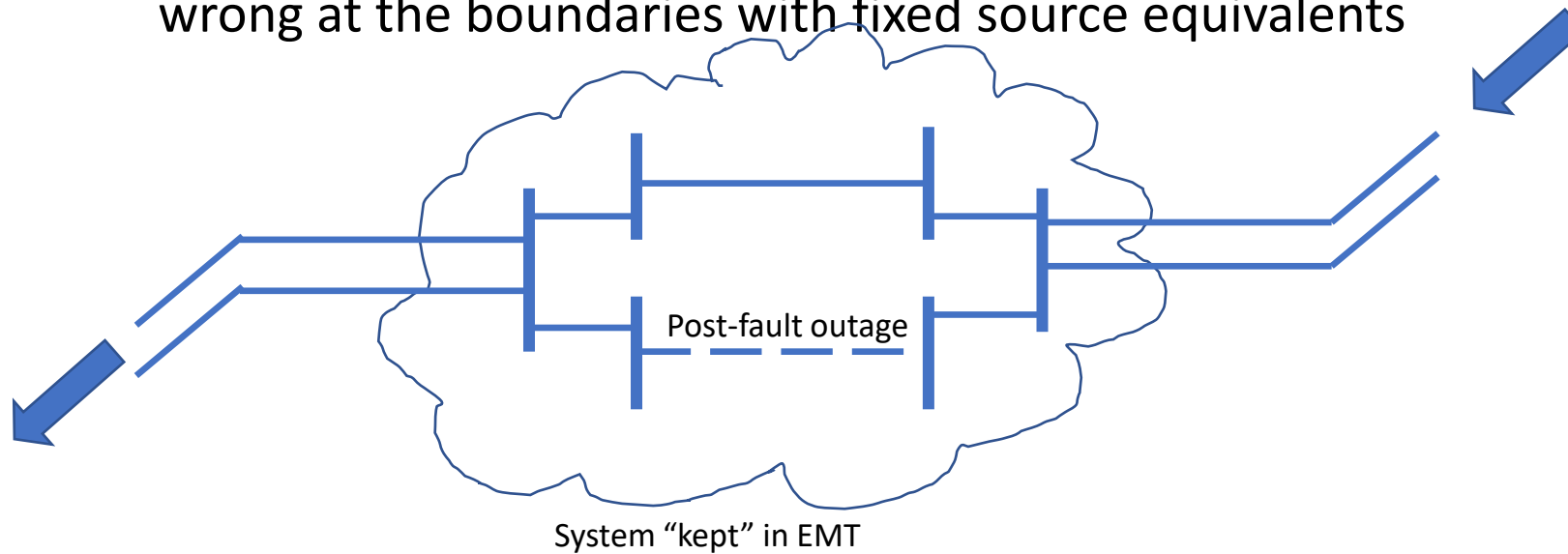


# When should you use Co-Simulation?

Topic Change

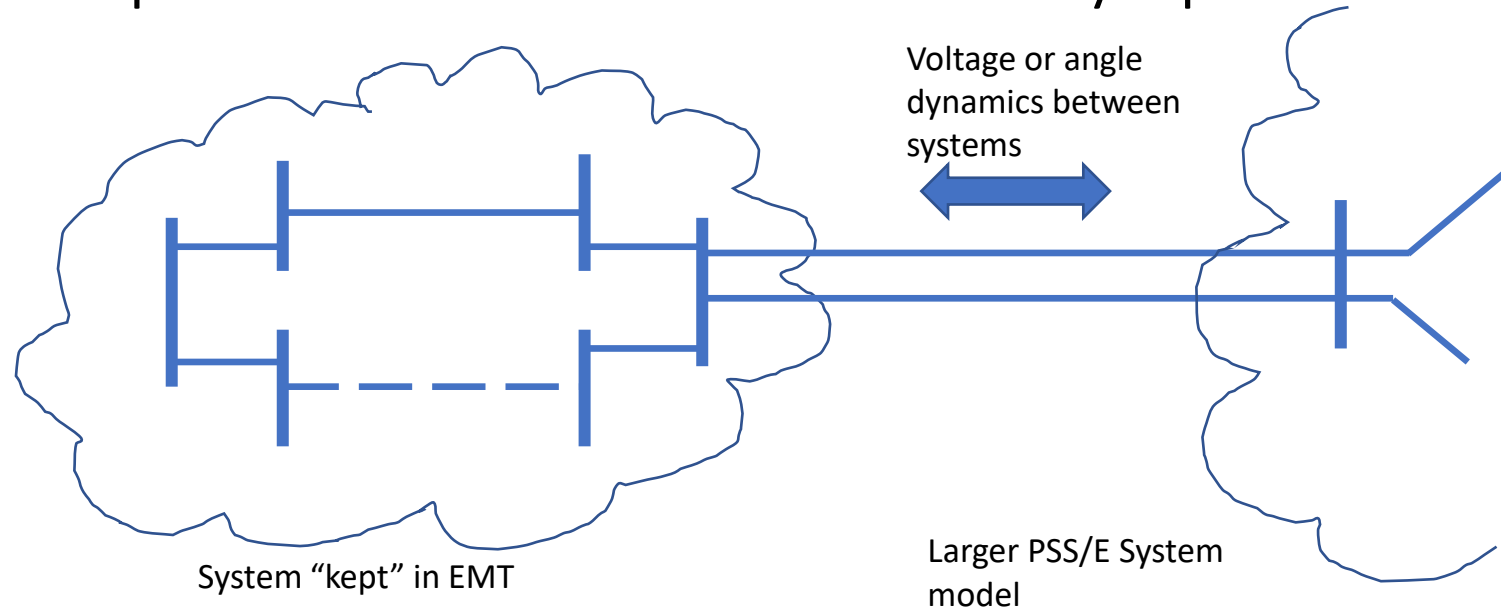
# Use case #1

- High path flows through your study area
  - Post contingency angles (and therefore powerflow) will be wrong at the boundaries with fixed source equivalents



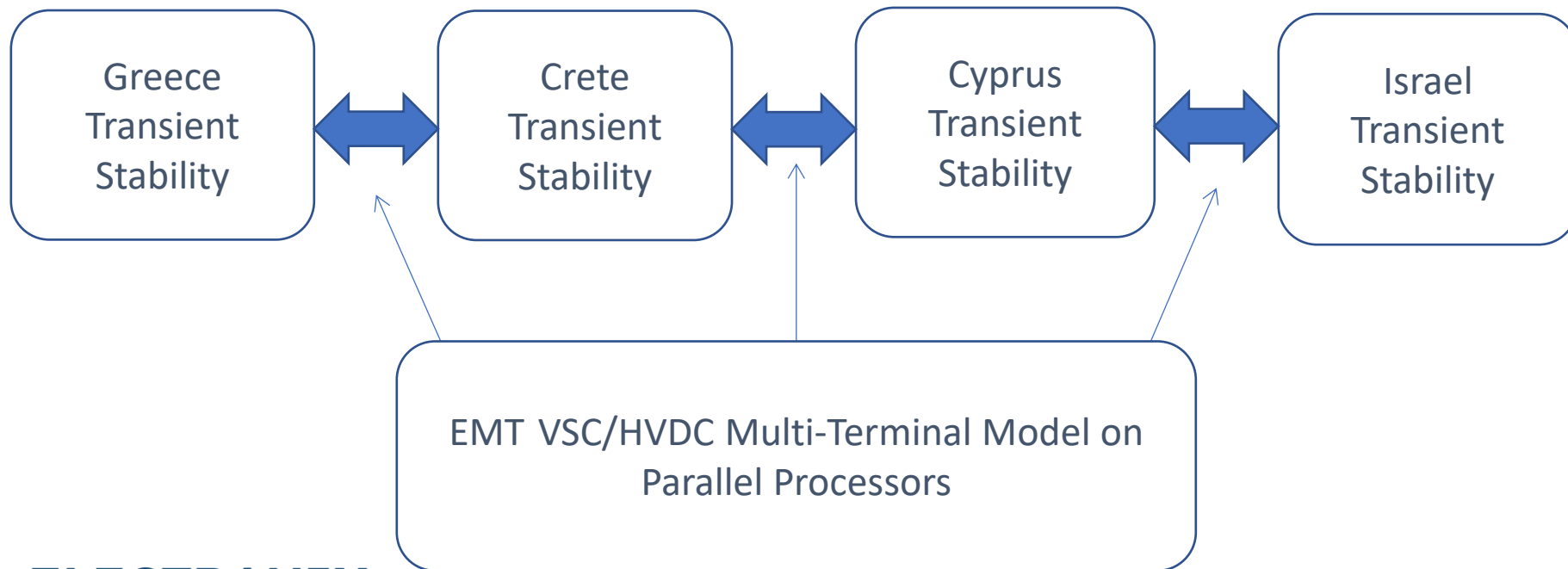
# Use case #2

- Inter-area machine dynamics
  - Areas swinging against each other will not be represented with fixed source boundary equivalents



# Use case #3

- 'Glue' between incompatible transient stability tools
  - Different PSS/E versions, PowerFactory, PSLF



# Use case #4

- Uncertainty
  - What don't I know? How do I get the very best warm fuzzy feeling about my study accuracy?



# Alternatives to Co-simulation

- Larger EMT study area, or multiple study areas modeled in EMT using parallel simulation. (There are going to be limits, however!)
- Be aware of your model limitations. Are they really important for what you're studying?