interlocking system at NSIR by DFCCIL, Yard layout provision of longer loop without isolation, SWR of NSIR for simultaneous reception)
- (3) Failure of staff in Train working(TM of UP GVGN load failed to maintain communication with crew, he did not perform duty as a overall in charge of train, SM not conversant with rule of SWR,TWR and OHE working, Section controller for poor management, NCLI for slack supervision

Responsibility :Loco Pilot & Asst. Loco Pilot. both did not observed Starter signal S-39 EDFC line no.2 in sleeping condition and passed it ON position resulted collision occurred .

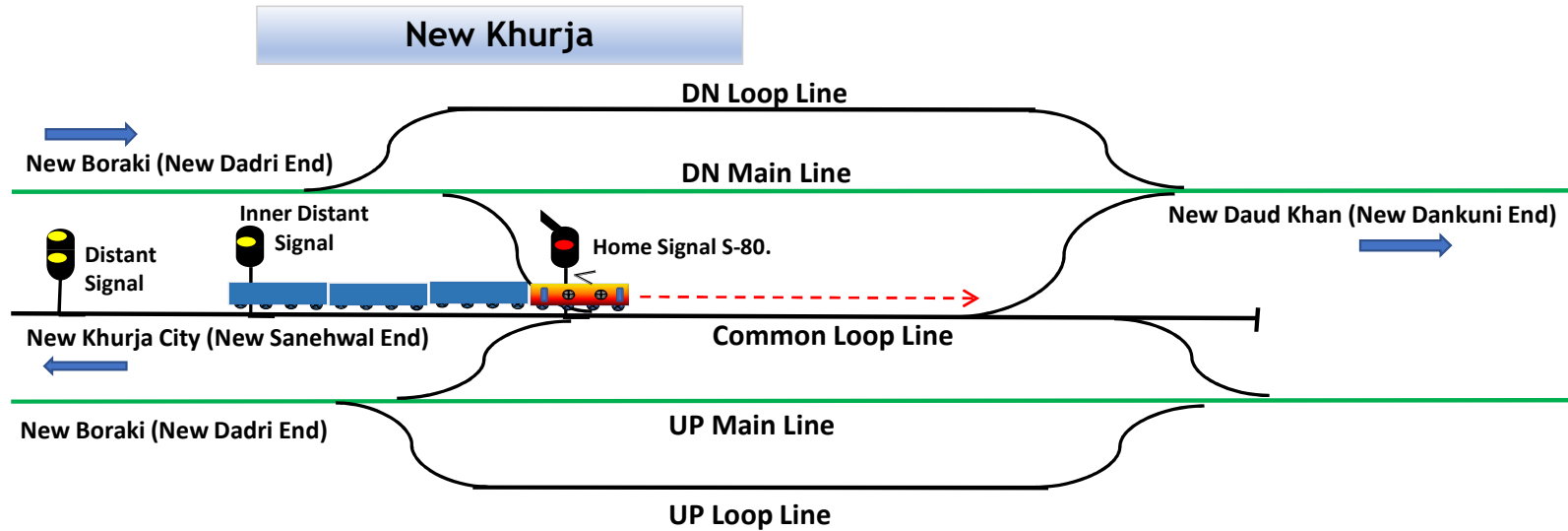
Action Taken:

SF-5 issued on 16.08.24 to LPG & ALP and removed from service.

CRS Recommendations(Preliminary)

1. Intensive monitoring of LPs/ALPs by NCLIs on DFC network, assessment of behavior, counseling and measure to ensure alertness of LP/ALP and it should be also ensured that one of LP should be not on continues night duty
2. VCD to be more effective taking all behavior aspect of LPs/ALPs
3. Route learning for loco crew operation on EDFC should be more strengthened and a special drive should be launched to impart route learning with special attention on signal position on longer loop to crew deployed on EDFC route.
4. Studies should be carried out on loco simulators with >6hours of simulated run to study changes/deterioration in crew behavior with hours of continues attention/duty.

SPAD of DN/KLN load, loco 38060/WAG-9/ASN at New Khurja (DFCC) on 31.05.24



Site Details:

- DN/KLN-66 working with loco 38060/WAG-9/HC/ASN departed from KATN at 17.25 hrs.
- While train was approaching at KRJN Home Signal No. S-80 was Red. LP passed home signal in ON position about half meter ahead of foot of home signal S-80 at 19.56 hrs.
- Fresh crew provided, charge took over at 22.50hrs, left ex site and arrived at 23.27hrs in line no.3 of KRJN.

SPAD of DN/KLN load, loco 38060/WAG-9/ASN at New Khurja (DFCC) on 31.05.24

Observations:

- Weather and visibility was clear & Visibility of KRJN Home signal no.S-80 clearly visible.
- FSD & VCD was available in Loco and was in working order.
- Total duty-08'41" at the time of SPAD case(Sign On-11.15hrs at SRE on 31.05.24).
- No mandatory course of crew is overdue.
- At 11.15hrs LP Sign ON at SRE and sent spare between SRE-PKYN-SRE before take over charge,
- At 14.50hrs, LP took over charge of loco no.38060/ASN in line no-8 of SRE yard, At 15.05hrs Train dep. SRE and KJYN passed at 19.47hrs,
- As per Loco pilot -Distant signal passed at **Double Yellow** aspect, Inner Distant Signal was passed at **Yellow aspect**, KRJN Home Signal S-80 was at **Red aspect**,
- As per LP, train was controlling with application of RG braking but speed was not reducing, LP applied Emergency Brake from A-9 and ALP also applied RS Valve in Full service but stopped after passing DN Home Signal S-80 about half meter ahead of foot of home signal S-80 as per speed graph.
- As per speed graph at 19.56.07hrs LP applied Emergency brake and train stopped at 19.56.19hrs after travelling 62 meters.
- After passing Yellow aspect, speed was about 30kmph 523meters before Home signal and Home signal S-80 passed about at 12kmph.
- **Pressures in Loco and Brake-Van checked in KRJN Yard and found ok:**
BP-5.00kg/cm2, FP-06kg/cm2, MR-9.0kg/cm2 in loco and Brake Van-BP-4.7kg/cm2. Both Auto brake and RS Valve found in working condition normally.
- MV-5-50000655345/UDL/ASN/ER/01.05.24/Brake Power-100%/ Load-58BOXNE+!BVCM,
- GDR prepared at KNZ on 31.05.24 and BP was-94.82%,
- Brake power jointly checked at KRJN and found -97.75%.
- BA of crew checked and found Negative.

Cause of SPAD:

LP attempted to control train by using Re-Generating brake after noticing DN Home signal at ON position. Consequently, he delayed applying A-9 brake in sufficient time to regain full control of train, resulting in the train not being controlled before Home signal S-80, hence the train was stopped 02 meters beyond the Home signal S-80.

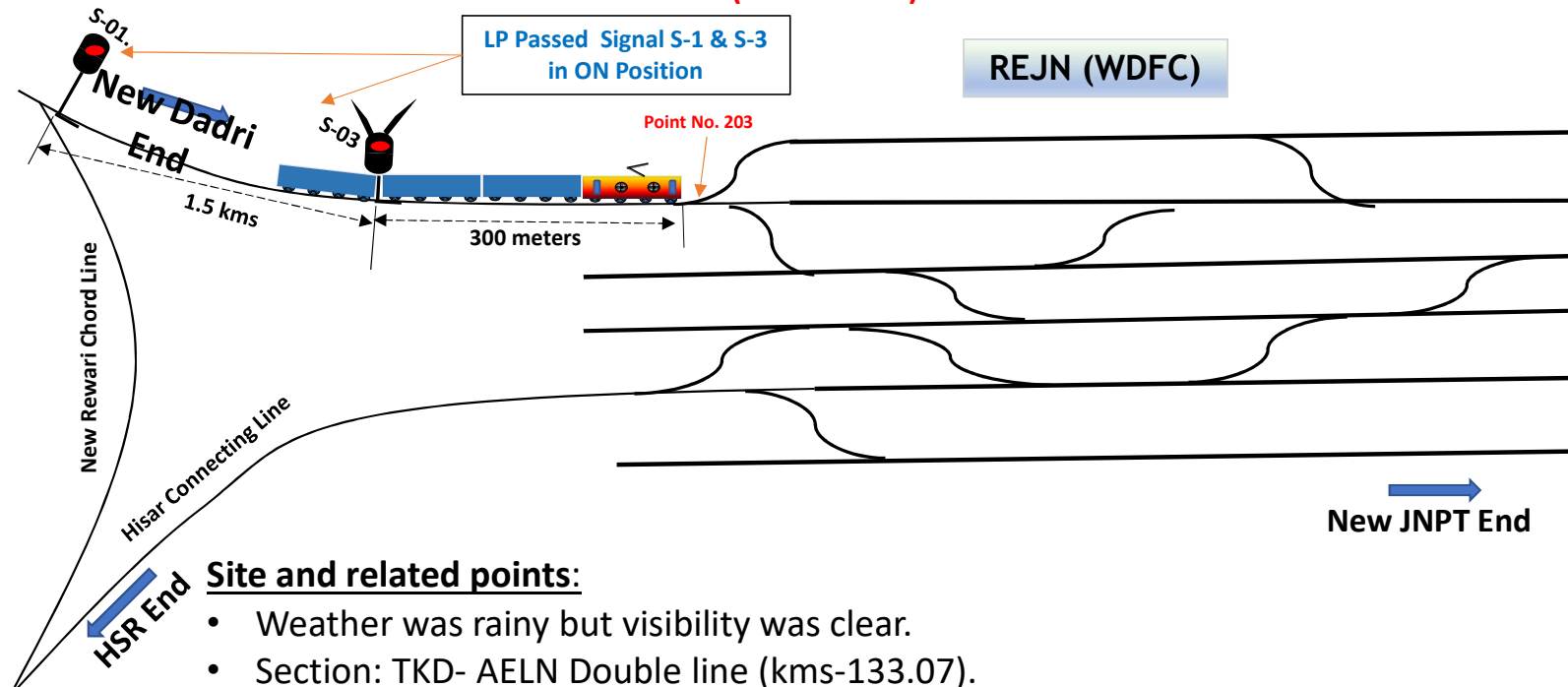
Responsibility: LP & ALP both were placed under suspension and revoked on 10.06.24 and deputed on stationary duty at MTC.

Action Taken: LP & ALP;

SF-5 issued on 08.08.24 to LPG & ALP.

D&AR inquiry is under process.

SPAD case of MB/CMLK Load, Loco No. 60446/WAG-12B/NGP at REJN (WDFC) Home signal no.S-1 and S-3 of WDFC section (KRJN-AELN) on 19.09.24



Site and related points:

- Weather was rainy but visibility was clear.
- Section: TKD- AELN Double line (kms-133.07).
- Double Distant MACL territory.
- Home signal S-1 is placed at 1335.1kms and S-3 is at 1333.6kms.
- Total duty-**06'42"** at the time of SPAD case and travelled 106kms from TKD to REJN.
- No mandatory course of crew is overdue.
- BPC no.70000043409/CC/dt.24.08.24 issued by DER (ICD)/Dadri/PRYJ/NCR/Twin pipe/(load-42+1=2725T) & no wagon was isolated.
- Last GDR was made at MB on 18.09.2024.
- At 22.06hrs LP Sign ON at TKD of MB/CMLK load, CTO at 22.30hrs and dep. 22:40hrs.

SPAD case of MB/CMLK Load, Loco No. 60446/WAG-12B/NGP at REJN (WDFC) Home signal no.S-1 and S-3 of WDFC section (KRJN-AELN) on 19.09.24

Brief Report of Incidence:

SPAD reported at 04:53hrs by SM/REJN of MB/CMLK load working with loco 60446/WAG-12/NGP, LP passed Home Signal S-1 & S-3 at **“ON position”** at 04.48 hrs and stopped after covering distance 1.8 kms up to point No 203.

Details of Events: As per Analysis of Event Recorder:

- At 00:30 hrs Train arrived at BVH and working Loco no.41297/BJU changed at BVH and fresh loco no.60446/NGP provided and train dep. at 02:31:17 hrs.
- LP could not conducted BFT and conducted BFT at 02:38:52 hrs at speed of 55 kmph, speed reduced to 30 kmph at 02:39:46 hrs after travelling 498 meters.
- Train stopped from 02:48:03 to 2:48:49 hrs for TM at PYLA and from 02:50:46 - 02:54:36 hrs for Path.
- Train stopped at AST from 03:09:46 to 03:11:10 hrs for path.
- Train stopped at PRLN from 03:25:02 to 03:26:31 hrs for T- 409.
- LP observed TSR of 50 kmph at 03:26:23 to 03:53:40 distance 12.65 kms.
- At 04:10:08 hrs train run through passed ex TAUN.
- At 04:18:55 hrs DJ opened at Neutral Section.
- At 04:28:38 hrs train stopped at IBS signal no.1702 which was Red and departed at 04:29:25 hrs.
- At 04:32:17 hrs speed raised to 101 kmph, at 04:32:31 hrs speed raised to 107 kmph and 4:32:42 hrs speed down to 100 kmph (over speed was only for 25 seconds).
- At 04:41:02 hrs, train passed DHRN (Dharuhera).

SPAD case of MB/CMLK Load, Loco No. 60446/WAG-12B/NGP at REJN (WDFC) Home signal no.S-1 and S-3 of WDFC section (KRJN-AELN) on 19.09.24

As per Analysis of Event Recorder :

- In between 04:46:28 - 04:46:47hrs **Distant signal passed.**
- From 04.47.25 - 04.49.32 hrs speed was 90-91-90 kmph (9508.479).
- At 04:47:47 hrs, **Inner Distant signal passed.**
- At 04:49:32 - 04.49.36 hrs, LP applied Emergency Brake RS Valve and BP dropped 04.93 kg/cm² to 04.26 kg/cm² and speed decreased from 90 to 86 kmph.
- In between 04:48:42 - 04:49:11hrs **Home signal S-1 in Danger position.**
- At 04.49.37.016 hrs BP dropped 04.26 kg/cm² to 04.0 kg/cm² and speed was 86 kmph.
- From 04.49.37.156 - 04.49.37.227 hrs, BP dropped 4.0 kg/cm² to 2.73 kg/cm² and speed was 86 kmph.
- From 04.49.37.786 - 04.49.40.166 hrs, BP pressure dropped from 1.07 kg/cm² to 0.57 kg/cm² (emergency brake applied) and speed was 85 kmph.
- From 04.49.41.986 - 04.49.46.816 hrs, BP pressure dropped 0.47 kg/cm² to 0.68 kg/cm² and speed decreased to 76 kmph.
- At 04:49:56 hrs, LP passed **Routing Home signal No. S-3 in Danger position.**
- From 04.49.46.816 - 04.50.05.646 hrs BP pressure dropped 0.47 kg/cm² to from 0.65 kg/cm² and speed decreased from 76 kmph to 25 kmph.
- At 04.50.13.836 hrs train stopped 300 meters ahead of Home signal S-3 (9509.076) taken - 597 meters.

SPAD case of MB/CMLK Load, Loco No. 60446/WAG-12B/NGP at REJN (WDFC) Home signal no.S-1 and S-3 of WDFC section (KRJN-AELN) on 19.09.24

Analysis of Voice Recording:

- At 02:52:30 hrs LP was talking on mobile.
- At 02:55 hrs departure of train and LP talking on mobile upto 02:56 hrs.
- Calling out signal was not done by LP & ALP en-route.
- From 04:32:07 to 04:32:19 hrs over speed buzzer reset by LP.
- While passing DHRN station, Horn was blowing (04:40:43 to 04:40:51hrs).
- At 04:46:53, 04:47:00, 04:48:27 hrs, Unclear sound on VHF was observed.
- At 04:48:54 hrs, a voice was heard “CMLK K Chalak Mahodaya baat Karen”.
- At 04:49:09 hrs, a voice was heard “Power Ko Rokiye”.
- At 04:49:09 hrs reaction by LP.
- At 04:49:17 hrs Emergency applied by ALP by RS Valve.
- At 04:52:54 hrs LP mobile’s phone rings.

SPAD case of MB/CMLK Load, Loco No. 60446/WAG-12B/NGP at REJN (WDFC) Home signal no.S-1 and S-3 of WDFC section (KRJN-AELN) on 19.09.24

As per Loco pilot:

- Train was running at approx.90 kmph speed, Distant signal (Double Distant Signal Territory) passed at **Double Yellow** and due to micro sleep both LP & ALP missed the Inner Distant Signal at **Single Yellow**, Home Signal No. S-1 at **Red** and suddenly came out from micro sleep and saw Signal S-3 was **Red**, applied Emergency Brake and train stopped after covering distance 1.8 kms up to point No 203.
- FSD was available in Loco and but was not used by crew.
- VCD was available in Loco and was in working order.

Conclusion: Due to micro sleep, both LP & ALP missed the aspect of Inner Distant signal, Home Signal No. S-1 and suddenly came out from micro sleep and saw Signal No. S-3 was Red, at once applied Emergency Brake and train stopped after covering distance of 1.8 kms up to point No 203.

Responsibility: Final cause & Responsibility will be fixed after finalization of joint note

Action Taken: SF-5 issued on 07.11.24 to LPG and ALP. Defense reply from both COs is awaited.