

COMPANY PROFILE · 2026

Electrical Power Engineering for the grid we are building now

Interconnection, substation design, transmission lines, power system studies, renewable and storage engineering, NERC compliance, nuclear plant electrical scope and owner's engineering — for utilities, developers, EPCs and data center operators across the United States.

Ready to take charge of your power engineering needs — from first interconnection screening through energization, and through the compliance obligations that follow.

Keentel Engineering is a United States electrical power engineering firm specializing in extra high voltage, high voltage and medium voltage systems. We take generation, transmission and large load projects from the first screening study through energization and long-term reliability compliance — and we stay with the asset afterward. Eleven integrated service lines, three specialist engineering groups and four offices across four time zones, organized so that the study that supports the design and the design that satisfies the compliance obligation are produced against one engineering record rather than three.

30+	51	11	4
YEARS OF HANDS-ON POWER SYSTEMS EXPERIENCE	ELECTRICAL ENGINEERS ON STAFF	INTEGRATED ENGINEERING SERVICE LINES	U.S. OFFICES ACROSS FOUR TIME ZONES

VOLTAGE | 4.16 | 13.8 | 34.5 | 69 | 115 | 138 | 161 | 230 | 345 | 500 kV

WHAT WE DO

01 Interconnect Screening, application and model submittals, independent verification of transmission provider results.	02 Study Load flow, short circuit, arc flash, coordination, stability, EMT, harmonics and grounding.	03 Design Substations, transmission lines, collector systems, protection and control, balance of plant.	04 Oversee Owner's engineering, design review, procurement, factory and field testing, commissioning.	05 Energize Construction support, testing and commissioning, and the record the asset is operated from.	06 Comply NERC evidence, model verification, ratings, mitigation and the reliability obligations that follow.
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LET'S TALK ABOUT YOUR PROJECT ›› Tell us the technology, the size, the point of interconnection and where you are today. We will tell you candidly what engineering it needs, what it should cost, and where the schedule risk sits — whether or not you engage us.

NSPE

D·U·N·S REGISTERED

IEEE SENIOR MEMBER

BBB ACCREDITED A+

CONTACT 813-389-7871 · contact@keentelengineering.com · keentelengineering.com · Tampa · Austin · Sacramento · Baltimore

ABOUT THE FIRM

A power engineering firm built for the grid we are building now

We are specialists in extra high voltage, high voltage and medium voltage power systems — and we work on the assets, not around them.

Keentel Engineering LLC is a United States electrical power engineering firm. Our work spans the full life of a power asset: the screening study that tells a developer whether a point of interconnection is viable; the application and models that put a project into a queue; the substation, transmission line and collector design that gets built; the testing and commissioning that energizes it; and the reliability compliance obligations that attach the moment it starts operating.

That range is deliberate. Most of the expensive problems in power projects happen at the seams — between the study and the design, between the design and the utility's requirements, between the as-built plant and the compliance evidence someone has to produce three years later. Keeping those handoffs inside one engineering organization is the single most effective thing an owner can do about them.

Our clients are investor-owned utilities, municipals and cooperatives; renewable and storage developers; EPC contractors and OEMs; industrial owners; nuclear operators; and the data center developers reshaping American load growth. Some engage us for a single named study. Many engage two or three service lines together, because that is how the work actually arrives.

Four offices — Tampa, Austin, Sacramento and Baltimore — give us working familiarity with ERCOT, WECC, CAISO, PJM, MISO, SPP, SERC and FRCC, and coverage inside your business hours wherever the project sits. Work is issued under the seal of a Professional Engineer licensed in the state where the project is built.

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YEARS OF HANDS-ON POWER SYSTEMS EXPERIENCE	ELECTRICAL ENGINEERS ON STAFF	U.S. OFFICES ACROSS FOUR TIME ZONES	INTEGRATED ENGINEERING SERVICE LINES

Our Mission

To deliver high-quality technical services tailored to the unique needs of every client — combining precision, compliance and value engineering on work that has to be right the first time.

Our Vision

To become the preferred engineering partner within the renewable energy and transmission & distribution sectors, growing our capability and reach alongside the clients who build America's grid.

From screening to energization

The same firm that tells you whether a point of interconnection is viable designs the substation that lands on it and sets the relays that protect it. Nothing is handed to a third party at the point where the assumptions matter most.

And afterward

Reliability compliance attaches the day an asset operates. Facility ratings, model verification, protection maintenance and evidence packages come from the same record the project was built against, not from a reconstruction of it.

At any point in between

Plenty of clients bring us one named study, one drawing package or one audit. A single deliverable is a normal engagement here, not a foot in the door for a larger one.

TAMPA — HEAD OFFICE

400 N Ashley Dr, Ste 2600
Tampa, FL 33602
813-389-7871

AUSTIN

5900 Balcones Dr, Ste 100
Austin, TX 78731
512-591-0752

SACRAMENTO

1401 21st St, Ste R
Sacramento, CA 95811
916-913-4524

BALTIMORE

306 W Redwood St, Ste 200
Baltimore, MD 21201
410-225-2181

WHY CLIENTS CHOOSE US

Five reasons the work comes back to us

None of these are claims about effort. They are claims about how the firm is organized — which is what actually determines whether a project goes smoothly.

01 Specialists, not generalists

Fifty-one electrical engineers in three dedicated groups — design, studies and regulatory compliance. The engineer modeling your plant in PSCAD does that work every day, not occasionally, and the engineer writing your protection settings has written hundreds of them. Depth in a narrow field beats breadth across a wide one when the deliverable has to survive a utility review.

02 The whole lifecycle, one engineering record

Models, ratings, assumptions and protection philosophy carry forward from interconnection screening to NERC evidence packages instead of being rebuilt — and reinterpreted — at every handoff. The base case behind your facility rating is the base case behind your interconnection study. When a regulator or a utility asks why a number is what it is, there is one answer, not three.

03 Independent by instinct

As owner's engineer we answer to the asset owner alone. We verify transmission provider study results rather than accept them, we review EPC and OEM submittals against what the owner actually bought, and we tell clients when a project cannot be saved. An engineer who never delivers bad news is not providing assurance — they are providing agreement.

04 Compliance built in, not bolted on

Our regulatory group works alongside design and studies, so NERC, IEEE, NESC and NFPA requirements shape the design rather than surfacing as findings on an operating asset. The cheapest time to satisfy PRC-019, PRC-024, FAC-008 or MOD-025 is while the equipment is still on paper.

05 Nationwide reach, local presence

Offices in Tampa, Austin, Sacramento and Baltimore give us working familiarity with the tariffs, queue processes and study conventions of ERCOT, WECC, CAISO, PJM, MISO, SPP, SERC and FRCC — and an engineer available in your business hours rather than eight hours behind them.

What we will tell you before you sign

Whether the scope you asked for is the scope you need. Where the schedule risk actually sits — usually procurement, not engineering. Which parts of the work carry regulatory exposure and which do not. And, if we do not hold a Professional Engineer license in your state, we say so before contract rather than after.

What we do not claim

We do not self-perform civil, structural or geotechnical work, and we say so. We coordinate it with the specialists who do, and we manage the interface rather than pretend the boundary is not there.

Where the schedule actually breaks

On most projects it is procurement and utility response time, not engineering hours. We plan around the transformer lead time and the queue cycle rather than promising to out-run them.

Who reads the deliverable

A utility reviewer, an auditor, a lender's engineer or your own staff in three years. All four have to be able to follow it without a phone call to the author.

We verify rather than accept. Transmission provider study results, EPC submittals and OEM datasheets get checked against the model and the contract, because the owner is the one who lives with the consequence

We keep the model. The analysis behind your project stays re-runnable, in your hands, with the assumptions documented well enough to defend three years later

We price the walkdown. Where drawings and records are thin, field verification is scoped and quoted rather than assumed away with a conservative factor

We name the boundary. What we perform, what we coordinate, and what belongs to someone else is stated in the scope of work rather than discovered during execution

OUR SERVICES

Eleven service lines, one engineering team

Most clients engage two or three of these together. They are built to combine — the study that supports the design, the design that satisfies the compliance obligation.

01

POI Interconnection Engineering Support

Pre-application screening, application and model submittals, independent verification of transmission provider study results, and design of the interconnection facilities through energization.

02

Substation Design Services

Complete physical and electrical packages from 4.16 kV collector stations to 500 kV switchyards — layout, grounding, protection and control, SCADA, metering and construction support.

03

EHV, HV & MV Power System Studies

Load flow, short circuit, arc flash, protective device coordination, stability, EMT, harmonics, grounding, insulation coordination and motor starting analysis.

04

Transmission Line Design Services

Conductor selection and ampacity, sag and tension, NESC clearances, structures and foundations, shield wire and OPGW, EMF profiles, and plan-and-profile coordinated with terminal protection.

05

Utility-Scale Renewable Energy Engineering

Solar, wind, BESS and hybrid plants — collector design, inverter and transformer sizing, plant controller and SCADA architecture, IEEE 2800 compliance and augmentation planning.

06

Owner's Engineer Services

Independent technical representation across technology selection, design review, procurement, construction monitoring, factory and field testing, and commissioning oversight.

07

NERC O&P 693 Compliance Services

Applicability and gap analysis, PRC / FAC / MOD / VAR remediation engineering, RSAW evidence packages, Align portal support, mock audits and mitigation plans.

08

Nuclear Power Plant Services

Offsite power and switchyard interface, non-safety-related and balance-of-plant distribution studies, degraded voltage setpoint analysis, and support for modifications and uprates.

09

Protection & Control Engineering

Protection scheme design, relay settings and coordination, relay modeling, IEC 61850 and SCADA integration, relay maintenance programs and disturbance monitoring.

10

MEP Engineering Services

HVAC, plumbing, fire protection and fire alarm, building power and lighting, emergency and standby systems — for control buildings, e-houses and full commercial facilities.

11

Data Center Power Engineering

Interconnection and substation engineering for powered land, hyperscale and AI campus loads — large load studies, dynamic modeling, redundancy design and utility coordination through energization.

STANDARDS AND CODES WE DESIGN AND VERIFY TO

NERC Reliability Standards	FERC Order 2023	IEEE Std 2800	IEEE Std 80	IEEE Std 1584
IEEE Std 519	IEEE C37 series	IEEE C57 series	IEEE 1547	NESC (ANSI C2)
ASCE MOP 74	NFPA 70 (NEC)	NFPA 70E	NFPA 855	UL 9540 / 9540A
ANSI/NETA ATS & ECS	IEC 61850	ANSI	OSHA	ASHRAE
IBC / IMC / IPC				

Eight of these eleven have a dedicated in-depth flyer

Power System Studies, Substation Engineering & Design, POI & Grid Interconnection, Transmission Line Design, Utility-Scale Renewable Energy Engineering, Owner's Engineer Services, NERC O&P Compliance Services and Nuclear Power Plant Electrical Engineering each have a standalone document covering scope, standards, deliverables and the current regulatory landscape in detail — ask for whichever are relevant to your project.

01 POI Interconnection Engineering Support

DEDICATED FLYER AVAILABLE

Getting a project through an interconnection queue is now the longest and least predictable phase of its development. Under FERC Order 2023 the process is cluster-based, deposits are at risk, withdrawal penalties are real, and a model that fails a usability screen can cost a cycle. We work the queue from the screening study that decides whether a point of interconnection is worth pursuing, through the studies and model submittals, to the design of the facilities that actually get built.

- **Pre-application screening** — thermal, voltage and short circuit headroom at candidate points of interconnection before a deposit is committed
- **Application support and model submittals** — power flow, dynamic and EMT models built to the transmission provider's own submission requirements and usability criteria
- **Independent verification** of feasibility, system impact and facilities study results rather than acceptance of them
- **Network upgrade review** — what is actually assigned, what is shared, and what a reasonable cost allocation looks like
- **Interconnection facility design** — the POI substation, metering, protection and the line or tap that reaches it
- **LGIA and study assumption review** — reconciling what the agreement obliges against what the design delivers
- **Restudy and re-entry strategy** when a cluster result changes the economics
- **Energization support** — witness testing, utility coordination and the commissioning sequence through first synchronization

02 Substation Design Services

DEDICATED FLYER AVAILABLE

Complete physical and electrical substation packages from 4.16 kV collector stations to 500 kV switchyards, in air-insulated and gas-insulated configurations. We produce the drawing set a contractor builds from and an owner operates from — general arrangement through wiring diagrams, bills of material and procurement specifications — with the studies that justify every rating in it produced by the same firm.

- **Configuration and one-line development** — ring bus, breaker-and-a-half, main-and-transfer and straight bus, traded against reliability, footprint and cost
- **Physical design** — general arrangement, plan and section, bus and conductor sizing, clearances, equipment layout and rigid bus analysis
- **Grounding grid design and analysis** to IEEE Std 80 with step and touch potential
- **Protection and control** — AC and DC schematics, relay panels, wiring and connection diagrams, and settings coordinated with the terminal
- **Station service, DC systems and battery sizing**, including duty cycle development and charger sizing
- **SCADA, metering, communications and RTU integration**, with IEC 61850 where the owner's standard calls for it
- **Lightning and surge protection**, insulation coordination and shielding analysis
- **Civil, structural and geotechnical coordination** — interface management with the specialists who perform that work
- **Construction support** — RFIs, submittal review, field changes and as-built records

WHAT YOU RECEIVE ON THESE ENGAGEMENTS

- **Screening memo** with headroom at each candidate POI and a recommendation on which to pursue
- **Independent review letter** on transmission provider study results, with the specific assumptions we disagree with
- **Grounding study** to IEEE Std 80 with step and touch potential results

- **Submission-ready models** — power flow, dynamic and EMT, built to the provider's own usability criteria
- **Substation drawing set** — general arrangement through wiring diagrams, BOM and procurement specifications
- **Protection settings and coordination curves** for the terminal and the interconnection facilities

Air-insulated

Conventional AIS switchyards where land is available and maintenance access is the governing consideration.

Gas-insulated

GIS and hybrid arrangements for constrained sites, indoor installations and environments where footprint or exposure governs.

Collector & POI

34.5 kV collector stations and the high-voltage interconnection substations that tie generation and storage into the transmission system.

03 EHV, HV & MV Power System Studies

DEDICATED FLYER AVAILABLE

The analytical core of the firm, at 4 kV through 765 kV. Studies are executed on industry-standard platforms and delivered as a report a reviewer can follow — stated inputs and sources, explicit assumptions with their basis, method, results against the governing standard, and specific actionable recommendations — together with the native model files, so the analysis is yours to carry forward rather than re-commission.

- **Load flow and voltage regulation** across operating modes and contingencies
- **Short circuit and equipment duty** — momentary, interrupting and close-and-latch rating verification
- **Protective device coordination and relay settings**, with coordination curves and setting sheets
- **Arc flash incident energy** to IEEE Std 1584, with label schedules and mitigation options
- **Transient stability and dynamic analysis**, including plant and controller response
- **EMT studies** — control interaction, sub-synchronous oscillation, switching transients and insulation coordination
- **Harmonics and power quality** to IEEE Std 519, including converter and drive interaction
- **Grounding grid analysis** to IEEE Std 80 and soil resistivity interpretation
- **Motor starting, voltage dip and cable ampacity**
- **Model verification and ride-through** — MOD-025 / 026 / 027, PRC-024 / PRC-029, GIC assessment and load shedding studies

04 Transmission Line Design Services

DEDICATED FLYER AVAILABLE

Overhead transmission line design from distribution voltages through 500 kV, including new build, reconductoring, rebuild and uprating. The electrical design and the structural design are produced against the same model, and the terminal protection is set by the same firm that sized the conductor.

- **Route and corridor studies**, constraint mapping and survey coordination
- **Conductor selection and ampacity** — steady-state and emergency ratings, thermal and economic optimization
- **Sag and tension**, ruling span, and creep and long-term elongation behavior
- **Structure design and loading** to NESC (ANSI C2) and ASCE MOP 74 — steel, concrete and wood, tangent through dead-end
- **Clearances** — ground, crossing, blowout and NESC compliance across the profile
- **Shield wire and OPGW** design, lightning performance and grounding
- **EMF and audible noise profiles**, corona and RI performance
- **Foundation coordination**, plan-and-profile development, PLS-CADD modeling and material lists
- **Reconductoring and uprating** — what the existing structures will carry before anything is replaced

New build

Greenfield lines and stations, where the study set and the design are produced together from the first route or configuration option.

Study report and executive summary

Arc flash label schedules

Rebuild & uprate

Reconductoring, structure replacement and voltage uprating, starting from what the existing asset will actually carry rather than what is easiest to specify.

Native model files and case lists

Plan-and-profile and structure lists

Operating assets

Arc flash, coordination and rating studies on plant that is already running, including the field verification that makes them defensible.

Setting sheets and coordination curves

Material and conductor schedules

Studies and line design produced together

A conductor is selected against an ampacity requirement that comes from a load flow, protected by a relay whose reach setting depends on the line impedance, and cleared within a time the stability case assumed. When those four numbers come from three firms they rarely agree. Producing them in one place is not a convenience — it is the difference between a design that is internally consistent and one that is merely complete.

The model is the asset, not just the report

Most owners hold study reports whose underlying models are lost, undocumented or several modifications out of date — which is why the next question costs as much as the last one. We hand back the model with the report, documented well enough that your own engineers can re-run it after the next modification, and we state plainly which data came from drawings, which from nameplate and test records, and which from field verification.

05 Utility-Scale Renewable Energy Engineering

DEDICATED FLYER AVAILABLE

Solar, wind, battery storage and hybrid plants, from the collector system to the point of interconnection. Inverter-based resources are now held to performance requirements that did not exist a few years ago — IEEE Std 2800 ride-through and control specifications, model quality gates, and NERC registration and reporting obligations that attach as soon as the plant operates.

- **Solar PV** — DC block and string design, inverter and MV transformer sizing, DC and AC cable ampacity, and independent review of energy yield models
- **Wind** — long-radial collector network design, turbine electrical interface coordination, site-wide SCADA and fiber, and repowering assessment of existing collector infrastructure
- **BESS** — bidirectional protection and controls, augmentation planning, auxiliary and thermal load engineering, and NFPA 855 / UL 9540A coordination
- **Hybrid plants** — shared interconnection sizing, plant controller architecture and dispatch logic across generation and storage
- **IEEE 2800 compliance** — ride-through, reactive capability, frequency and voltage response, and the evidence that demonstrates them
- **Plant controller and SCADA architecture**, point lists and utility telemetry
- **Grid-forming and advanced grid support** capability assessment where the market requires it

06 Owner's Engineer Services

DEDICATED FLYER AVAILABLE

Independent technical representation for the asset owner across the life of a project. The owner's engineer is not the designer of record and not the construction manager — the role is to make sure the owner gets what the owner bought, and to say so in writing when they are not getting it.

- **Technology selection and basis of design** review before the specification is released
- **Design review** of EPC and OEM deliverables at 30 / 60 / 90 percent against the contract and the owner's standards
- **Procurement support** — specification review, bid evaluation, and the long-lead equipment strategy that governs the schedule
- **Factory acceptance testing** witness and report review
- **Construction monitoring** and milestone verification against defined completion criteria
- **Commissioning oversight** — ANSI/NETA acceptance testing, energization sequence and punch-list closure
- **Performance testing and guarantees**, including the measurement boundary that decides whether a plant passes
- **Technical due diligence** for lenders, acquirers and asset managers

Development stage

Screening, POI selection, preliminary sizing and the interconnection application — the decisions that set the ceiling on everything after them.

Independent of the EPC on owner's engineer engagements — we do not review our own work

Model quality treated as a deliverable, not a formality — a rejected model costs a cycle

Execution stage

Detailed design, procurement support, EPC oversight, factory and field testing, and commissioning through first energization.

Measurement boundary stated on every performance test, because that is what decides whether a plant passes

Compliance obligations mapped at design stage, so registration does not arrive as a surprise

Operating stage

Model verification, ride-through evidence, facility ratings, augmentation planning and the reliability obligations that continue for the life of the plant.

The requirement set moved, and it is still moving

Inverter-based resources are now held to performance specifications, model quality gates and registration thresholds that did not exist when many operating plants were designed. A project designed to yesterday's requirement and energized into today's is the most common avoidable problem in this market. We design against the requirement that will apply at commercial operation, and we say which one that is.

Independence is the product

We do not carry the EPC scope on a project where we serve as owner's engineer. The value of the role rests entirely on the owner knowing that our review of a submittal is not a review of our own work, and that a recommendation to reject a piece of equipment costs us nothing to make.

07 NERC O&P 693 Compliance Services

DEDICATED FLYER AVAILABLE

Operations and planning compliance for registered entities — including the newly registered inverter-based resource owners who acquired an obligation they did not previously carry. What distinguishes our position is that we produce the technical evidence as well as running the programme: the settings, models, ratings, planning studies and calculations that the standards actually ask for.

- **Registration and applicability analysis** — which functions, which standards, which requirements, and from what date
- **Gap analysis and controls** across the O&P standard families
- **PRC remediation engineering** — relay settings and coordination, protection system maintenance programs, disturbance monitoring and ride-through
- **FAC** — facility ratings methodology and the rating calculations behind it
- **MOD** — model verification and validation for generators, exciters and governors
- **VAR** — reactive capability, voltage schedules and controller performance
- **RSAW evidence packages** indexed requirement by requirement, with the calculation records behind them
- **Align portal support**, self-logging, mock audits and mitigation plans
- **Cold weather and extreme event** engineering and documentation

Scope note: this service line covers Operations & Planning standards. CIP cyber security is a separate discipline, coordinated with your own cyber security team rather than performed by us.

08 Nuclear Power Plant Services

DEDICATED FLYER AVAILABLE

Non-safety-related and balance-of-plant electrical engineering for the operating fleet, restarts, uprates, small modular reactors and co-located load. Nearly the whole path that General Design Criterion 17 depends on — the grid, the switchyard, the generator step-up and auxiliary transformers, the non-1E distribution system — is non-safety equipment analysed with power system engineering.

- **Offsite power adequacy** and the transmission stability case behind it
- **Degraded voltage analysis and setpoints** — the highest-value study in this scope
- **Open phase detection** and unbalanced supply analysis
- **Switchyard configuration, failure modes, protection and modernisation**
- **Balance-of-plant distribution** — load flow, short circuit, coordination, motor starting and arc flash
- **NUC-001 interface requirements** and transmission coordination
- **Uprate and modification support**, including transformer and bus rerating
- **SMR and advanced reactor** electrical design and grid integration

Scope note: Keentel does not hold a 10 CFR 50 Appendix B quality assurance programme and does not act as a commercial-grade dedicating entity. We work on non-safety-related scope in our own right, or within the licensee's or an Appendix B supplier's programme, as stated in the scope of work.

Newly registered entities

Inverter-based resource owners who have just acquired a compliance obligation, starting from applicability and working toward an evidence position that will survive a first audit.

- | Applicability matrices
- | Relay setting and coordination records

Established programmes

Entities with a functioning programme that need the engineering behind it — ratings, settings, models and studies — produced or refreshed by someone who does that work daily.

- | RSAW evidence packages
- | Generator model verification

After a finding

Mitigation that closes the technical gap rather than documenting it, with the calculation record the mitigation plan is going to be judged against.

- | Facility rating calculations
- | Mitigation plans and milestones

Evidence is engineering, not paperwork

Most compliance findings are not filing failures. They are a facility rating with no calculation behind it, a relay setting that does not match the coordination study, a generator model that has never been validated against a test, or a protection maintenance interval that nobody can demonstrate was met. Those are engineering problems, and they are fixed by engineers — which is why our compliance group sits beside the design and studies groups rather than in a separate practice.

09 Protection & Control Engineering

Protection is where a design decision, a study result and a compliance obligation all land on the same setting sheet. We design the scheme, model the relays, produce and coordinate the settings, and support the testing that proves them — at distribution, transmission and generator terminals.

- **Protection scheme design** — line, transformer, bus, generator and feeder protection philosophy and single-line development
- **Relay settings and coordination** across the full device set, with coordination curves and setting sheets
- **Relay modeling and short circuit analysis** supporting the settings
- **Panel design, AC and DC schematics**, wiring and connection diagrams
- **IEC 61850** station architecture, GOOSE schemes and configuration
- **SCADA and RTU integration**, point lists, telemetry and utility interface
- **Remedial action and load shedding schemes**
- **Protection system maintenance programs** and disturbance monitoring supporting the PRC standards
- **Digital relay replacement** — settings translation, scheme verification and testing support

10 MEP Engineering Services

Mechanical, electrical and plumbing design for the buildings that power projects depend on — control buildings, e-houses, switchgear rooms and full commercial facilities — delivered by the same firm that designed the electrical system inside them.

- **HVAC** design and equipment selection, including switchgear and battery room ventilation
- **Plumbing** and sanitary design
- **Fire protection and fire alarm** systems and coordination
- **Building power and lighting**, panel schedules and load calculations
- **Emergency and standby systems** — generators, transfer schemes and egress lighting
- **Code compliance** to NFPA 70, IBC / IMC / IPC and ASHRAE

11 Data Center Power Engineering

Large load interconnection and the electrical infrastructure behind it, for powered land, hyperscale campuses and AI training loads. Large loads are now studied the way generation is — with dynamic models, ride-through expectations and a transmission provider that wants to know exactly how the load behaves during a disturbance.

- **Large load interconnection studies** and utility coordination through energization
- **Dynamic modeling of large loads** for transmission provider submission
- **Powered land assessment** — what a site can actually take, and when
- **Campus substation and distribution design**, redundancy and reliability architecture
- **Onsite generation and storage integration**, including behind-the-meter arrangements
- **Power quality, harmonics and protection** for converter-dense facilities

Why these three sit together

They are the lines that turn a power system design into a building someone can operate. The protection engineer sets the device the study sized; the MEP engineer conditions the room it sits in; the data center engineer is buying both at a scale that makes the coordination between them the whole problem. Procured separately they generate interface gaps — a relay panel that will not fit the e-house, a ventilation design that assumed a different transformer, a redundancy scheme nobody verified against the incoming service.

Protection philosophy documents

E-house and control building packages

Setting sheets and coordination curves

Load calculations and panel schedules

IEC 61850 SCD and configuration files

Large load dynamic models

Greenfield

Protection philosophy, panel design, building services and campus distribution specified together from the basis of design onward.

Retrofit

Digital relay replacement, switchgear obsolescence, added cooling load and the coordination re-study that every one of those triggers.

Expansion

Adding load or capacity to a live facility, where the constraint is usually the incoming service and the existing protection, not the new equipment.

HOW THE TEAM IS BUILT

Three specialist groups, fifty-one electrical engineers

Organized so every project is staffed by people who do that specific work every day. The groups work the same job together — which is why a design decision here accounts for a study constraint there.

18

The Designers

POWER SYSTEM DESIGN GROUP

They turn lines into lifelines — calculating, modeling and detailing substations, collector systems, transmission lines and balance of plant so the system works the first time. Physical and electrical design, protection panels, grounding, station service and the drawing set a contractor builds from.

Platforms: AutoCAD, Revit, CAD 3D, ETAP, PVsyst, PLS-CADD.

17

The Grid Whisperers

POWER SYSTEM STUDIES GROUP

They speak the language of large-scale plants and grid dynamics, ensuring your project plays well with the utility and the future. Load flow, short circuit, coordination, stability, EMT, harmonics and the model quality that decides whether a submission is accepted.

Platforms: PSCAD, PSS® E, DigSILENT PowerFactory, ETAP, ASPEN, PSLE, SKM PowerTools, PowerWorld.

16

The Watchdogs

REGULATORY COMPLIANCE GROUP

They live and breathe compliance — OSHA, NFPA 70 (NEC) and NFPA 70E, IEEE, NERC and FERC — so your systems are ready for inspection, audit and everything in between. Applicability, evidence, mitigation and the engineering that closes a gap rather than documents it.

Focus: NERC O&P standards, RSAW evidence, Align portal, facility ratings, model verification.

Licensure and sealing

Work is issued under the seal of a Professional Engineer licensed in the state where the project is built. Keentel maintains PE licensure across our active markets; if we do not hold a license in your state, we say so before contract rather than after. Florida Firm Registry No. 36853.

A named engineer on your project — you speak to the person doing the work, not to a coordinator relaying questions to them

Cross-group review where it matters — compliance reads the design, design reads the study, before anything is issued

Group depth behind that engineer — a second and third opinion on a hard result is down the hall, not out of house

Continuity across phases — the engineer who ran the study is available when the question comes back three years later

Why the three groups are separate but co-located

Separate, because protection settings and NERC evidence and substation physical design are three different crafts and nobody is excellent at all three. Co-located on the same job, because the decisions interact: a bus configuration changes the fault duty, the fault duty changes the settings, the settings become the compliance evidence. The structure exists so that specialists produce the work and the interactions between them are somebody's explicit responsibility rather than nobody's.

Staffed by discipline

A study is staffed from the studies group and a design from the design group — not from whoever is free. Where a project needs both, it gets both, working the same base data.

Checked before issue

Every calculation and drawing is prepared, checked and approved by different engineers, with the check recorded on the deliverable rather than asserted in a proposal.

Four time zones

Tampa, Austin, Sacramento and Baltimore — so a utility comment that arrives at 4 p.m. Pacific still gets worked the same day.

MODELING ENVIRONMENT

The platforms our engineering is executed on

The platform used for a given study is stated in the proposal, along with the model version and the base case it starts from, so there is no ambiguity about what the results were produced with or what you receive at the end.

					
SKM PowerTools	PowerWorld	AutoCAD & AutoCAD Electrical	Revit		
CAD 3D	PLS-CADD	PVsyst	GIS tools		

ANALYSES WE PERFORM

Load flow & voltage	Short circuit & device duty	Protective device coordination	Relay settings
Arc flash / incident energy	Transient stability	EMT / control interaction	Sub-synchronous oscillation
Harmonics & power quality	Reactive capability	Grounding grid (IEEE 80)	Insulation coordination
Motor starting	Cable ampacity	Model verification (MOD-025/026/027)	Ride-through (PRC-024/029)
GIC assessment	Load shedding / RAS	Lightning performance	Switching transients
Sag & tension	Battery duty cycle sizing		

MARKETS AND INTERCONNECTION REGIONS

Working familiarity with the tariffs, queue processes and study conventions of each.

ERCOT	CAISO	PJM	MISO
SPP	WECC	SERC	FRCC / Florida
NYISO	ISO-NE	Non-ISO utilities & cooperatives	

What we hand over with the results

Native model files, case lists and a change log accompany the report on every study engagement. The platform, version and base case are named, the simplifications are written down, and the data provenance is labelled — drawing, nameplate and test record, or field verification. That is what makes a study re-runnable after the next modification instead of re-commissionable, and it is why clients who engage us once for a study tend to come back for the second question rather than start over somewhere else.

VOLTAGE CLASSES | 4.16 | 13.8 | 34.5 | 69 | 115 | 138 | 161 | 230 | 345 | 500 kV

STUDY RANGE 4 kV through 765 kV, with study platform, model version and base case named in every proposal

WHAT YOU ACTUALLY RECEIVE

The deliverable, not a description of the work

Every engagement ends in documents someone else has to use — a contractor, a utility reviewer, an auditor or your own engineers three years from now. That is who we write for.

Design

Stamped drawing sets — general arrangement, plan and section, one-line, three-line, AC and DC schematics, wiring and connection diagrams, grounding and raceway plans, panel layouts, cable and conduit schedules, bills of material and technical specifications for procurement.

Studies

A report documenting the modeled system, assumptions, base cases and results against the governing standard, with specific actionable recommendations — plus the native model files and case lists, so the analysis is yours to carry forward rather than re-commission.

Compliance

Completed RSAW responses, evidence packages indexed to each requirement, calculation records, test procedures and results, and mitigation plans where a gap is identified — assembled so an auditor can follow the trail without an escort.

HOW A DELIVERABLE IS STRUCTURED

Scope and standards stated at the front — what was analysed, to what edition of what standard, and what was excluded

Every assumption written down with its basis, so a reviewer can challenge the assumption rather than the conclusion

Results against the acceptance criterion, item by item, rather than a narrative summary

Calculation records in a form that supports a compliance evidence package without rework

Source data provenance — which values came from drawings, which from nameplate and test records, and which from field verification

Model description — platform, version, base case, contingency set and any simplification made

Findings, exceptions and mitigation options with the cost and schedule consequence of each

Native model files delivered with the report, documented well enough to re-run

NAMED DELIVERABLES CLIENTS ASK FOR BY NAME

Interconnection screening memo

Protective device coordination study

EMT / control interaction study

Substation IFC drawing package

System impact study review

Grounding grid analysis (IEEE 80)

Facility ratings methodology

Transmission line plan-and-profile

Arc flash study & label schedule

Short circuit & device duty study

Generator model verification report

RSAW evidence package

Sealed, and sealed by whom

Deliverables that require a Professional Engineer's seal are issued under the seal of a PE licensed in the state where the project is built. Where a deliverable is preliminary, issued for review, or otherwise not for construction, it says so on the sheet — an unsealed draft carries no certification and we do not let one circulate as though it does.

Revision, not replacement

Projects change. When a rating, a configuration or a base case moves, the deliverable is revised against the same model and the same record rather than rebuilt from the beginning — which is both faster and the only way the revision history stays defensible.

PROJECT EXPERIENCE

Delivered work, named where we can name it

Named projects are publicly referenced. Where noted, client names and locations are withheld for confidentiality and are available on request under NDA.

EXTRA-HIGH VOLTAGE — 345 KV AND ABOVE

- **765 kV / 345 kV spare autotransformer project** — New York Power Authority, Massena Substation, NY. Testing and commissioning leadership at the EHV level.
KEY PERSONNEL, PRIOR ROLE
- **500 kV double-circuit quad-bundle transmission line** — insulation coordination and lightning performance study in PSCAD. Client confidential.
- **Seven EHV bulk supply point substations** (380 / 132 / 33 / 13.8 kV class) — multi-year protection and control design program for a national transmission utility. Client confidential.

HIGH-VOLTAGE INTERCONNECTION SUBSTATIONS — ENERGIZED / OPERATING

- **Pediment Energy Storage** — Mesa, AZ (Salt River Project). HV interconnection substation design for a 250 MW / 1,000 MWh BESS; energized June 2026. Client: AYPa Power, a Blackstone portfolio company.
- **Bypass Energy Storage** — Fort Bend County, TX (ERCOT). HV interconnection substation design for a 200 MW / 400 MWh standalone BESS; commercial operation 2025. Client: AYPa Power.
- **Desert Quartzite Solar + Storage** — Riverside County, CA. HV interconnection substation engineering for a 300 MW solar plus 150 MW BESS facility; operational. Client: EDF.
- **Roosevelt Wind** — Roosevelt County, NM. HV interconnection substation engineering for a 250 MW wind facility; fully operational. Client: EDF.

OPERATING GENERATING STATIONS — HV ELECTRICAL ENGINEERING

- **Merom Generating Station** — Sullivan County, IN. Electrical power engineering support across a wide range of tasks at an operating 1,080+ MW generating station. Client: Power CAMS.
- **PSEG Linden Generating Station** — Linden, Union County, NJ. Various electrical power engineering assignments at an operating 1,740+ MW generating station.
- **Vandolah Power Station** — Hardee County, FL. High-voltage electrical testing and commissioning at a 728 MW dual-fuel peaking facility; complete. Client: Vandolah Power Company.

EXPERIENCE PROFILE

765 kV testing & commissioning

HV interconnection substations for BESS, solar and wind

500 kV line insulation coordination

Operating stations from 728 MW to 1,740 MW

380 / 132 / 33 / 13.8 kV bulk supply points

GIS at 132 / 11 kV through 220 kV

Beyond the named projects

The list continues on the following page with utility-scale solar and wind, battery storage and data centers, gas-insulated and industrial substations, and distributed generation impact work. In-depth case studies for any entry, and client references with authorized direct contact information, are available on request — including for the engagements shown here as client confidential.

Energized and operating — the interconnection substations listed above are in service, not in development, which is a materially different reference

Across four ISOs and a vertically integrated utility — ERCOT, CAISO, PJM and SPP work alongside Salt River Project territory

UTILITY-SCALE SOLAR & WIND — 34.5 KV COLLECTION / HV INTERCONNECTION

- **Fox Squirrel Solar** — Madison County, OH. Engineering and testing for a 577 MW ground-mount solar PV facility under development. Client: EDF.
- **Resurgence Solar** — Boron, San Bernardino County, CA. Electrical and NERC compliance engineering for an operating 165 MW solar plus battery storage facility. Client: RRC Companies.
- **Playa Solar 1 & Playa Solar 2** — Las Vegas, NV. Electrical and NERC compliance engineering for operating utility-scale solar facilities. Client: EDF Power Solutions.
- **Three 50 MW wind projects** — 132 kV GIS grid station primary and secondary design. Clients confidential.
- **Utility-scale solar interconnection studies at 132 kV** — including a 4 × 50 MW plant, a 90 MW project and a 17-project regional solar portfolio. Clients confidential.
- **Renewable fleet compliance and PSS[®] E modeling support** for approximately 9 GW of operating renewable assets. KEY PERSONNEL, PRIOR ROLE

BATTERY ENERGY STORAGE & DATA CENTERS — 34.5 KV COLLECTION / HV INTERCONNECTION

- **385 MW utility-scale BESS** — complete electrical design and engineering documentation. Client confidential.
- **100 MW / 400 MWh BESS, PJM** — electrical design, single-line diagrams and drawing packages. Client confidential.
- **Data centers and large loads** — 1 GW ERCOT hyperscale interconnection; 1.35 GW of electrical design across three ERCOT campuses at 250, 500 and 600 MW; and dynamic modeling engagements in SPP (245 MW), PJM (220 MVA), ERCOT (160 MW) and CAISO (99 MW). Clients confidential.

HV GIS & INDUSTRIAL

- **Confidential GIS design projects at Exelon / Commonwealth Edison** — performed during a 16-year utility tenure. KEY PERSONNEL, PRIOR ROLE
- **Offshore wind GIS design** — project work involving HICO and Hitachi gas-insulated switchgear, including Avangrid offshore wind development support. Details under NDA.
- **132 kV GIS and AIS grid stations for major industrial clients**, including indoor GIS at 132 / 11 kV and a 220 kV grid station extension. Clients confidential.

COMMUNITY & DISTRIBUTED SOLAR

- **Distributed solar and net-metering impact assessments** — rooftop and distributed PV penetration analysis supporting utility net-metering policy and planning. Clients confidential.
- **Commercial and small utility-scale solar PV design** — feasibility, cost-benefit analysis and interconnection support. Clients confidential.
- **Distributed energy resource impact analyses** for distribution grid interconnection. Clients confidential.

How to read this list

Named projects are publicly referenced and the client is identified where the client has agreed to be. Entries marked *client confidential* are real engagements whose owner has not agreed to be named — we can describe the scope in detail under NDA, and in most cases arrange a direct reference. Entries marked *key personnel, prior role* were delivered by Keentel key personnel in a prior professional capacity rather than by the firm, and are shown because the experience is real and relevant, not because it is Keentel corporate history.

Solar PV from commercial scale to 577 MW

Wind from 50 MW projects to 250 MW facilities

BESS from 100 MW / 400 MWh to 385 MW

Hyperscale interconnection to 1 GW

1.35 GW across three ERCOT campuses

Dynamic modeling in SPP, PJM, ERCOT and CAISO

What the confidential entries have in common

They are predominantly developer and industrial work where the owner treats the interconnection position, the site capacity or the commercial terms as competitively sensitive — which is reasonable, and which is why we do not publish them. The scope, the voltage, the platform used and the deliverable set can all be described in detail under NDA, and a direct reference can usually be arranged with a week's notice.

Collector systems at 34.5 kV

GIS at 132 / 11 kV and 220 kV

Offshore wind GIS interface

Net-metering and DER impact analysis

Feasibility and cost-benefit studies

NERC compliance on operating renewables

OUR CLIENTS

Trusted by utilities, developers, EPCs and hyperscalers

Our clients range from investor-owned utilities and global OEMs to renewable developers, engineering firms and the data center operators reshaping American load growth.



Arizona Public Service

Reliable electric service and modern grid infrastructure across Arizona.



Siemens Energy

Advanced power engineering and grid modernization solutions across the U.S.



Avangrid

Renewable energy and utility infrastructure engineering projects nationwide.



EDF Power Solutions

Utility-scale renewable energy integration and grid interconnection services.



Entergy

Transmission, substation and interconnection engineering across the Gulf South.



AYPA Power

Battery storage and renewable energy interconnection engineering support.



RRC Companies

Electrical engineering partner for utility transmission and infrastructure projects.



Pike Engineering

Transmission and distribution engineering support across utility networks nationwide.



Fisher Associates

Power engineering and grid support for utility and renewable energy projects.



OCTA Data Center

Powered land and infrastructure-ready sites for hyperscale, cloud, AI and large-scale data centers.



Brasswater

Integrated development for industrial, office, retail and data-center infrastructure across North America.



Risk Work

Safety-focused engineering and compliance support for critical infrastructure projects.



Anthropic

Electrical infrastructure and power-system engineering support for data-center energy requirements.



PAE Engineers

Advanced power system solutions for complex energy and infrastructure projects.



Tenova

Industrial engineering, electrification and decarbonization solutions for advanced infrastructure projects.



NLine Energy

Steam-to-power energy recovery solutions that convert excess steam pressure into electricity.



XUTILITY

Utility consulting, grid modernization, transmission planning and electrical engineering solutions.



Austin Energy

Public utility providing reliable electric power and energy services across the Austin community.



Shermco

Electrical maintenance, engineering and testing services for critical power systems.



Pro-Serv

Industrial contracting and field services supporting power, utility and infrastructure projects.

Solvida Design + Engineering

Solvida Design + Engineering

Electrical, civil and structural design for photovoltaic projects from rooftop to utility scale.

References

Client references with authorized direct contact information, in-depth case studies and key personnel resumes are available on request. Project-specific references are provided with the client's permission rather than assumed.

INDUSTRIES SERVED

Eight markets, one body of engineering

The physics does not change between a wind farm and a data center. What changes is the tariff, the standard and the person you have to convince — which is exactly what working across all of them teaches you.

Utilities & Cooperatives

Investor-owned utilities, municipals and electric cooperatives — substations, lines, protection, planning and compliance.

Renewable Developers

Solar, wind, BESS and hybrid independent power producers, from screening through operating compliance.

Data Centers

Hyperscale, AI campuses and powered land — large load interconnection, dynamic modeling and campus power.

EPC Contractors

Design support, constructability review, and the studies that back a bid or a change order.

Industrial & Manufacturing

Electrification and decarbonization, plant distribution, coordination and arc flash.

Oil, Gas & Petrochemical

Facility power, hazardous area coordination and electrical safety studies.

Nuclear Generation

Offsite power, switchyard and balance-of-plant electrical scope for the operating fleet and new build.

Public Agencies

Municipal and institutional facilities, campus distribution and standby power.

WHY THE WORK COMES BACK

One record, many uses

The model built for an interconnection study is the model behind the facility rating and the compliance evidence. Clients who engaged us once for a study come back because the second question is cheaper than the first.

Written to be reviewed

Our deliverables get read by utility reviewers, auditors and lenders. They are structured so those readers can check the work rather than take it on trust — which is what makes a first submission stick.

Candid on scope

We would rather tell you that you need less engineering than you thought than sell a study you do not yet need. That conversation is free, and it is the reason a surprising number of clients call us before they call anyone else.

What working across all eight teaches you

A data center developer learns from how a generator proves ride-through. A renewable developer learns from how a nuclear station documents a degraded voltage calculation. A utility learns from how an industrial owner handles arc flash on plant that cannot be de-energized. The standards move between these markets faster than the practice does — and a firm that works in all of them sees the requirement coming before it arrives in a tariff.

Generation — thermal, nuclear, solar, wind, storage and hybrid plants, from interconnection through operating compliance

Transmission — lines and substations from 13.8 kV through 500 kV, new build, rebuild and uprating

Load — hyperscale and AI campuses, industrial facilities and institutional campuses, studied the way generation is

The interfaces between them — which is where most of the engineering risk on a modern project actually lives

Regulated owners

Need work that survives a prudence review and a compliance audit. Documentation and traceability matter as much as the answer.

Developers

Need speed and a study that passes a utility review the first time, because a rejected submission costs a cluster cycle rather than a week.

Industrial & institutional owners

Need work that can be executed on a live facility, around an outage window that is measured in hours rather than weeks.



HOW THE WORK IS CONTROLLED

Checked before it leaves, traceable after it lands

Quality in engineering is not a statement of intent. It is a set of specific practices that either happened on your project or did not.

Technical quality

- **Prepared, checked, approved** — by different engineers, recorded on the deliverable itself
- **Independent check of the model**, not just the report: base case, contingency set, assumptions and units
- **Source data traced** to drawings, nameplate and test records, or field verification, and labelled as such
- **Standards edition named**, because the answer changes between editions
- **Sanity checks against an independent method** where a result governs a purchase or a setting

Document control

- **Controlled revision history** with the reason for each revision recorded
- **Native files delivered** alongside sealed PDFs — CAD, models and setting files
- **Transmittal records** so both sides know which revision is current
- **Client standards applied** where you have them, and named where you do not

Assumptions are challengeable — written down with their basis, so a reviewer disputes the input rather than the conclusion

Field verification is scoped, not assumed — where records are thin we say so and price the walkdown rather than model a guess

Safety

- **NFPA 70E and OSHA** practice governs field work, testing and commissioning attendance
- **Arc flash and shock boundaries** established before energized work is contemplated — and we will say when work should not be energized
- **Site-specific orientation** to the host's programme, not ours, when working on your asset
- **Designed-in safety** — incident energy reduction, remote racking and maintenance mode settings offered as design options, not afterthoughts

Schedule and communication

- **Milestone reviews at 30 / 60 / 90 percent** so there are no surprises at issue
- **A named engineer** you can call, not a queue
- **Data requirements stated up front**, with the consequence of each gap
- **Early warning** when an input, a utility response or a long-lead item is going to move the date — while it can still be managed

Standards editions are named — because the acceptance criterion moves between editions, and a study that does not say which one it used cannot be checked

Exceptions are reported — a result outside the acceptance criterion appears in the deliverable, not in a conversation

The check that matters most

An independent engineer re-derives the governing result by a different route before the deliverable is issued — a hand calculation against a software answer, a second model against the first, a published curve against a computed one. It catches the errors that reviews of the report never do, because a report review checks whether the document is consistent with itself, not whether the answer is right.

Where quality programmes belong to someone else

On nuclear scope and on work performed inside a client's own quality assurance programme, we work to your procedures, with your verification, checking and approval, and the applicable programme is named in the scope of work rather than assumed. Keentel does not hold a 10 CFR 50 Appendix B programme and does not act as a commercial-grade dedicating entity.

ENGAGEMENT

Scoped honestly, priced three ways

We would rather tell you that you need less engineering than you thought than sell you a study you do not yet need. Scope conversations are free and specific.

Fixed Fee

For well-defined deliverables — a named study, a substation package to a defined milestone, a compliance evidence package. Price certainty where scope is clear.

Time & Materials

For advisory, owner's engineering and support work where scope evolves with the project and the utility's responses.

MSA / Retainer

For developers and utilities with recurring work. Standards alignment and mobilization happen once, not per project — usually the most economical route.

HOW AN ENGAGEMENT RUNS

1

Scoping call

Technology, capacity, POI voltage, utility and status. We map what you need and in what order.

2

Proposal

Defined deliverables, assumptions, data requirements, schedule and fee. No open-ended scope.

3

Data & kickoff

Single-lines, datasheets, agreements and standards. Field verification where records are thin.

4

Engineering

Milestone reviews at 30 / 60 / 90 percent so there are no surprises at issue.

5

Issue & support

Stamped deliverables, plus construction, commissioning and audit support afterward.

WHAT WE NEED FROM YOU TO SCOPE ACCURATELY

Single-line diagram or site plan

POI voltage & interconnecting utility

Queue position or project status

Equipment datasheets or shortlist

Existing study reports or LGIA

Owner / utility design standards

Milestone and COD dates

Missing some of it is not a barrier — data gathering and field verification can be the first phase of the work, and we will say so in the proposal rather than discovering it later.

The scoping call is free

Thirty minutes with an engineer, not a salesperson. You leave it knowing what the work is, roughly what it costs, and what you could defer.

The proposal is specific

Named deliverables, stated assumptions, the data we need from you, the standard we will work to, the schedule and the fee. No open-ended scope.

Change is handled in writing

When an input or a requirement moves, the consequence to scope, schedule and fee is stated before the work is done, not invoiced after it.

Confidentiality — project information is handled under NDA as a matter of course, and client names appear in our marketing only with permission

Ownership — deliverables and the native model files behind them are yours on payment, including the right to hand them to another engineer

Methodology — deliverables include the assumptions, models and results you need to use and defend the work; our internal study methodologies and tool configurations are not distributed

Reliance — third-party reliance on a deliverable is granted in writing where it is needed, rather than assumed by whoever receives a copy

START A SCOPE ›› contact@keentelengineering.com · 813-389-7871 · keentelengineering.com

FIRM FACTS

Everything a procurement form asks for

Collected on one page so a vendor registration, a prequalification package or a bid list submission does not require a phone call.

Legal entity	KEENTEL LLC	D-U-N-S number	05-439-1550
Doing business as	KEENTEL ENGINEERING	NAICS code	541330 — Engineering Services
State of Florida registry	No. 36853	Headquarters	Tampa, Florida
Additional offices	Austin TX · Sacramento CA · Baltimore MD	Engineering staff	51 electrical engineers
Experience	30+ years in power systems	Service lines	11 integrated engineering service lines
Accreditation	BBB Accredited Business — A+ rating	Professional membership	NSPE · IEEE Senior Member
Licensure	PE licensure across active markets	Main telephone	813-389-7871
Email	contact@keentelengineering.com	Web	keentelengineering.com
Scheduling	calendly.com/keentel-engineering/15min		

On licensure

Keentel maintains Professional Engineer licensure across our active markets, and work is issued under the seal of a PE licensed in the state where the project is built. If we do not hold a license in your state, we say so before contract rather than after — and where a state requires it, we associate with a locally licensed firm rather than proceed without one.

On scope boundaries

Civil, structural and geotechnical work is coordinated with the specialists who perform it rather than self-performed. Nuclear work is non-safety-related, or is performed within a licensee's or an Appendix B supplier's quality assurance programme. NERC services cover Operations & Planning standards; CIP cyber security is coordinated with your own cyber team.

For vendor registration

Legal name, D-U-N-S, NAICS and the Florida registry number above cover most supplier onboarding forms. Anything further, ask and we will send it the same day.

For prequalification

Project references with authorized contacts, key personnel resumes, and scope-specific case studies are provided on request rather than published.

For contracting

Certificates, licensure evidence for the project state, and our standard terms are issued with the proposal so nothing is discovered at execution.

Anything not listed here

Ask. Registration documents, licensure evidence for a specific state, W-9s, banking and remittance details, supplier diversity questionnaires and client-specific onboarding forms are handled by the same people who write the proposals, so a request does not disappear into a procurement inbox. Most come back the same business day.

Contracting vehicles — fixed fee, time and materials, and master service agreements with task orders; NDAs and client paper reviewed and returned promptly

Subconsultant arrangements — we work as a prime or as a subconsultant to an architect-engineer, EPC or utility engineering house, with the responsibility split stated up front

START HERE

Let's talk about your project

Tell us the technology, the size, the point of interconnection and where you are today. We will tell you candidly what engineering it needs, what it should cost, and where the schedule risk sits — whether or not you engage us.

01 The project Technology, capacity, site and current stage.	02 The interconnection POI voltage, utility or ISO, queue position.	03 The driver A deadline, a utility comment, an audit or a purchase.	04 The gap What you have already, and what is missing.
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ELEVEN SERVICE LINES

POI Interconnection Engineering Support	Substation Design Services	EHV, HV & MV Power System Studies	Transmission Line Design Services
Utility-Scale Renewable Energy Engineering	Owner's Engineer Services	NERC O&P 693 Compliance Services	Nuclear Power Plant Services
Protection & Control Engineering	MEP Engineering Services	Data Center Power Engineering	

Not sure what you need?

Send the single-line and the utility correspondence. Half the time the answer is a smaller scope than the one that was asked for.

Already have a study?

We review other firms' work, and we say plainly whether it holds up. An independent read is usually cheaper than a re-study.

Want the detail?

Eight of the eleven service lines have a standalone in-depth flyer. Tell us which apply and we will send them.

START A SCOPE ›› contact@keentelengineering.com · 813-389-7871 · keentelengineering.com

NSPE

D·U·N·S REGISTERED

IEEE SENIOR MEMBER

BBB ACCREDITED A+

TAMPA — HQ

400 N Ashley Dr, Ste 2600
 Tampa, FL 33602
 813-389-7871

AUSTIN

5900 Balcones Dr, Ste 100
 Austin, TX 78731
 512-591-0752

SACRAMENTO

1401 21st St, Ste R
 Sacramento, CA 95811
 916-913-4524

BALTIMORE

306 W Redwood St, Ste 200
 Baltimore, MD 21201
 410-225-2181

contact@keentelengineering.com · keentelengineering.com · 813-389-7871 · Florida Firm Reg. No. 36853 · NAICS 541330

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