

FledgePower Use Cases

Fledge could be used for many use-cases.

- [FledgePower UC#1](#)
- [FledgePower UC#2](#)

Other use-case idea's include:

- **61850 gateway between the substation and the central systems**

Use FledgePower as a gateway/proxy to send substation data to central systems in IEC61850 format.

South/North plugin: 61850

Concept: IEC61850-90-2

- **61850 to 104 gateway between the substation and the central systems**

Use FledgePower as a gateway/proxy to send substation data to central systems in 104 protocol format.

North: 104

South: 61850

Concept: IEC61850-90-2 / IEC61850-80-1

- **Local validation of 61850 measurements (e.g. kirchhoff law)**

Use FledgePower to validate local/substation measurement data (do the measurements makes sense?). E.g. flatline checks and [kirchhoff laws](#) based on the current state of the substation (what is the switching position).

South: IEC61850

- **DER agent**

FledgePower can be an agent to act as a gateway between central controllers and local devices. Example specification: [Netbeheer Nederland](#)

North: 61850

South: depends on the connect hardware

Concept of [scheduling LN](#): IEC61850-90-7 (figure 13)

- **DER agent controller**

FledgePower can (part of) a central DER controller to control DER agents.

North: unknown

South: 61850

Controller to control a DER agent

- **Part of software defined substation / centralized control and protection (CPC)**

FledgePower could be part of CPC system for a non-realtime use-cases (see other topics on this page)

North: 104/61850

South: not known yet

- **Local configuration collection and storage (what configs are running in the substation)**

North/south: yet unknown, depends on the vendor

- **Test local configurations**

Compare the SCD files with the actual implementation; Periodic checks can also be added for specific parameters.

South: 61850

- **Collect and redispatch fault recordings**

Use FledgePower to collect COMTRADE/PQDIFF from IED's.

Collect COMTRADE files from IED's

South: COMTRADE / PQDIFF

North: unknown

- **Ad-hoc fault recording control**

Use FledgePower to start ad-hoc high resolutions measurements (COMTRADE/PQDIFF)

South: probably IEC61850

- **Local grid safety analyzer**

Determine locally if the grid is running in a safe condition.

South: 61850

- **Change (protection) settingsgroups**

Change settingsgroups based on the current state of the substation/central input.

South: IEC61850