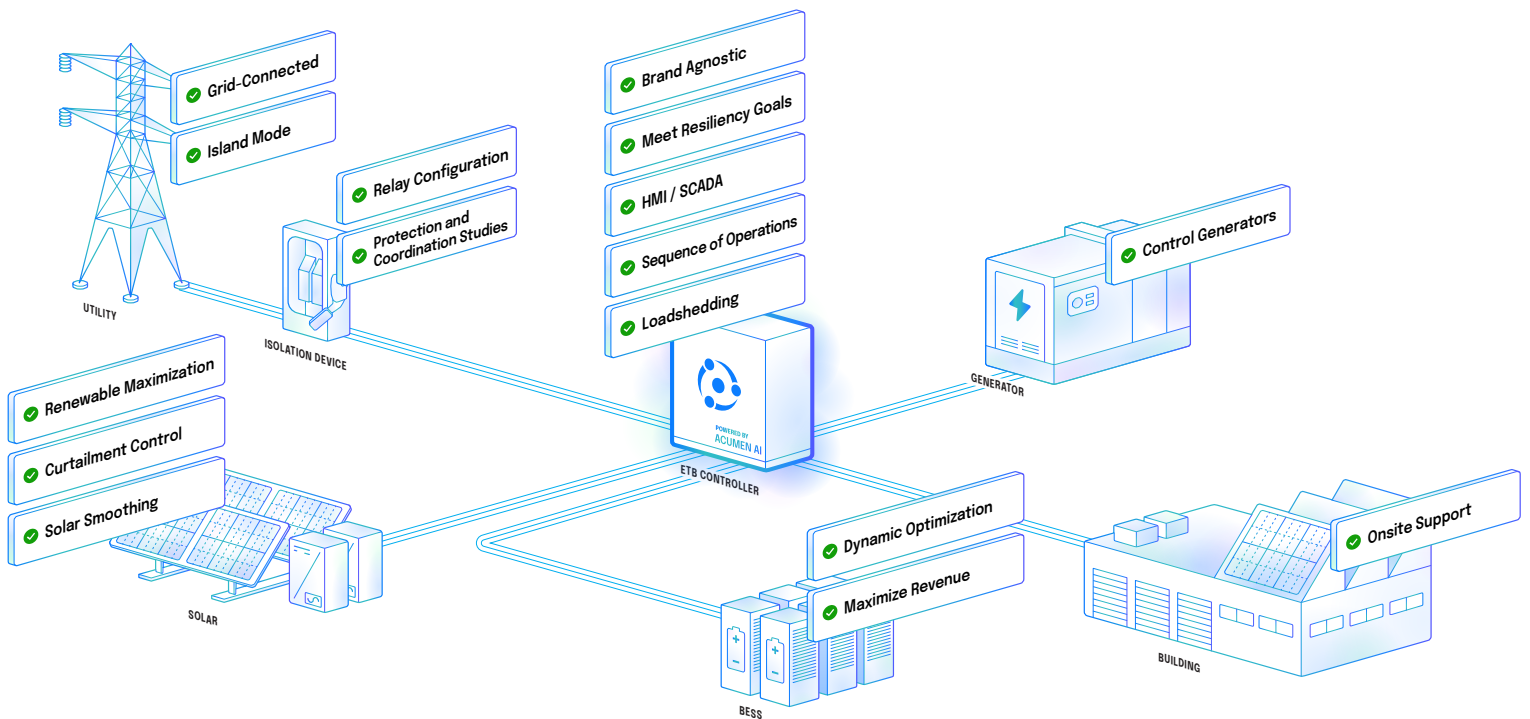


ETB Microgrid Solution Offering



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Energy Toolbase offers one integrated microgrid solution that removes scope ambiguity, streamlines delivery, and simplifies projects through end-to-end design, implementation, and support from a trusted partner.



Comprehensive Support

- ✓ Design Support
- ✓ DER Management, Grid Services, and EMS Optimization
- ✓ Enterprise Visualization and Telemetry
- ✓ Energy Audit and Load Forecasting
- ✓ Commissioning Solutions

Low Voltage Drawing Package

Energy Toolbase will provide a low-voltage (LV) drawing package for the planned microgrid. The package will show in-scope* control devices, key interconnection points, termination details, and control wiring needed to integrate the LV equipment with the broader microgrid system. The package is intended for review and incorporation by the customer's Engineer of Record (EOR) and does not constitute stamped, engineered, or construction-ready drawings. The package is limited to low-voltage control, communication, and termination drawings for in-scope equipment. It excludes equipment procurement, field installation, relay programming, commissioning, and final EOR approval.

* In-scope equipment is limited to items defined in the Energy Toolbase quotation for the ETB Controller + BESS system. Adding undefined assets may affect pricing.

Scope & Responsibilities

Provided by Energy Toolbase:

An electronic drawing package (in PDF and DWG file format) consisting of the following:

- A Single Line Diagram (SLD) showing where each in-scope component sits in the system.
- Wiring diagrams depicting point-to-point connections for all LV components.
- Communication cable interconnections for in-scope components and Energy Toolbase-supplied field devices, including meters and BESS components.
- A termination plan showing how LV equipment connects to field devices, including the grid circuit breaker, Energy Toolbase-supplied metering, and BESS components.
- A legends and abbreviations page defining the symbols and abbreviations used throughout the drawing set.

Provided by Electrical Engineer of Record (Excluded from Energy Toolbase Scope):

- Review and approval of all the cabinet component specifications.
- Review and approval of the Energy Toolbase provided drawing package to be considered as issued for construction.

Provided by Customer:

- Bill of materials for relevant devices, including the grid breaker, opening and closing coils, CTs, PTs, power supply, protective relay, UPS, and related components.
- Project SLD showing existing site electrical infrastructure that impacts the microgrid and all new proposed equipment to be installed.
- Cabinet dimension drawings, including panel dimensions, cutouts, cable entry details, component mounting details, and panel mounting details.
- Other documentation needed to complete the LV drawing package.

Microgrid Design Support

Energy Toolbase will support Customer Group with consulting services and plan set review focused on microgrid system design. Consulting may include guidance on project feasibility, LV drawing design considerations, sequence of operations, relay configuration, communication infrastructure, and other relevant technical topics. Plan set review is limited to functional system design redlining, confirming key components are present, and verifying in-scope components are incorporated correctly. Services do not include code compliance review, plan set development, electrical or structural engineering, stamping, or final engineering approval.

Scope & Responsibilities

Provided by Energy Toolbase:

- Review of electrical system design and preliminary project feasibility.
- Suggestions on controls network integration and communication infrastructure.
- Review of low voltage schematics and associated component selection.
- Guidance and review on control/operation scheme.
- Review of protective relay configuration.
- General coordination with BESS manufacturer.
- Guidance on relevant technical topics within the microgrid industry, as applicable.
- Recommendations around codes and standards.

Provided by Electrical Engineer of Record (Excluded from Energy Toolbase Scope):

- Protection and Coordination Study or list of protection functions required for the application and the corresponding settings for protective relay.
- Final approval/stamp on the system design, electrical drawings, control scheme and protective relay settings to be considered as issued for construction and commissioning.

Provided by Customer:

- Bill of materials for project devices, including the grid breaker, coils, CTs, PTs, power supply, protective relay, and UPS.
- Electrical drawing package for all cabinets associated with the system. These drawings should include System SLD, LV drawings, station phasing diagrams and protection logic diagrams.
- Manuals and data sheets of the DERs in scope. These should include details of the associated control systems as well (e.g. inverter details, generator controllers etc.)
- Project requirements, objectives and grid interconnection agreement.
- Any other information or documentation associated with the project.

The above Energy Toolbase services are limited to consulting support, functional system design review, and redlining intended to confirm that key components are present and incorporated correctly. The services do not include code compliance review, hands-on plan development, configuration, stamping, final engineering approval, or structural engineering. Energy Toolbase will make reasonable efforts to assist the customer in developing a sound design; however, final deliverables remain subject to review, approval, and stamping by the customer's Engineer of Record.

Why Partner with Energy Toolbase for Microgrids?

Hardware Agnostic

We unlock hardware choice—selecting the right technology for every project instead of forcing a single-vendor ecosystem.

Bankable & Proven

Trusted by leading developers, owners, and financiers, Energy Toolbase provides a bankable foundation for project success.

Complete Solution

One integrated microgrid solution that removes scope ambiguity, streamlines delivery, and simplifies project execution.

Comprehensive Support

Engineering, project management, and O&M services that streamline deployment and support long-term system success.

Domain Expertise

Our team has been in your shoes, with decades of experience developing, building, and deploying energy projects in the field.

Trusted

Confidence backed by transparency, expertise, and solutions that perform as modeled in the real world.



Get started today!

Scan here to schedule a call
with our energy storage professionals!