

IEC 61850 User Feedback Task Force - Feature #7204

New DO for measuring the circulating current between two tap changer position

05/06/2025 03:46 AM - Christophe Ghafari

|                                     |        |                                |               |
|-------------------------------------|--------|--------------------------------|---------------|
| <b>Status:</b>                      | New    | <b>Start date:</b>             | 05/06/2025    |
| <b>Priority:</b>                    | Normal | <b>Due date:</b>               |               |
| <b>Assignee:</b>                    |        | <b>% Done:</b>                 | 0%            |
| <b>Category:</b>                    |        | <b>Estimated time:</b>         | 0.00 hour     |
| <b>Target version:</b>              |        |                                |               |
| <b>ID:</b>                          |        | <b>To discuss in WG10:</b>     | No            |
| <b>Source:</b>                      |        | <b>Short Proposal:</b>         |               |
| <b>TF Unique ID:</b>                |        | <b>Standard(s):</b>            | IEC 61850-7-4 |
| <b>WG10 Proposal:</b>               |        | <b>Needs More Information:</b> | No            |
| <b>Estimated Completion:</b>        |        | <b>Assigned TF:</b>            | None          |
| <b>Discuss in Upcoming Meeting:</b> | No     |                                |               |

**Description**

During the operation of on load tap changers, there will be an instant of time when the rotary switch will connect two different contacts at the same time yielding a circulating current to flow. This current can be measured by a sensor and be monitored for predictive maintenance (to estimate when changing the rotary switch is necessary). The commutation time should be added as well.

**Proposal descriptions**

Two new DO in LN SLTC :

- One for circulating current
- One for commutation time