### IEC 61850 User Feedback Task Force - Feature #574

# Protection scheme: Weak end infeed (1 phase and 2/3 phase operate missing)

02/03/2021 02:07 PM - Herbert Falk

Status: Closed

Priority: Normal

Assignee:

Category: Standard extension required

Target version:

**ID**: 46

Source: ENTSO-E

TF Unique ID: 46 # ENTSO-E

WG10 Proposal:

Estimated Next meeting in Charlotte - 19/09

Completion:

Discuss in Upcoming No

Meeting:

Start date:

Due date:

**% Done:** 0%

Estimated time: 0.00 hour

To discuss in WG10: No

**Short Proposal:** To revise PSCH LN or to create new LN

in protection domain(19-06-06) To create Use-case with different scenarios in order to clearly define scope of

application (Vladan C)

**Standard(s):** IEC 61850-7-4

Yes

Needs More Information:

Assigned TF:

Description

Protection scheme: Weak end infeed (1 phase and 2/3 phase operate missing)

According to 7-4 there is no operation defined for Week end infeed granulated in such way to have information about 1 phase or 2/3 phases operation.

a) Allocation of WEI is in PSCH.

b) If WeiMod is correctly defined (for example Echo and Operate) then there will be both EchoWei (SPS) and EchoWeiOp (SPS).

c) By logic: AND==True can be retrieved signal required by ENTSO-e: Operate 1 phase by weak end infeed or:

By logic: AND, AND,...., AND), PSCH.EchoWeiOp.stVal )==True can be retrieved signal: Operate 2/3 phase by weak end infeed d) Question is – how to maintain semantics and not use GGIO to recreate this logical creation of signal for applications such as Gateway TC interface, HMI event list presentation, additional Logic...? Basically, building blocks are there but how to use them in standardized way?

Similar question arise for Distance protection 2/3 phase operate – where logic (for example): OR, AND,...., AND)==True can result in expected Distance protection 2/3 phase operate but if we follow practice that DA = SCADA signal that this can be identified only as a gap.

#### History

#### #1 - 02/03/2021 02:56 PM - Herbert Falk

- Status changed from New to In Progress

## #2 - 02/11/2021 07:13 AM - Vladan Cvejic

- Subject changed from Protection scheme: Weak end infeed (1 phase and 2/3 phase operate missing)
  According to 7-4 there is no operation defined for We to Protection scheme: Weak end infeed (1 phase and 2/3 phase operate missing)
- Short Proposal changed from To revise PSCH LN or to create new LN in protection domain (19-06-06) To create Use-case with different scenarios in order to clearly define scope of application (Vladan C) to To revise PSCH LN or to create new LN in protection domain(19-06-06) To create Use-case with different scenarios in order to clearly define scope of application (Vladan C)
- Standard(s) set to IEC 61850-7-4
- Estimated Completion changed from

Next meeting in Charlotte - 19/09 to Next meeting in Charlotte - 19/09

- Discuss in Upcoming Meeting set to No

Checking done.

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## #3 - 12/06/2022 09:36 AM - Vladan Cvejic

- Status changed from In Progress to Closed
- To discuss in WG10 set to No
- Needs More Information set to Yes

Since there is no representation from ENTSO-E anymore we can close these tickets for now. Additionally, we can eventually re-open if in the future similar needs are identified by other users.

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