## Test Case 2.3

Validated Requirements

190879: Provide PECU ANM Mic fault status (Functional Requirement)

Description

This test case verifies that TCMS logged PECU ANM Mic fault status as faulty/not faulty in DT Car/Car.

Categories

|  |  |
| --- | --- |
| Formal Test | Yes |
| Execution Environment | Lab |
| V-Level | System |
| Function Group | sPassenger Information and Entertainment Systems |
| Regression | No |
| Automated | No |
| Single Unit Operation Applicability | Yes |
| Multiple Unit Operation Applicability | No |

Pre-Condition

Set Train in TS4 State for DT-1 Cab

Test Case Design

|  |  |  |
| --- | --- | --- |
| **Nos** | **Action** | **Expected Result** |
| 1 | Set PECU ANM Mic fault status as not faulty for all PECU ANM Mic from TCCU1 | Verify that no event logged. |
| 2 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for DT-1 Car as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is active.  Verify that no event is active for PECU ANM Mic-2  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4 |
| 3 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for DT-1 Car as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is active.  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4 |
| 4 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for DT-1 Car as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is active.  Verify that no event is active for PECU ANM Mic-4 |
| 5 | Set PECU ANM Mic fault status of PECU ANM Mic-4  for DT-1 Car as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is active. |
| 6 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for DT-1 Car as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 7 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for DT-1 Car as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 8 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for DT-1 Car as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 9 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for DT-1 Car as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is inactive. |
| 10 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for DT-2 Car as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is active.  Verify that no event is active for PECU ANM Mic-2  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4 |
| 11 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for DT-2 Car as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is active.  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4 |
| 12 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for DT-2 Car as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is active.  Verify that no event is active for PECU ANM Mic-4 |
| 13 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for DT-2 Car as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is active. |
| 14 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for DT-2 Car as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 15 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for DT-2 Car as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 16 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for DT-2 Car as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 17 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for DT-2 Car as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is inactive. |
| 18 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for \_M1Car\_1 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is active.  Verify that no event is active for PECU ANM Mic-2  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4 |
| 19 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for \_M1Car\_1 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is active.  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4 |
| 20 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for \_M1Car\_1 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is active.  Verify that no event is active for PECU ANM Mic-4 |
| 21 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for \_M1Car\_1 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is active. |
| 22 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for \_M1Car\_1 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 23 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for \_M1Car\_1 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 24 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for \_M1Car\_1 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 25 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for \_M1Car\_1 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is inactive. |
| 26 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for \_M1Car\_2 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is active.  Verify that no event is active for PECU ANM Mic-2  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4 |
| 27 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for \_M1Car\_2 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is active.  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4 |
| 28 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for \_M1Car\_2 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is active.  Verify that no event is active for PECU ANM Mic-4 |
| 29 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for \_M1Car\_2 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is active. |
| 30 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for \_M1Car\_2 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 31 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for \_M1Car\_2 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 32 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for \_M1Car\_2 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active. |
| 33 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for \_M1Car\_2 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is inactive. |
| 34 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for \_M2Car\_1 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is active.  Verify that no event is active for PECU ANM Mic-2  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4  Verify that no event is active for PECU ANM Mic-5 |
| 35 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for \_M2Car\_1 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is active.  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4  Verify that no event is active for PECU ANM Mic-5 |
| 36 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for \_M2Car\_1 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is active.  Verify that no event is active for PECU ANM Mic-4  Verify that no event is active for PECU ANM Mic-5 |
| 37 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for \_M2Car\_1 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is active.  Verify that no event is active for PECU ANM Mic-5 |
| 38 | Set PECU ANM Mic fault status of PECU ANM Mic-5 for \_M2Car\_1 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is active. |
| 39 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for \_M2Car\_1 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is still active. |
| 40 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for \_M2Car\_1 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is still active. |
| 41 | Set PECU ANM Mic fault status of PECU ANM Mic-3  for \_M2Car\_1 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is still active. |
| 42 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for \_M2Car\_1 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is still active. |
| 43 | Set PECU ANM Mic fault status of PECU ANM Mic-5 for \_M2Car\_1 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is inactive. |
| 44 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for \_M2Car\_2 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is active.  Verify that no event is active for PECU ANM Mic-2  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4  Verify that no event is active for PECU ANM Mic-5 |
| 45 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for \_M2Car\_2 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is active.  Verify that no event is active for PECU ANM Mic-3  Verify that no event is active for PECU ANM Mic-4  Verify that no event is active for PECU ANM Mic-5 |
| 46 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for \_M2Car\_2 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is active.  Verify that no event is active for PECU ANM Mic-4  Verify that no event is active for PECU ANM Mic-5 |
| 46 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for \_M2Car\_2 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is active.  Verify that no event is active for PECU ANM Mic-5 |
| 48 | Set PECU ANM Mic fault status of PECU ANM Mic-5 for \_M2Car\_2 as Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is active. |
| 49 | Set PECU ANM Mic fault status of PECU ANM Mic-1 for \_M2Car\_2 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-1 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is still active. |
| 50 | Set PECU ANM Mic fault status of PECU ANM Mic-2 for \_M2Car\_2 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-2 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is still active. |
| 51 | Set PECU ANM Mic fault status of PECU ANM Mic-3 for \_M2Car\_2 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-3 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is still active.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is still active. |
| 52 | Set PECU ANM Mic fault status of PECU ANM Mic-4 for \_M2Car\_2 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-4 is inactive.  Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is still active. |
| 53 | Set PECU ANM Mic fault status of PECU ANM Mic-5 for \_M2Car\_2 as not Faulty from TCCU-1 | Verify that event "PECU ANM Mic fault status" for PECU ANM Mic-5 is inactive. |
| 54 | Deactivate DT-1 Cab and activate DT-2 Cab. | |
| 55 | Repeat Action-1 to Action-53 for all Cars where PECU ANM Mic fault status received from TCCU-2 | |
| 56 | Deactivate DT-2 Cab. | |

Post-Condition

Train State is set to TS1