IEC TC57 WG10 Future Work - WG10 Future Work #5927

CIM-61850 Harmonization - Add PosFlwIn data object to measurement classes

08/09/2022 08:02 AM - Vladan Cvejic

Status:	New	**Start date:**	07/13/2022
Priority:	Normal	**Due date:**	
Assignee:		**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:			
Source:	IEC 62361-102 R15	**Standard(s):**	IEC 61850-7-4
TF Unique ID:		**Needs More Information:**	No
WG10 Proposal:		**Assigned TF:**	61850-7-4
Discuss in Upcoming Meeting:	No	**Target edition:**	Next
Short Proposal:			

Description

IEC 62361-102 Recommendation R15

8.5 Direction of positive flow
8.5.1 General
The Measurement logical nodes that supply measurements of power and current do not have any settings/configuration to indicate the direction of positive flow relative to the primary equipment connectivity.
It is common practice to indicate the earthing point (terminal) of CTs in the drawings, which is either 'towards the busbar' or 'towards the line'. All other engineering artefacts must follow the given/defined scheme for the project. As IEC 61850 is focussed on the functions rather than on the type of bays, there is no means to indicate the producer/consumer use of them. TVTR and TCTR, which could be the appropriate LNs to host this information, do not include it today.
For physical devices, the international convention is to use the terminal designations 'P1' and 'P2' on the primary, 'S1' and 'S2' on the secondary side, where '1' is the one closer to the energy source.

The CIM attribute is named "Analog.positiveflowin" and has the following definition:
If true then this measurement is an active power, reactive power or current with the convention that a positive value measured at the Terminal means power is flowing into the related PowerSystemResource.

Proposal descriptions

Add a SPG setting called PosFlwIn, to the Measurement logical nodes, to indicate the direction of positive flow relative to the primary equipment connectivity

The description of this setting would be:
The attribute is applicable for measurements of active power, reactive power or current.
TRUE means a positive measurement value indicates power is flowing into the related PowerSystemResource. FALSE means a positive measurement value indicates power is flowing out of the related PowerSystemResource.

History

#1 - 09/13/2022 08:17 AM - Carlos Rodriguez del Castillo

- Discuss in Upcoming Meeting changed from Yes to No

#2 - 06/21/2023 02:22 AM - Vladan Cvejic

- Tracker changed from WG10FutureWork to WG10 Future Work

- Needs More Information set to No

- Assigned TF 61850-7-4 added

#3 - 10/26/2023 02:37 AM - Vladan Cvejic

- Target edition set to Not assigned

#4 - 02/08/2024 05:22 AM - Vladan Cvejic

- Target edition changed from Not assigned to Next