61850-7-5 and 61850-7-500 - IEC61850-7-5 #7129

Autorecloser sequence is inconsistent

02/10/2025 10:06 AM - Keith Gray

Status: New Start date: 02/10/2025

Priority: Normal Due date:

Assignee: % Done: 0%

Category:

Target version:

Source: 2024 IOP TF 7-5 Project IEC 61850-7-500

document:

Category: Not yet categorized Related TISSUE:

Description

FBPCU trips, RREC.AutoRecSt=TripFromProtection,

then RREC.AutoRecSt=FaultDisappeared and XCBR.Pos=open (105ms),

then RREC.AutoRecSt=WaitToComplete and OpCls=true (2ms later),

RREC.AutoRecSt=FaultDisappeared (2ms later),

then RREC.AutoRecSt=WaitToComplete again and Tr=false (110ms later),

then CBclosed OpCls=false and Pos is closed (15ms)

and RREC.AutoRecSt=Sucessfull (less than 1ms).

History

#2 - 02/10/2025 11:30 AM - Michael Haecker

- TF 7-5 Project document IEC 61850-7-500 added
- TF 7-5 Project document deleted (-)

Issue

Autoreclosure state machine and associated states

Implementations in existing devices do not perform exactly according to the state machine.

Although there is a statement in IEC/TR 61850-7-500 "[LN RREC] describes the states the autoreclosure function may reach, ...", there is the expectation that devices would have to perform in accordance with the state machine.

Proposal

IEC/TR 61850-7-500 needs to state that this is a suggested state machine or make it mandatory when it becomes a TS.

As per UCAlug IEC 61850 2024 IOP problem report #6961 https://redmine.ucaiug.org/issues/6961

Files

clipboard-202502071356-sbvf4.png 51.5 KB 02/07/2025 Christophe CAMELIS

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