INTEGRATED ENGINEERING SOLUTIONS FOR THE ENERGY SECTOR

Alatau EnergoProekt

Design of power grids, renewable energy facilities, substations and power transmission lines

10–500 kV voltage classes

WPP / SPP renewables

since 2013 on the market



SCALE

The company in numbers

500+ MW
of wind power plant projects

600+ MW
of solar power plant projects

50+
completed projects

10–500 kV
voltage classes

2013–2025
project delivery track record

OUR SERVICES

From concept to commissioning

A single end-to-end workflow preserves the technical logic of the project — from selecting the power evacuation scheme to on-site support during implementation.

01	02	03	04	05	06
Feasibility / scheme	**Surveys**	**Design**	**Expert review**	**Construction**	**Design supervision**

Result: technically approved design documentation, ready for further implementation and grid connection of the facility.

CORE AREAS

Grid and renewable facilities



Solar plants

Power evacuation schemes, external power supply, distribution points, grid connection support.



Wind farms

Grid solutions, substations, overhead lines and design supervision during implementation.



Power lines

35–220 kV overhead lines, routing, structural design, construction support.



Substations

Design of substations and switchgear, primary and secondary circuits.



WIND POWER PLANTS

500+ MW of wind projects

Power evacuation, substations and 35–220 kV OHL for wind farms in Kazakhstan and Kyrgyzstan.

Project	Capacity
Karaganda WPP (detailed design)	500 MW
Baidibek-1 WPP	210 MW*
Sastobe WPP	180 MW
Zhanatas WPP	100 MW
Shokpar WPP	100 MW
Ibray WPP	50 MW
WPP near Ereymentau	50 MW
Badamsha WPP	48.6 MW
Fort-Shevchenko WPP	42 MW

SOLAR POWER PLANTS

600+ MW of solar projects

Solar plants and grid connection infrastructure: power evacuation, substations and switchgear, power lines.

Key project	Capacity
“Sauran” SPP, Turkestan region (design adaptation)	300 MW
Sastobe SPP	180 MW*
Shu SPP	100 MW
Tolkyn SPP	50 MW
Shaulder SPP	50 MW
Kentau SPP	50 MW
Sholakkorgan SPP	50 MW
Sozak SPP	50 MW
Shymkent SPP	20 MW



35–500 KV OVERHEAD LINES

Reliable power transmission

- 35–500 kV voltage classes
- Hundreds of kilometres of lines
- Routing, structural design, approvals
- Design supervision and support

Project examples

OHL	Project
500 kV	1,100 MW CCGT, Kyzylorda — FS, 1,000+ km
220 kV	Sastobe — 180 MW WPP connection
110 kV	Shaulder SPP 50 MW
35 kV	Zhanatas WPP 100 MW
110 kV	Tolkyn SPP 50 MW
110 kV	Sholakkorgan SPP
35 kV	From WTGs to 110 kV SS (Ibray)



SUBSTATIONS AND SWITCHGEAR

35–220 kV and above

Design, supply and commissioning: primary and secondary circuits, relay protection, civil works, communications and telemechanics.

Project	Voltage
SS “Bortovaya”	220/35/6 kV
SS for Shulbinsk HPP	220 kV
SS “Ondiris”, Kyzylorda (detailed design)	220 kV
SS for Ibray WPP	110/35 kV
SS “Zhualy” (construction)	110 kV
SS “Mamyr”	110/10 kV
SS No. 42A “Aksai”	110/10 kV
SS “Cement Plant”	110/10 kV
SS for Tolkyn SPP 50 MW	110/10 kV
SS for Shu SPP 100 MW	110/10 kV

OUR EXPERIENCE

Digital substations

We have experience in developing digital substations: from a 330 kV substation design to approved design requirements.

–38%

substation footprint reduction

Digital 330 kV substation

- ✓ Digital substation concept implemented
- ✓ Optical current transformers
- ✓ 330 and 110 kV outdoor switchgear: ABB disconnecting circuit breakers, rigid busbars
- ✓ Standard STP 33240.20.117-18 “Digital Substations. Design Requirements”

Digital technologies applied	Voltage
SS “Tekhnologicheskaya” (Uzbekistan)	500 kV
SS “Metallurgicheskaya”	330 kV
SS “Tsentrolit”, “Ostrovets Vostochnaya”, “Auls”, “Dubrova”, “Bruzgi”, “Stroybaza”	110 kV



POWER SYSTEM DESIGN

A strong design foundation

Grid facility design starts with system logic: how the facility connects to the power system, what capacity it delivers, and which solutions pass expert review and approval.

Power evacuation schemes

Connection calculations, connection options, grid constraints

External power supply

OHL and cable routes, substations, switchgear, connection points

Feasibility and detailed design

Technical comparison of options and working documentation

Review and supervision

Approval support, design supervision, revisions

DESIGN EXPERIENCE

Selected projects

Renewables and energy infrastructure



100 MW SPP, Shu



100 MW WPP, Zhanatas



Substations



Power lines

Utility networks for large shopping malls



Moskva Metropolitan



Shymkent Plaza



Sputnik Mall



Aport Mall

PROJECT GEOGRAPHY

Kazakhstan and Kyrgyzstan

We deliver projects across Kazakhstan and in Central Asian countries.

KAZAKHSTAN

Astana · Almaty · Shymkent · Karaganda · Aktobe · Atyrau · Kostanay · Pavlodar · Ust-Kamenogorsk · Zhezkazgan · Kyzylorda · Turkestan · Taraz

KYRGYZSTAN

Bishkek · Osh

50+
completed projects

2
countries of operation

LICENSES AND QUALIFICATIONS

Legal and technical readiness

- State license for design activities — Category I
- License for construction and installation works — Category III
- Engineering-geological and engineering-hydrological surveys
- Field soil investigations, geophysical surveys and topographic works
- Full set of occupational health, safety and electrical safety instructions
- Partnership agreement for the design of nuclear power plant substations — NPP

PARTNERSHIPS

Strategic partners

Partnership agreement · NPP substations

Belenergosetproekt

Minsk, Republic of Belarus

A leading design institute for power grids and power systems. The agreement covers joint design of nuclear power plant substations.

60+	400+	ISO
years in operation	employees	9001 and ISO/IEC 27001

COMPETENCIES

- Power evacuation schemes — from NPPs to wind and solar
- Substations 35 kV and above: relay protection, APCS, telecom
- Digital substations, BIM and laser scanning

International partner

POWERCHINA

Power Construction Corporation of China, PRC

A state-owned corporation and one of the world's largest energy contractors: design, construction and operation of hydro, thermal and renewable power plants.

104th	$100+	110+
in Fortune Global 500	billion annual revenue	countries with projects

EXPERIENCE IN KAZAKHSTAN

Shelek WPP, Almaty Region	60 MW
Zhanatas WPP, Zhambyl Region, EPC	100 MW
Khromtau WPP, Aktobe Region, EPC	150 MW

WHY ALATAUENERGOPROEKT

From separate sections to one power system

The company covers all key design competencies for grid and renewable energy facilities: schemes, surveys, design, expert review, construction and supervision.

01 Systems approach
Every facility is treated as part of one power system

02 Integrated approach
Design, construction and design supervision

03 Renewables experience
Solar and wind plants with grid power evacuation

04 Documentation base
Licenses, OHS instructions, qualifications and support

Ready to deliver your energy projects

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Tel. **+7 700 692 23 41**

Email **info@alep.kz**

Web **alep.kz**

The QR code opens the company’s Instagram

