Nominal Protective Relays Setting Management

IPS
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Maintenance Intelligence of Tomorrow
What is Nominal Secondary Setting?

- Nominal secondary setting is relay specific secondary setting parameters.
- Nominal Setting is subset of relay setting which is predicted to be in the relay.
- Often is the nominal setting called „Variable“ or „Setting sheet parameters“.
- Nominal setting could be calculated, imported or manually entered.
- Nominal settings parameter is dedicated relay setting.
What is the use case for nominal settings

- Nominal settings TAB is developed for replacement of Setting Sheets in MS Excel, WORD,... or Paper
- Nominal setting functionality is not used with connection with CAPE (In this case CAPE setting are used)
- Nominal setting are used if user like to calculate primary form secondary values. Parameters can be defined with formula and primary expression of the secondary setting can be presented (Calculation secondary to primary)
Functionality of Nominal Settings

- Nominal settings are origin for the actual setting value
- Nominal settings will be automatically transferred to actual setting
- Nominal settings are developed in order to get more control about setting parameters
One protective relay can have in IPS System various settings:

- Nominal Setting (Variable Setting)
- CAPE Setting (Variable Setting) (for CAPE users only)
- Base Setting (Default "non variable" setting)
- Actual Setting (All relay settings=Variable + Non Variable parameters)
Nominal Settings Template

- Nominal setting template can be defined within Base Setting Management
- This is subset of settings labeled as setting sheet parameter
Nominal settings adding

- Manual
- Import via user specific file
Secondary → Primary Calculation

Preconditions:

- Relay location or one of the parent locations must be type „Feeder“
- CT and VT Ratios (Factor for calculations) must exist within relay feeder locations
- For each parameter which must be calculated formula must be defined within relay parameter pattern
- Nominal Relay Setting is created after all above is in place
Creation of relay reference settings with nominal setting

- Precondition
  - Select check box for Nominal setting selected (Nominal setting record)
Creation of relay reference settings with nominal setting