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मंडल कार्यालय आदेश-19/2025

L .N.393-W/M-/Instruction/0/Vol-III Date - 28.07.2025

समस्त मुख्य लोको निरीक्षक
एवं मुख्य क्रू नियंत्रक, जोधपुर एवं मेडतारोड
समस्त लोको पायलट, लोको पायलट शंटर एवम सहायक लोको पायलट

विषय: दिनांक 19.07.25 को 3-फेज विद्युत लोको संख्या 30252/WAP7/GZB में आग की घटना–
सन्दर्भ -HQ letter no. NWR-HQ()ELECT(TR)/144/2020 date 25.07.25

दिनांक 19.07.25 को अजमेर मंडल में ट्रेन संख्या 12216 में कार्यरत WAP7 लोको संख्या 30252 में आग लगने की गंभीर घटना हुई। प्रारंभिक जांच में पाया गया कि प्राथमिक ट्रांसफार्मर बुशिंग के फटने एवं OCR रिले में 'Primary Over Current' फॉल्ट F0108P1 के कारण यह घटना हुई। रनिंग स्टाफ द्वारा TSD का पालन न करने से आग की तीव्रता बढ़ गई।
उपरोक्त घटना की पुनरावृत्ति न हो इसके लिए निम्न और सलंग्न निर्देश को अपने नामित सभी रनिंग स्टाफ को काउन्सलिंग करे तथा दिनांक 11.08.25 को इसकी अनुपालना रिपोर्ट मंडल कार्यालय में जमा करावे |

1. **फॉल्ट संदेशों की स्पष्ट जानकारी:**
   - DDS स्क्रीन पर Priority-1 व Priority-2 फॉल्ट का अंतर समझें।
   - Primary Over Current Relay और QLM Relay (कन्वेंशनल लोको) के फाल्ट को समान गंभीरता से लें।
2. **VCB ट्रिप होने पर प्राथमिक कार्यवाही:**
   - DDS स्क्रीन पर फॉल्ट पढ़ें।
   - मशीन रूम में धुआं, तेल का रिसाव, स्पार्क, आग के संकेतों की जांच करें।
   - पोर्टेबल फायर एक्सटिंग्विशर या ALP साइड के लॉकर में रखे 22.5 किग्रा CO_2 सिलेंडर का प्रयोग करें।
3. **फॉल्ट न हो तो प्रक्रिया:**
   - ट्रेन को ब्लॉक सेक्शन में रोकें।
   - BPFA दबाएं एवं SB1 पैनल में OCR Relay फ्लैग जांचें।
   - मशीन रूम में तेल स्तर एवं संभावित रिसाव की जांच करें।
   - कोई असामान्यता न हो तो फ्लेग को अनलॉक करके BLDJ दबाएं।
4. **चार्ज लेने के समय निरीक्षण अनिवार्य:**
   - मशीन रूम में तेल रिसाव, सुरक्षा उपकरणों की कार्य स्थिति की जांच करें।
   - कोई खराबी हो तो TLC को तुरंत सूचित करें।

सभी रनिंग स्टाफ को OCR रिले की पूर्ण कार्यप्रणाली और चेक करने के बारे तथा अग्निशमन यंत्र प्रयोग हेतु पुनः ज्ञानित करे |

सलंग्न -यथोक्त

28/7/25
Sr.DME (Enhm&P)
NWR, JU

Copy- ADRM (Op)/JU -for kind information
-Sr.DSO/JU-for kind information

NORTH WESTERN RAILWAY

HEADQUARTERS OFFICE,
ELECTRICAL BRANCH,
NEAR JAWAHAR CIRCLE
JAIPUR -302017

NWR-HQ0ELCT(TR)/144/2020

Dated : 25.07.2025

Sr.DME/P/AII, BKN, JP, JU
Sr.DME/DSL/BGKT

Subject: Fire Incident in loco no. 30252/WAP7/GZB on 19.07.25.

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Recently, electric loco fire incident occurred in Ajmer Division on 19.07.25, wherein a GZB Shed-based WAP7 locomotive caught fire while working Train No. 12216 near Sendra station.

After preliminary investigation, the suspected cause of fire appears to be the bursting of locomotive's main transformer primary bushing. OCR relay flag found operated with fault message F0108P1. During interaction with the working crew after the incident, it was observed that neither LP nor ALP was aware of the "Primary Over Current" fault and its TSD. Their complete reliance on TLC for guidance after fault led to a delayed response to the fire. Moreover, the crew could not identify whether the OCR relay flag was in dropped condition. By the time crew noticed the fire, it spread to machine room equipments, resulting in a serious incident. Had the crew followed the TSD, the fire could have been contained in the initial stage, and such a catastrophic incident could have been avoided.

Therefore, following instructions are issued to prevent recurrence of such failure:

1. There is a need to reiterate proper instructions to the running staff working 3-phase electric locomotives regarding carefully reading and interpreting the display messages on the driver display screen provided in the cab of 3 phase locomotives. The difference between Priority 1 & Priority 2 faults should be clearly explained to them. The crew should be counseled that Primary Over Current Relay is equivalent to the QLM Relay in conventional electric locomotives and its operation should be considered seriously. The checking and unlocking of OCR relay dropped flag should be explained to them. Regular counseling of LP/ALPs should be done at crew lobbies regarding trouble shooting.

2. Following instructions in case of tripping of VCB with Over Current Relay should be given to running staff.

i) Whenever the VCB trips while hauling a train with 3-phase electric locomotives, the LP & ALP should immediately check/read the DDS message carefully on the driver display screen in the cab for the associated fault. In case the VCB has tripped through primary Over Current Relay with Priority 1 fault message, the Loco Pilot/Assistant Loco Pilot (LP/ALP) should consider it as a tripping similar to QLM relay in conventional electric locomotives and immediately inspect the Machine Room carefully looking for any signs of overheating/spark of the Primary bushing connection from the top of roof to transformer & other connections, fire/smoke, spread/spillage of oil specially near converter/transformer area and extinguish the same by using portable fire extinguisher. In case of larger fire specially near traction converter and transformer area, the cock of 22.5 kg CO2 cylinder provided in the locker on ALP side should be operated, keeping the Machine Room door in closed condition.

ii) If no signs of fire /smoke are observed, then LP should-

- Coast to clear block section. Bringing the loco to dead stop.
- Acknowledge fault by pressing BPFA. Check over current relay-78 flag in SB-1 panel.
- Inspect the Machine Room for any oil spillage. Check the oil level in both the expansion tanks of transformer in Machine room located near Oil Cooling Unit and the expansion tanks of both converters. It should be in between the Max. & Min. Mark.
- If there is any abnormality like splashing of oil inside the machine room or from Transformer /converter, sign of overheating/sparking of connection; shut down the loco. Ask for relief loco within 20 minutes.
- If flag found dropped in Primary Over Current relay provided in SB-1 and and there is no abnormality of oil splashing and oil level is in between max & min in all the four gauges, then unlock the relay by moving the screw clock wise provided on the front side of the relay. The relay flag shall disappear.
- Press BLDJ to close VCB after unlocking the relay. Inform TLC and record in the logbook. If not successful after making one attempt as given above then VCB will be inhibited, ask for relief loco without loosing time

3. It should be ensured that the LP & ALP running 3-phase electric locomotives are fully conversant with the display messages of fault available in the driver display screen on the cab. The importance of Priority 1 and Priority 2 faults and their consequences should be explained to them.

4. The maintenance staff should check for the sign of oil leakage from different type of capacitors provided in the Machine Room in every minor schedule. Oil leakages from pipe lines, conservator and bushings of transformer as well as traction converter should be checked in every minor schedule and the same attended. Signs of any oil spillage/accumulation at the top of transformer plate should be observed during every schedule by opening the converter covers in the front and the same got attended. This has also to be checked by Trip Shed staff.

5. The working and calibration of Fire Detection Unit should be checked in every schedule of the locomotive. The working of pipe lines of Fire Detection Unit and CO2 pipe lines should be checked in every schedule. The adequacy of CO2 gas in the 22.5 kg cylinders provided on the back side of ALP inside the locker should be checked in every schedule of the locomotive

6. The working of Primary Over Current Relay provided in SB1 panel in the Machine Room should be checked in every minor schedule and the same calibrated as per prescribed schedule by the shed.

7. During charge takeover, crew must inspect the loco thoroughly. Oil spillages in machine room, and non-functioning safety equipment must be identified and reported to TLC immediately. Oil spillage near or under the main traction converters should be thoroughly inspected.

8. Regular firefighting training sessions should be organized for crew to ensure prompt and effective response in emergency situations.

9. Quality of refresher course & other training courses are to be monitored & improved.

25.7.25

(Pankaj Kumar Meena)
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North Western Railway

Copy to:
PCEE/NWR – For kind information please.