DSATools™
Dynamic Security Assessment Software

Powertech

WECC MVS Updates

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http://www.dsatools.com

Releases

- Version 25.0.0 released on **July 28, 2025**

- Release Schedule
  - Scheduled “quarterly” releases (3 minor releases/year, e.g., v22.1, v22.2, v22.3, 1 major release e.g. v23)
  - Minor releases will generally include fixes/model support/small enhancement requests, major release cycle for public release of more significant features

TSAT/SSAT – Details for v25

TSAT

- Electronic load shed due to Frcel < 1.0 included in nominalloadtrip attribute
- Flag model to allow different AVR when PSS is disabled
- TSAT-PSCAD co-sim improvements (better compatibility with PSCAD v5.0.2)

SSAT

- **Centralized plant control support** (PLT block) and corresponding support for dependent library models
- Support for remote generator, branch, and shunt inputs
- dq-admittance scanning report (for EMT plant/IBR model comparison at higher frequency range)
- VSM (hybrid GFM/GFL) end block support
- Per-scenario **distributed computation** (similar to TSAT/VSAT) in offline SSAT
- Shared-signal (SSG) block support

UDM Features

- Fixed-shunt SPS actions and monitoring
- Plot window support (view/produce simulation results within UDM editor)
- Multiple equations for MTH block
- Blocking current threshold for VSI end block (needed for REGC_B)

TSAT/SSAT – Upcoming (targeted for v25.1+)

TSAT

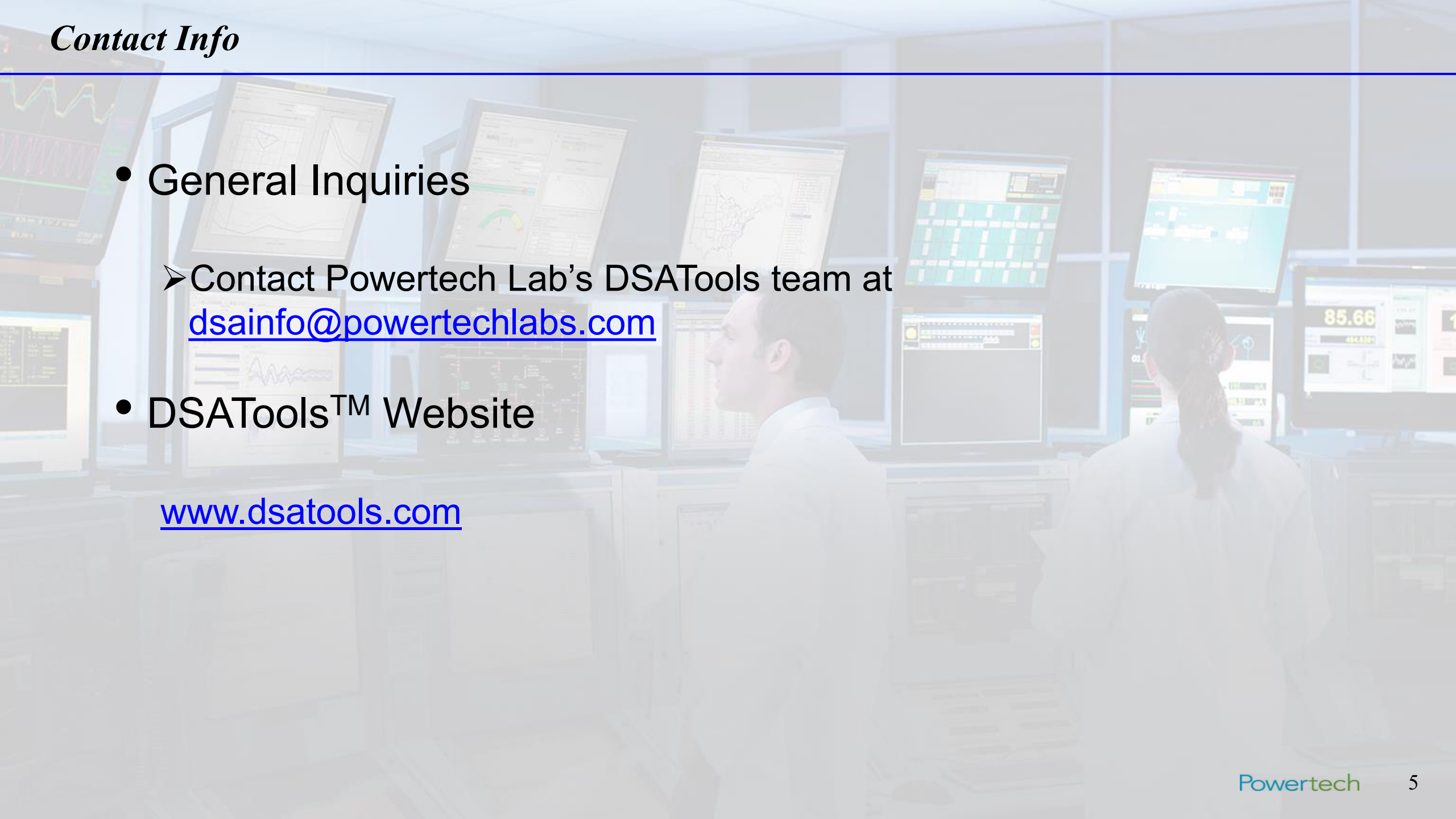
- In-built REGFM_A1, B1, and C1 conversions (currently uses TUDM library for support, requires manual addition to case)
- 3W transformer flow monitoring
- Damping criteria for interface flows

SSAT

- Output-based “mode shape”
- POI-infinite bus scan

UDM Features

- FFT UDM block



- General Inquiries
  - Contact Powertech Lab's DSATools team at dsainfo@powertechlabs.com
- DSATools™ Website

  www.dsatools.com