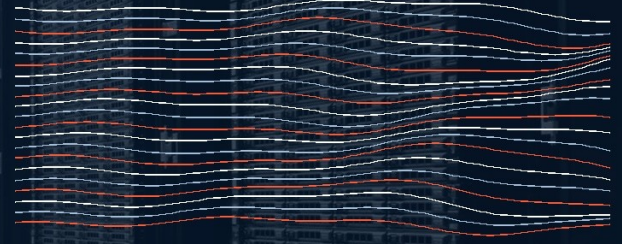


800 VDC Is Specified. The Transient Profile Is Still Open.

Observer-first control IP and vendor-neutral test structure for SST, DC/DC, rack-power, and SST-ESS platforms.



The interface is taking shape. The detailed AI load profile is not.

OCP SST Specification Rev. 0.3.0 defines a black-box medium-voltage-to-800 VDC platform, including 5 MW and 10 MW classes, output-voltage bands, state-machine behavior, redundancy concepts, and Modbus communications.

It also leaves detailed data-center load profiles, load-step definitions, distributed-redundancy behavior, busway effects, and SST-ESS power coordination for future definition. That is the immediate behavior-level opening.

QUIETEDGE POSITION

Observe the transition before asking the OEM controller to act.

Start read-only. Compare identical runs. Add only bounded, auditable influence after review.

AI LOAD EVENT



THE SPECIFICATION DEFINES

- 13.8 kV and 34.5 kV MVAC product classes.
- 5 MW and 10 MW DC output classes.
- 800 VDC unipolar output.
- $\pm 0.5\%$ switching ripple, $\pm 1\%$ static tolerance, and $\pm 3\%$ dynamic regulation.
- State-machine, overload, redundancy, and Modbus expectations.

THE DYNAMIC WHITE SPACE

- Detailed AI load-acceptance and load-rejection profiles.
- Busway parasitics and Ldi/dt treatment.
- Distributed and block-redundancy droop and power sharing.
- SST-ESS power and energy coordination.
- Vendor-neutral verification profiles for transition behavior.

QuietEdge does not claim OCP certification. The partner product owns the medium-voltage power train, compliance, safety certification, and final product performance.

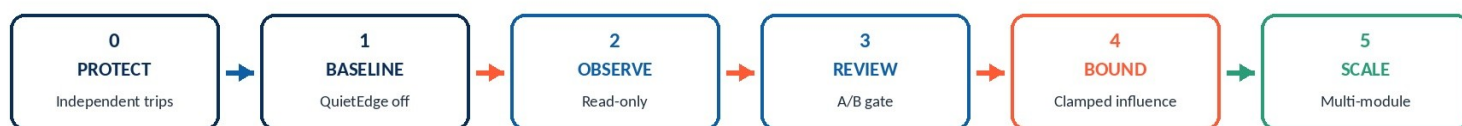
QuietEdge Dynamic Response Profile

A vendor-neutral structure for the events that determine what operators actually experience.

01	02	03	04
LOAD ACCEPTANCE - Step amplitude and slew. - Pulse width and repetition. - Synchronized vs. randomized racks. - Available local energy.	LOAD REJECTION - Percent load removed. - Rejection slew and overshoot. - Sink or storage availability. - Recovery and resynchronization.	REDUNDANCY EVENTS - Insert, remove, isolate. - Catcher or reserve engagement. - Derate and warning states. - Restart, rejoin, and re-space.	ENERGY COORDINATION - SST-ESS power sharing. - MV-side ramp and ride-through. - Local bridge duration. - Upstream pulse transfer.

Start read-only. Earn the right to influence.

The same staged sequence can be applied to an SST controller, converter cell, rack-power shelf, or sidecar DSP.



No QuietEdge actuation before observer-only evidence passes formal review.

WHAT THE PARTNER RECEIVES

- Telemetry and signal-ownership map.
- Portable observer core, adapter interface, and register schema.
- Stable/elevated/transition/fallback event semantics.
- Pre-trigger, transition, and recovery records.
- Fixed-versus-adaptive A/B report against selected load cases.
- Optional bounded observer/reference path and multi-module package.

REFERENCE-MODEL A/B EVIDENCE

Recovery after peak: ~216 ms -> ~72 ms

Peak ripple: 47.91 mV -> 41.42 mV

Peak-to-RMS ripple: 2.16 -> 1.69

Dither-energy proxy: 3848 -> 596

These are simulation/reference-model technical-effect results, not bench-validated SST performance. Staged 800 V DAB hardware validation is underway.

EVALUATION LICENSE

Observer-only access, telemetry integration, porting NRE, and the first A/B report.

PLATFORM / FIELD-OF-USE LICENSE

Approved bounded-response interfaces, tuning support, and rights for a defined product family or market.

PRODUCTION SCALE

Multi-module control stack or build-to-print package with per-unit or per-MW royalty and support.

Bring us your load profile or converter platform.

QuietEdge will define an observer-only A/B evaluation that preserves your primary controller, hard protection, and product roadmap.

QUIETEDGE.AI
jspringer@quietedge.ai



Reference: OCP Solid State Transformer Specification Rev. 0.3.0, effective June 22, 2026. QuietEdge is not affiliated with or endorsed by OCP.