

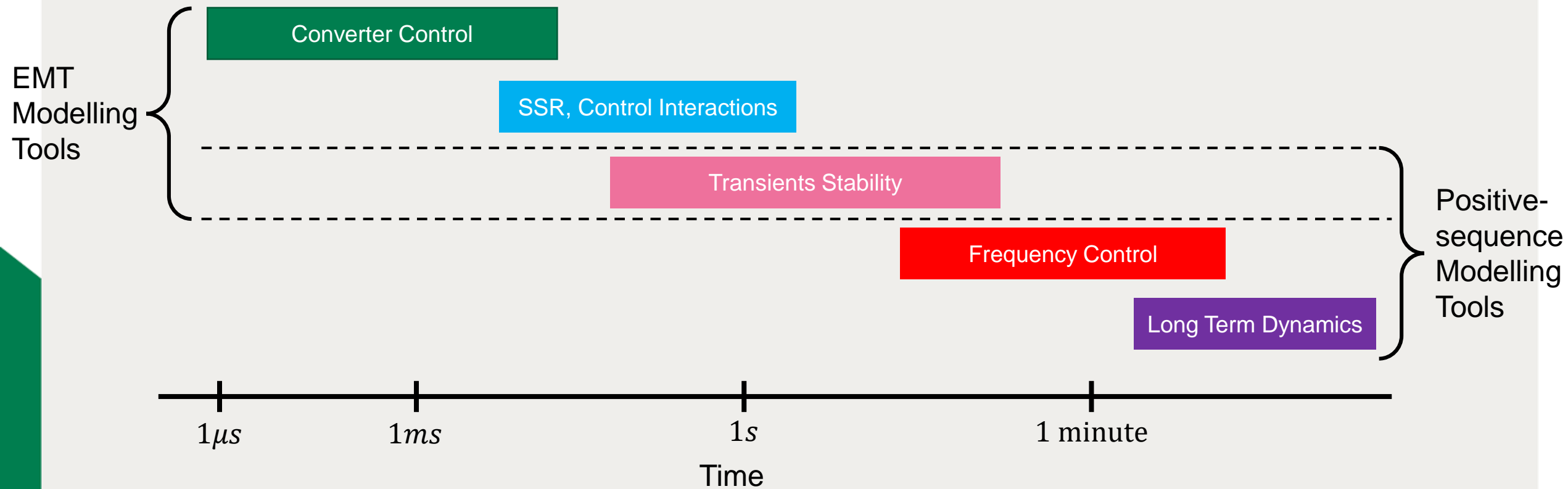
Real-time EMT studies for Protection evaluation

Study Committee B5, PS 1

Q1.03: Are phasor-domain inverter models sufficient for most protection coordination studies and what are the key criteria for deciding when EMT simulations are preferred for evaluating protection performance over conventional phasor-domain short circuit analysis?

Dr. Mital Kanabar (CA)

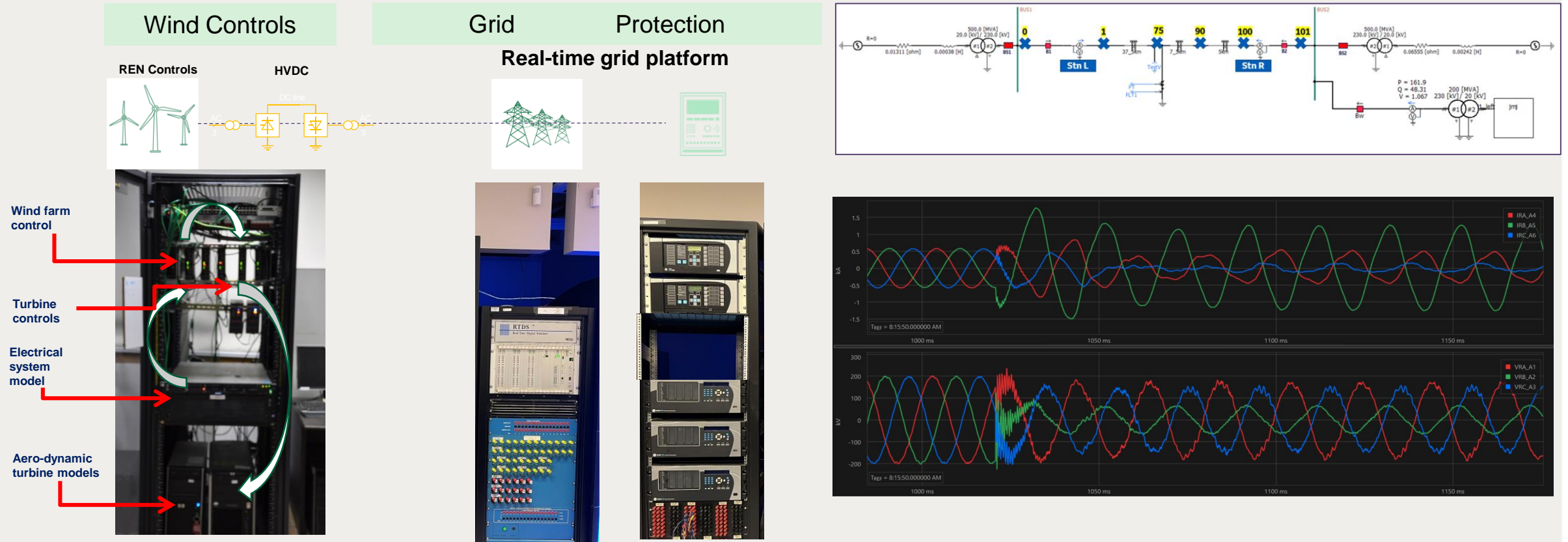
Power System Modeling Tools



EMT needed in converter control interactions with sampled values used for protection with harmonic content, rate of change of frequency & transient voltage scenarios

Group Discussion Meeting

Real-time EMT platform setup to Evaluate Protection Performance



Real-time EMT is needed to validate protection relay operational behaviors with transient, rate of change of frequency, inter-harmonics (crow-bar effect), harmonics and accuracy to calculate phasors which are used for most protection

Group Discussion Meeting