CIM/CGMES related libraries

- C++ library for various versions of CIM and CGMES: https://github.com/cim-iec/libcimpp
  - Online class documentation of CIM: https://cim.fein-aachen.org/libcimpp/doc/IEC61970_16v29a/annotated.html
  - Supports import for DL, DY, EQ, GL, SV, SSH, TP CGMES profiles and all IEC61970 CIM classes
  - Export is only partially available
- Python library for CGMES (v2.4.15): https://github.com/sogno-platform/cimpy
  - Supports import and export for DL, DY, EQ, GL, SV, SSH, TP CGMES profiles
- Java library for CGMES (v2.4.15): https://github.com/sogno-platform/cim4j
  - Supports import, built in a similar way as cimpy, documentation still missing
- Java library for CGMES (v2.4.15 and v3.0 coming soon): https://github.com/powsybl/powsybl-core
  - Java library used to import a set of EQ, TP, SSH and SV profiles and export the updated SSH and SV profiles. It could be used to import EQ profile only (ongoing work). Support of DL and GL profiles. Full export EQ in progress.
  - Online documentation: https://www.powsybl.org/pages/documentation/grid/formats/cim-cgmes.html
  - Bidding python: https://www.powsybl.org/pages/documentation/developer/scripting/python
- iTesla : A Modelica library for phasor time-domain simulations : https://github.com/itesla
  - Background article : https://www.sciencedirect.com/science/article/pii/S2352711016300097
- iPSL: iTesla Power System Library : https://github.com/itesla/ipsl#ipsl-itesla-power-system-library
- Haigutus/USVDM : A collection of utilities for exchanging and working with CGMES : https://github.com/Haigutus/USVDM
- CGMES OCL rules V3 Validator Prototype : https://github.com/rte-france/cgmes-ocl-validator (By RTE)
- Modeling CGMES rules using RDF/OWL/SHACL : https://github.com/cimcgmes/cgmes-modeling-shacl
- Azure Digital Twins Definition Language (DTDL) ontology for Energy Grid : https://github.com/Azure/opendigitaltwins-energygrid/
  - Background article : https://techcommunity.microsoft.com/t5/internet-of-things/energy-grid-ontology-for-digital-twins-is-now-available/ba-p/2325134
  - This is based on LFE CIMpy since the FIWARE smart data model for CIM is generated from CIMpy
- Javascript library to draw network diagrams from CGMES files: https://github.com/sogno-platform/pintura
  - generated CGMES js classes: https://github.com/sogno-platform/pintura/tree/master/cimmenu/cgmes/src