Active Transmission System Modeling

WECC MVS Meeting
May 25th, 2023

Status HVDC Models

- Generic simple point-to-point LCC-HVDC model has been done and out for quite some time (chvdc2)
  - PDCI has been converted to chvdc2 (much thanks to BPA) for WECC basecase development and cross-platform conversions
  - IPP – have had dialogue with LADWP to see if they can do the same
  - **KEY POINT:** vendor specific user-written model versions of PDCI and IPP exist and should continue to be used by the utilities for local studies and other studies as deemed fit and necessary; the generic model is for WECC wide basecase development and to allow easy cross-platform conversion of cases across multiple tools

- BPA has been recently revisiting the parameterization of PDCI, particularly for South to North transfer

Status HVDC Models

- Generic simple point-to-point VSC-HVDC model has been done and out for some time (vhvdc1)

- Trans Bay Cable folks (NextEra Energy with consultation with MEPPI) provided some excellent feedback and suggestions to improve vhvdc1 model – will discuss presently

- Thus vhvdc2 proposal in the works

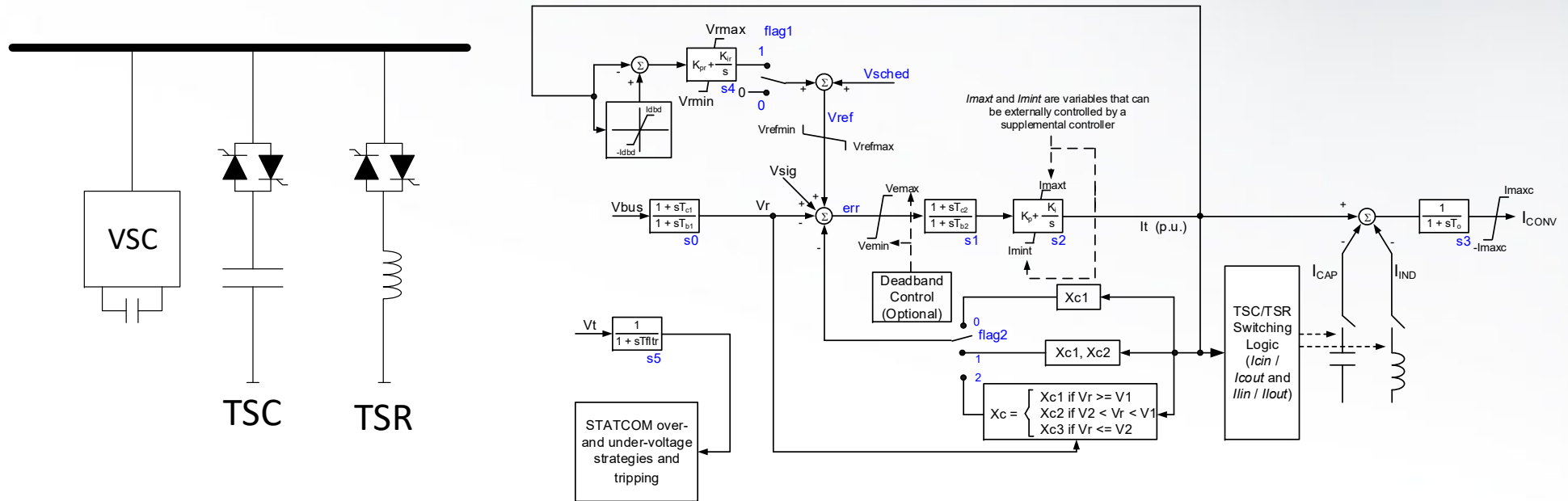PEACE ®

Multi-Terminal VSC-HVDC Model

- PTEI has presented on this in several previous meetings

- Need to decide how to move forward and its priority

SVSMO4

- Have presented on it at last several MVS meetings
- Proposed model specification memo is on MVS webpage since 12/21

NEXT STEPS

- Transbay Cable -> *vhvdc2, if vhvdc2 developed and approved, else limited conversion to vhvdc1 for now*

- Need to put SVSMO4 on the list of modeling priorities and get it started for implementation and benchmark testing

- Continued work on multi-terminal VSC-HVDC and VSC-HVDC for off-shore wind