



REFERENCE LIST

1994-2023



CONTENTS

- 3 METRO
- 23 CITY ELECTRIC TRANSPORT
- 67 RAILWAYS
- 83 INDUSTRIAL, IRON AND STEEL,
MACHINE-BUILDING, RESEARCH
AND DEVELOPMENT ENTERPRISES
- 95 POWER INDUSTRY

METRO

UKRAINE

KHARKIV METRO	4
KYIV METRO	6

REPUBLIC OF KAZAKHSTAN

ALMATY METRO	8
--------------	---

REPUBLIC OF AZERBAIJAN

BAKU METRO	10
------------	----

REPUBLIC OF UZBEKISTAN

TASHKENT METRO	14
----------------	----

REPUBLIC OF KOREA

BUSAN CITY METRO	16
DAWONSY COMPANY	16

REPUBLIC OF TURKEY

IZMIR METRO	17
-------------	----

SWEDEN

STOCKHOLM METRO	18
-----------------	----




ROMANIA

BUCHAREST METRO	20
-----------------	----

















KHARKIV METRO

KHARKIV, UKRAINE

Turn-key projects:

- 2003-2009**  3 traction substations of 23 Serpnia, Botanichniy Sad, Oleksiivska metro stations.
Supply of equipment, installation works, commissioning, startup.
- 2016**  Traction substation of Peremoha metro station.
Supply of equipment, installation supervision, commissioning, startup.
- 2017**  Tunnel equipment for the dead end of Istorychniy Muzei metro station and low voltage equipment for Kharkiv Metro Administration building power supply.
Supply of equipment, installation, commissioning.



	NEX Switchgear 6 kV	1 set
	NEX Switchgear 10 kV	1 set
	DC Switchgear 825 V	26 units
	Transformer	10 units
	Rectifier	12 units
	Telecontrol equipment	1 set
	AC Switchgear 0.23...0.4 kV	5 sets
	DC Distribution Board	2 sets
	Communications Based Train Control Switchgear	2 sets
	Equipment for tunnels and depots:	
	Line Disconnector Cabinet	15 units
	Third Rail Power Supply Cabinet	1 unit
	Cables Connection Cabinet	40 units
	Switchover Cabinet	20 units
	Switchgear (Distribution unit)	1 unit
	Fans Automatic Control Cabinet	25 units
	Disconnectors Control Cabinet	2 units
	Shutters Control Cabinet	22 units
	AC Board	2 units
	Automatic Transfer Switch Cabinet	1 unit
	Battery chargers	3 units
	Battery	1 set
	Reactive power compensation installation	2 units



KHARKIV METRO,
UKRAINE

KYIV METRO

KYIV, UKRAINE

2004-2013 Turn-key projects: 11 traction substations of Syrets, Boryspilska, Chervony Khutir, Vyrlytsia, Demiivska, Holosiivska, Vasylkivska, Vystavkovy Tsentr, Ipodrom, Teremky metro stations, Depot Kharkivske.

Supply of equipment, installation works, commissioning, startup.









2019 Technical modernization of 11 combined traction step-down substations (replacement of 3 rectifiers, 4 transformers, supply of tunnel equipment, 6 modernization packages 825 V, supply of main ventilation fans automatic control system).

Software development for operator's automated workstation of Kharkivske depot and workstation of shift signal electrical engineer on the basis of Citect SCADA system.

2021 Repair of microprocessor centralization of signalling, centralization and blocking system hardware for 6 stations, major repair of microprocessor centralization of signalling, centralization and blocking equipment of technical station of Kharkivske depot with replacement of controllers.

Technical modernization of rectified current cubicles 825 V with replacement of high-speed circuit breakers at electrical substations of Sviatoshynsko-Brovarska line and Obolonsko-Teremkivska line.

Design, supply of equipment, installation supervision, commissioning, startup.




	NEX Switchgear 10 kV	6	sets
	DC Switchgear 825 V	132	units
	Transformer Resibloc	59	units
	Rectifier	59	units
	AC Switchgear 0.23...0.4 kV	11	sets
	DC Distribution Board	5	sets
	Communications Based Train Control Switchgear	4	sets
	Equipment for tunnels and depots:		
	Line Disconnecter Cabinet	116	units
	Third Rail Power Supply Cabinet	39	units
	Cables Connection Cabinet	24	units
	Switchover Cabinet	27	units
Switchgear (Distribution unit)	7	units	
	Fans Automatic Control Cabinet	44	units
	Well Pump Automatic Control System	5	units
	Battery chargers	30	units
	Battery	5	sets
	Telecontrol equipment	8	sets
	Software for microprocessor centralization of signalling, centralization and blocking system	1	set
	Modernization package 825 V	54	units



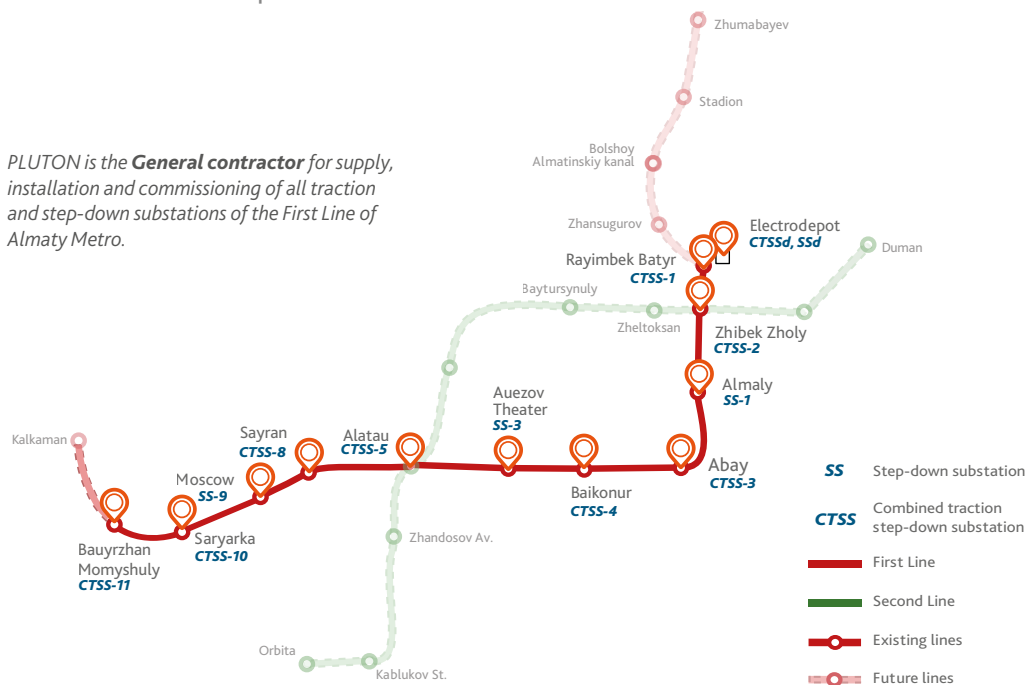
ALMATY METRO







ALMATY, REPUBLIC OF KAZAKHSTAN

Turn-key projects:

- 2008**  6 combined traction step-down substations and 3 step-down substations of Rayimbek Batyr, Zhibek Zholy, Almaty, Abay, Alatau, Baikonur, Auezov Theater metro stations, Electrodepot.
Supply of equipment, installation works, commissioning, startup.
- 2012 - 2014**  Combined traction step-down substation of Sayran station and step-down substation of Moscow station.
Supply of equipment, installation works, commissioning, startup.
- 2021**  2 combined traction step-down substation for Bauyrzhan Momysuly and Saryarka stations.
Supply of equipment, installation supervision, commissioning, startup.

PLUTON is the **General contractor** for supply, installation and commissioning of all traction and step-down substations of the First Line of Almaty Metro.



	Switchgear 10 kV	9 sets
	NEX Switchgear 10 kV	4 sets
	DC Switchgear 825 V	103 units
	Transformer	48 units
	Transformer Resibloc	73 units
	Rectifier	26 units
	AC Switchgear 0.23...0.4 kV	25 sets
	DC Distribution Board	12 sets
	Signaling and communication automatics switchgear	12 sets
	Equipment for tunnels and depots:	
	Line Disconnecter Cabinet	71 units
	Cables Connection Cabinet	136 units
	Battery charger	31 units
	Uninterruptible Power Supply Static System	4 sets
	Uninterrupted power supply system	2 sets
	Battery	19 sets
	Reactive power compensation installation	8 units
	Telecontrol equipment	13 sets



ALMATY METRO,
REPUBLIC OF KAZAKHSTAN

BAKU METRO

BAKU, REPUBLIC OF AZERBAIJAN

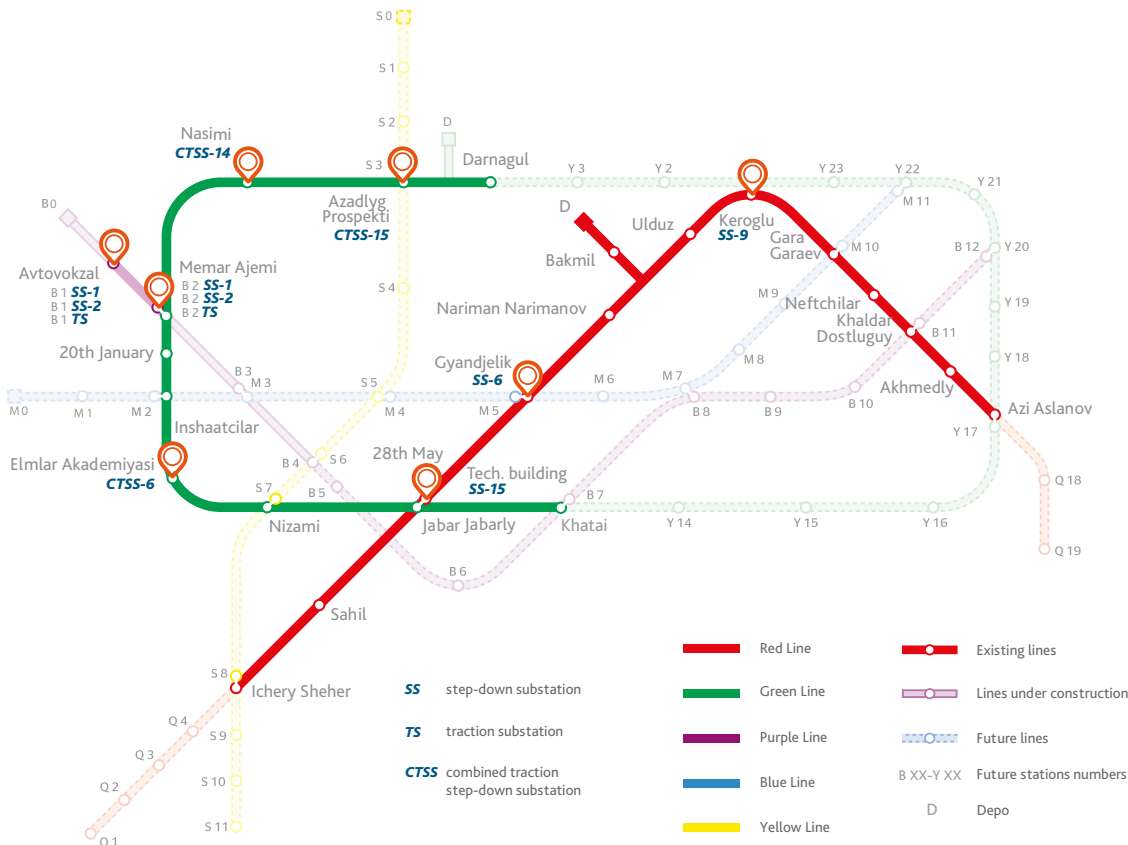
Turn-key projects:

2008-2017



7 step-down substations, 2 traction substations and 3 combined traction step-down substations of Nasimi, Azadlig Prospekti, Keroglu, Avtovokzal, Memar Ajemi, Elmlar Akademiyasi, Gyandjelik metro stations and Technological building of Baku metro.

Design, supply of equipment, installation works, commissioning, startup.



Gas-insulated medium voltage switchgear 6 sets
 Switchgear 10 kV 2 sets
 NEX Switchgear 10 kV 4 sets
 DC Switchgear 825 V 72 units



Transformer 30 units
 Transformer Resibloc 36 units
 Rectifier 17 units



AC Switchgear 0.23...0.4 kV 21 sets
 DC Distribution Board 9 sets
 Communications Based Train Control Switchgear 6 sets
 Signaling and communication automatics switchgear 2 sets



Equipment for tunnels and depots:
 Line Disconnecter Cabinet 52 units
 Cables Connection Cabinet 50 units



Climate support system (ventilation, conditioning) 6 sets



Uninterrupted power supply system 15 kVA 2 units
 Uninterrupted power supply system 50 kVA 1 unit
 Battery chargers 23 units
 Battery 7 sets
 Reactive power compensation installation 16 units



Telecontrol equipment 8 sets



BAKU METRO,
REPUBLIC OF AZERBAIJAN

BAKU METRO

BAKU, REPUBLIC OF AZERBAIJAN

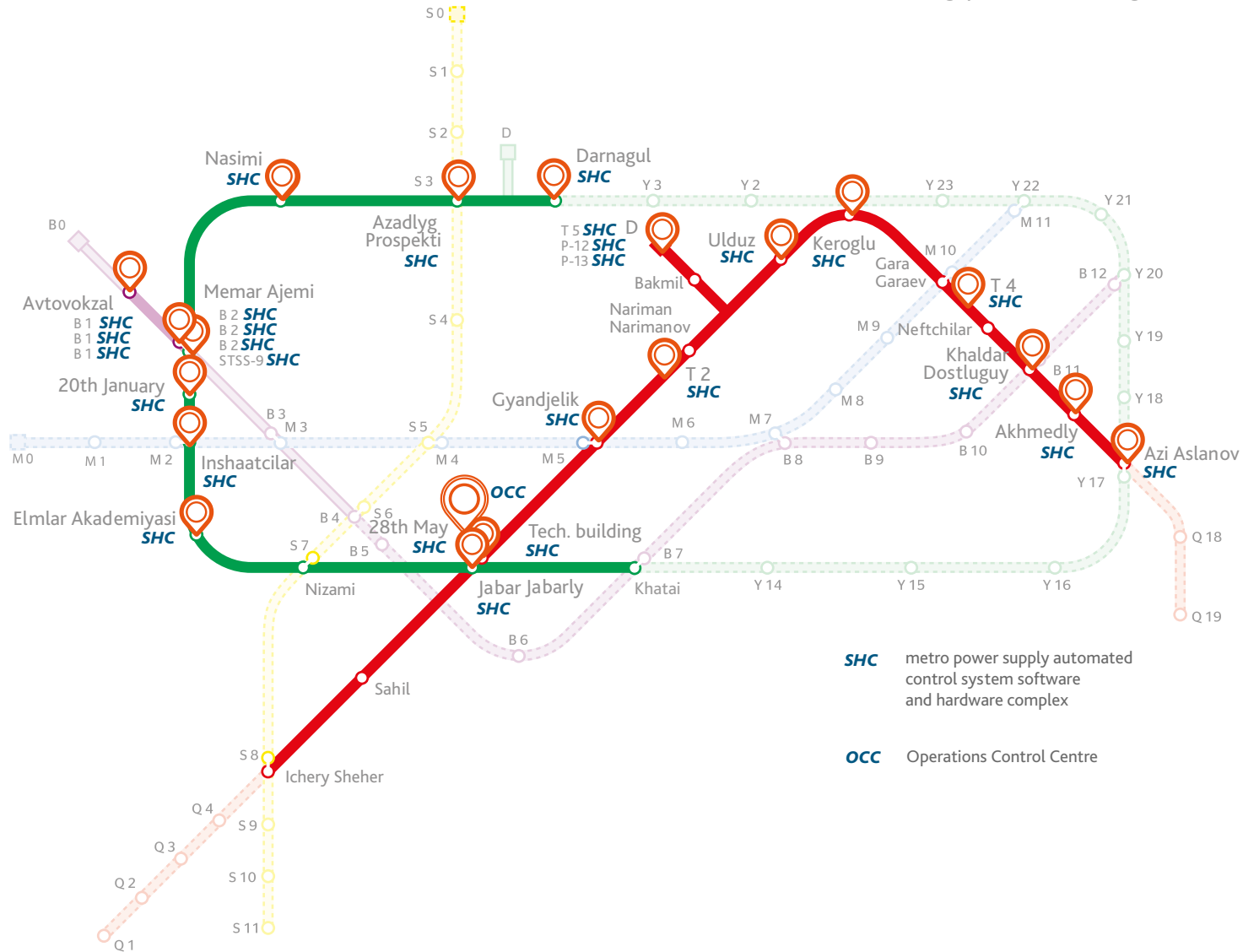
2013-2017



Turn-key project for automation of power supply operations control system of Baku Metro.



Design, supply of equipment, SCADA software for Operations Control Center and remote stations (27 sites).
Installation and commissioning, personnel training.





OPERATIONS CONTROL CENTER,
BAKU METRO,
REPUBLIC OF AZERBAIJAN


TASHKENT METRO


TASHKENT, REPUBLIC OF UZBEKISTAN


2001 Supply of equipment for traction substations:


	Rectifier	18 units
---	-----------	----------


2019 Supply of equipment for CTSS-41 Turkiston:

	DC Switchgear 825 V	13 units
---	---------------------	----------

	DC Distribution Board	2 sets
---	-----------------------	--------

	Transformer Resibloc	3 units
---	----------------------	---------

	Rectifier	3 units
---	-----------	---------

	Equipment for tunnels and depots:	
---	-----------------------------------	--

	Line Disconnecter Cabinet	11 units
--	---------------------------	----------

	Cables Connection Cabinet	11 units
---	---------------------------	----------


	Power distribution box	175 units
---	------------------------	-----------


	Battery chargers	4 units
---	------------------	---------


2022 - 2023


Current project: Construction of circle elevated metro line in Tashkent. Stage II (Kuyluk-Kypchak-Yangi hayot).


Supply of 5 traction substations
Installation supervision, commissioning.

	DC Switchgear 825 V	45 units
---	---------------------	----------

	Rectifier	15 units
---	-----------	----------

	Equipment for tunnels and depots:	
---	-----------------------------------	--

	Line Disconnecter Cabinet	36 units
---	---------------------------	----------

	Cables Connection Cabinet	34 units
---	---------------------------	----------



BUSAN CITY METRO

BUSAN, REPUBLIC OF KOREA

2017 Supply of equipment for traction substation:



DC Switchgear 1500 V

2 units

DAWONSYS COMPANY

ANSAN, REPUBLIC OF KOREA

2018 Supply of equipment for Dawonsys Company own requirements:



DC Switchgear 1500 V

4 units



IZMIR METRO

IZMIR, REPUBLIC OF TURKEY

2019 Supply of equipment for Halkapınar Depo substation.
Installation and adjustment supervision.



DC Switchgear 750 V

6 units



Rectifier

1 unit



STOCKHOLM METRO

STOCKHOLM, SWEDEN

- 2021** Supply of equipment for Slussen, Albano and Kungsklippan substations.
- 2022** Current project for the supply equipment for Fatburen 1 and Fatburen 2 substations.
- 2023** Current project for the supply of equipment to Hälsingehöjden substation.

Supply of equipment, commissioning.



Rectifier (7 kA)

5 units



DC Switchgear 750 V

36 units

High-speed circuit-breaker test device

5 units

Service equipment

6 sets





STOCKHOLM METRO,
SWEDEN

BUCHAREST METRO

BUCHAREST, ROMANIA

2017 Implementation of project on outdated rectifier replacement for a new one for Piata Unirii 1 traction substation.



Rectifier

1 unit



2022

Supply of equipment for Tudor Arghezi traction substation.
Installation supervision, commissioning.



Rectifier

2 units



DC Switchgear 825 V

8 units

Contact network overvoltage

protection unit OVLD 2 units

Protection unit DEPEC 1 unit



Disconnectors control cabinets

2 units

Disconnectors

14 units

Service equipment

1 unit





CITY ELECTRIC TRANSPORT

UKRAINE

KYIV CITY ELECTRIC TRANSPORT	24
LVIV CITY ELECTRIC TRANSPORT	28
VINNYTSIA TRANSPORT COMPANY	32
KRAMATORSK CITY ELECTRIC TRANSPORT	34
ODESA CITY ELECTRIC TRANSPORT	36
ZAPORIZHZHIA CITY ELECTRIC TRANSPORT	36
KREMENCHUK CITY ELECTRIC TRANSPORT	37
SUMY CITY ELECTRIC TRANSPORT	37
IVANO-FRANKIVSK CITY ELECTRIC TRANSPORT	38
MYKOLAIV CITY ELECTRIC TRANSPORT	40
KRYVYI RIH FAST TRAM	41
KRYVYI RIH TROLLEYBUS	41
DNIPRO CITY ELECTRIC TRANSPORT	42
AUTONOMOUS REPUBLIC OF CRIMEA	
CRIMEAN TROLLEYBUS	44
KERCH CITY ELECTRIC TRANSPORT	44

REPUBLIC OF LATVIA

RIGA CITY ELECTRIC TRANSPORT	46
------------------------------	----

REPUBLIC OF MOLDOVA

BELTSY CITY ELECTRIC TRANSPORT	46
--------------------------------	----

SWITZERLAND

CITY ELECTRIC TRANSPORT OF SWITZERLAND	47
--	----

GERMANY

CITY ELECTRIC TRANSPORT OF GERMANY	47
------------------------------------	----

SWEDEN

STOCKHOLM CITY ELECTRIC TRANSPORT	48
-----------------------------------	----

REPUBLIC OF TAJIKISTAN

DUSHANBE CITY ELECTRIC TRANSPORT	52
----------------------------------	----

REPUBLIC OF POLAND

POZNAN CITY ELECTRIC TRANSPORT	53
LODZ CITY ELECTRIC TRANSPORT	54
ZGIERZ CITY ELECTRIC TRANSPORT	58
KONSTANTYNÓW ŁODZKI CITY ELECTRIC TRANSPORT	58

ROMANIA


ORADEA CITY ELECTRIC TRANSPORT	60
MEDIAS CITY ELECTRIC TRANSPORT	62
VASLUI CITY ELECTRIC TRANSPORT	62

REPUBLIC OF MADAGASCAR


ANTANANARIVO CITY ELECTRIC TRANSPORT	64
--------------------------------------	----


KYIV CITY ELECTRIC TRANSPORT










KYIV, UKRAINE

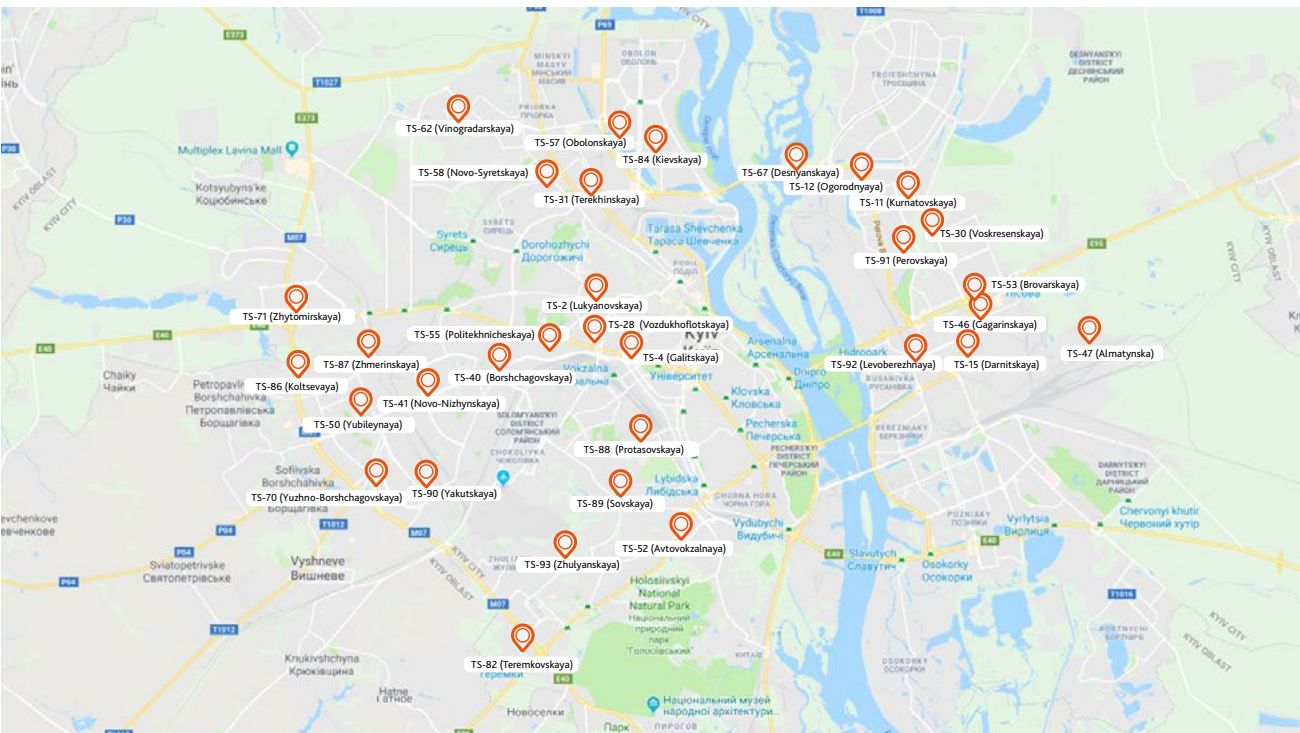
1998 - 2013  Supply of equipment for 31 Kyiv city electric transport traction substations (Municipal Enterprise Kyivpastrans).

Supply of equipment, installation works, commissioning, startup.

2021 - 2022  Supply of Lybidska fixed traction substation.
Supply of equipment, installation supervision, commissioning.

2022 - 2023  Reconstruction of Lukyanivska traction substation
Supply of equipment, installation supervision, commissioning, startup.

	NEX Switchgear 10 kV	2	set
	DC Switchgear 600 V	119	units
	Distribution transformer	12	units
	Transformer Resibloc Rectifier	4	units
	Auxiliaries cabinet	118	units
	Operating current cabinet	19	units
	Input device	22	units
	Telecontrol equipment	18	units
	Telecontrol equipment	3	sets








БОГДАН
ХМЕЛЬНИЦЬКИЙ
1888






KYIV, UKRAINE

KYIV CITY ELECTRIC TRANSPORT

KYIV, UKRAINE

- 2020**  **Turn-key project:**
Supply of temporary single-unit modular traction substation Lybidska.
Supply of equipment, installation works, commissioning, startup.
- 2021 - 2022**  Supply of two-unit modular traction substation No. 47 (Almatynska).
Supply of equipment, installation supervision, commissioning, startup.
- 2023**  Supply of two-unit modular traction substation No. 51 (Pushcha-Vodytsia).
Design, supply of equipment, installation supervision, commissioning, startup.



	Module	3 units
	NEX Switchgear 10 kV DC Switchgear 660 V with AFB® arc-free circuit breaker	3 sets 17 units
	DC Switchgear 660 V (Rectifier disconnecter RU-RV, Positive busbar RU-PSH, Negative busbar RU-OSH)	7 units
	Converter Transformer	4 units
	Rectifier	4 units
	Auxiliaries equipment	3 sets
	Telecontrol equipment	3 sets



**SINGLE-UNIT MODULAR TRACTION
SUBSTATION
KYIV, UKRAINE**

LVIV CITY ELECTRIC TRANSPORT

LVIV, UKRAINE

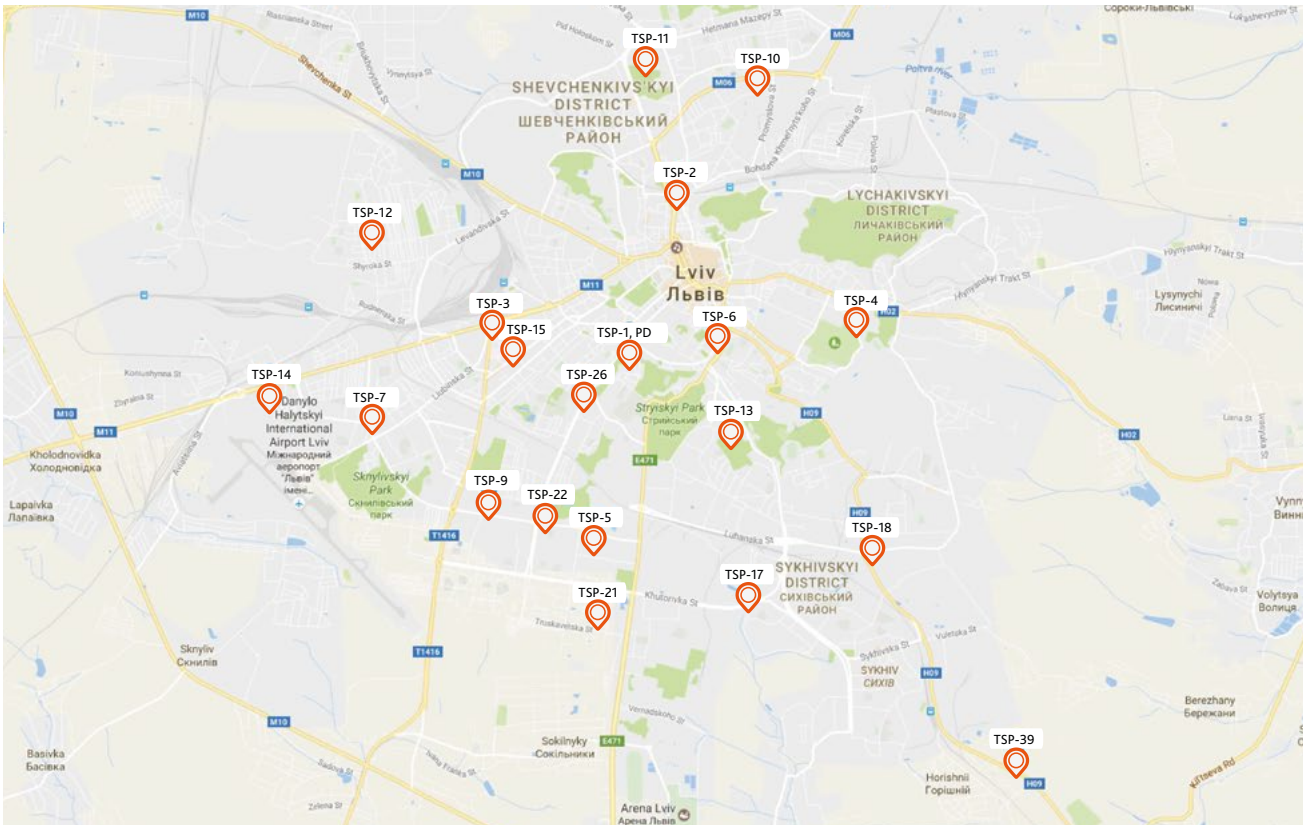
2011-2016



Turn-key projects:
 Modernization of Control Center and 19 Traction Converter Substations for Power Supply of Lviv City Electric Transport Network.

Design, dismantling, installation of Automated system for electric power consumption accounting (ASEPCA), Security alarm system (SAS) and Fire alarm system (FAS), supply of equipment, civil works, installation works, commissioning, training.

The Project was financed with the support of the European Bank for Reconstruction and Development (EBRD).



Switchgear 6 kV (complete and partial modernization of the existing switchgear 6 kV) 85 units
 Equipment for retrofit of existing Switchgear 6 kV 79 sets
 Equipment for retrofit of existing DC Switchgear 600 V 130 sets



DC Switchgear 600 V (complete replacement of existing switchgear 600 V) 40 units



Equipment 0.4 kV
 (newly installed equipment at substations):
 Automatic Load Transfer system for rectifier group 53 units
 Operating current cabinet 19 units



Security alarm system and fire alarm system equipment in substations 20 sets



SCADA system for substations:
 Telecontrol cabinet (newly installed equipment) 9 units
 Telecontrol cabinet (complete modernization of existing equipment) 10 units
 Automated system for electric power consumption accounting cabinet (newly installed equipment) 19 units



Operations Control Center
 (complete modernization of existing equipment):
 Power dispatcher, remote control engineer and remote control operator workstations 3 units
 Telecontrol cabinet 1 unit
 Automated system for electric power consumption accounting cabinet 1 unit
 Security alarm system and fire alarm system equipment 1 set



LVIV, UKRAINE

LVIV CITY ELECTRIC TRANSPORT

LVIV, UKRAINE

2014 -
2016



Turn-key project:
Supply of three-unit modular traction substation for TS-17.

Installation works, commissioning, startup.

The Project was financed with the support of the European Bank for Reconstruction and Development (EBRD).



Module 3 units



NEX Switchgear 6 kV
DC Switchgear 600 V 1 set
12 units



Transformer Resibloc
Rectifier 3 units
3 units



Auxiliaries equipment 1 set



Telecontrol equipment 1 set








**THREE-UNIT MODULAR TRACTION
SUBSTATION
LVIV, UKRAINE**

VINNYTSIA TRANSPORT COMPANY

VINNYTSIA, UKRAINE

2014 Turn-key project:
Supply of two-unit modular traction substation for Municipal Enterprise Vinnytsia Transport Company.

Installation works, commissioning, startup.

	Module	2 units
	NEX Switchgear 10 kV	1 set
	DC Switchgear 600 V	8 units
	Converter transformer	2 units
	Rectifier	2 units
	Auxiliaries equipment	1 set
	Telecontrol equipment	1 set




2019

Retrofit of 2 DC cubicles 600 V with replacement of high-speed circuit breaker.

Supply of equipment.

Reconstruction of traction substation №19.

Supply of equipment, installation and commissioning supervision.

	DC Switchgear 600 V	5 units
	Rectifier	1 unit
	Auxiliaries cabinet	1 unit
	Operating current cabinet	1 unit
	Cables combined protection cabinet	1 unit



VINNYTSIA, UKRAINE

KRAMATORSK CITY ELECTRIC TRANSPORT






KRAMATORSK, UKRAINE

2018 Turn-key project:
Supply of three-unit modular traction substation for Municipal Enterprise Kramatorsk Tram and Trolleybus Authority.

Development of the project design and estimate documentation, installation works, commissioning, startup.

The Project was financed with the support of the European Bank for Reconstruction and Development (EBRD).



	Module	3 units
	NEX MV Switchgear 6 kV DC Switchgear 600 V	1 set 12 units
	Converter transformer Rectifier	3 units 3 units
	Auxiliaries equipment	1 set
	Telecontrol equipment and SCADA system	1 set



**THREE-UNIT MODULAR TRACTION
SUBSTATION
KRAMATORSK, UKRAINE**

ODESA CITY ELECTRIC TRANSPORT

ODESA, UKRAINE

2006 2 city electric transport traction substations.

Supply of equipment, installation works, commissioning.



DC Switchgear 600 V

9 units



Rectifier

7 units



Auxiliaries cabinet

1 unit

Operating current cabinet

1 unit

Input device

1 unit

ZAPORIZHZHIA CITY ELECTRIC TRANSPORT

ZAPORIZHZHIA, UKRAINE

2017-2018 Equipment for Zaporizhzhia City Electric Transport Municipal Enterprise Zaporizhelectrotrans.

Supply of equipment, installation works, commissioning.



Traction network monitoring and protection system SMTN-3

32 units

2021 Equipment for Zaporizhzhia City Electric Transport Municipal Enterprise Zaporizhelectrotrans.

Supply of equipment, installation supervision, commissioning.



Rectifier

1 unit



KREMENCHUK CITY ELECTRIC TRANSPORT

KREMENCHUK, UKRAINE

2017-2021 Modernization of traction substation for Municipal Enterprise Kremenchuk Trolleybus Department

Supply of equipment, installation works, commissioning.



MV Switchgear 10 kV modernization package 3 sets

DC Switchgear 600 V modernization package 2 sets


2022 Modernization of DC Switchgear 600 V. Supply of equipment, installation works, commissioning.



DC Switchgear 600 V modernization package 7 sets

SUMY CITY ELECTRIC TRANSPORT

SUMY, UKRAINE

2022  Supply of single-unit modular traction substation for Municipal Enterprise Electroavtotrans. Supply of equipment, installation supervision, commissioning, startup.



IVANO-FRANKIVSK CITY ELECTRIC TRANSPORT






IVANO-FRANKIVSK, UKRAINE

2019 - 2023 - Building of the new traction substation (TSS-15) with a capacity of 2x1600 kVA and Mazepy street – Pivdenny Blvd. – Pivnichnyy Blvd. trolleybus line (Communal Enterprise “Electroavtotrans”).

Design, building of modular traction substation, trolleybus contact network, public transport stops and lighting arrangement.

The Project was financed with the support of the European Bank for Reconstruction and Development (EBRD).



	Module	2	units
	NEX Switchgear 10 kV DC Switchgear 600 V with AFB® arc-free circuit breaker	2	sets 7 units
	Converter Transformer Rectifier	2	units 2 units
	Auxiliaries equipment	2	sets
	Telecontrol equipment	1	set



TWO-UNIT MODULAR TRACTION SUBSTATION
IVANO-FRANKIVSK, UKRAINE

MYKOLAIV CITY ELECTRIC TRANSPORT

MYKOLAIV, UKRAINE

2019 Supply of two-unit modular traction substation for Municipal Enterprise Mykolaivelectrotrans within the framework of construction of new trolley line for Namyv microdistrict.

Supply of equipment, installation and commissioning supervision.



Module

2 units



NEX Switchgear 6 kV
DC Switchgear 600 V

1 set
7 units



Converter Transformer
Rectifier

2 units
2 units



Auxiliaries equipment

2 sets



Telecontrol equipment

1 set

KRYVYI RIH FAST TRAM

KRYVYI RIH, UKRAINE

1999 PLUTON is a General supplier of equipment for fast tram line (7 substations) in Kryvyi Rih.



Traction substations

7 units

KRYVYI RIH TROLLEYBUS

KRYVYI RIH, UKRAINE

2019 - Technical modernization of power
2020 distribution center 6 kV and DC cubicles of traction substation №4 (Communal Enterprise "City Trolleybus").

Development of design and estimate documentation package, supply of equipment, installation and commissioning supervision.



MV Switchgear 6 kV modernization package

1 set



DC Switchgear 600 V with AFB® arc-free circuit breaker

10 units



Telecontrol equipment

3 units



DNIPRO CITY ELECTRIC TRANSPORT

DNIPRO, UKRAINE

2018 Equipment for Municipal Enterprise Dnipro Electrotransport traction substation TS-26.

Supply of equipment, installation supervision, commissioning.



DC Switchgear 600 V

2 units



Transformer
Rectifier

1 unit
1 unit



2019 Modernization of TS-15 traction substation.

Supply of equipment, installation and commissioning supervision.



DC Switchgear 600 V

2 units



Rectifier

2 units

2020 Modernization of TS-17 traction substation.

Design, supply of equipment, installation and commissioning supervision.



DC Switchgear 600 V

10 units



Rectifier

2 units

2019 - 2021 Modernization of TS-19 traction substation.

Design, supply of equipment, installation supervision, commissioning.



DC Switchgear 600 V

8 units



Rectifier

2 units




DNIPRO, UKRAINE


CRIMEAN TROLLEYBUS


AUTONOMOUS REPUBLIC OF CRIMEA



Turn-key projects:

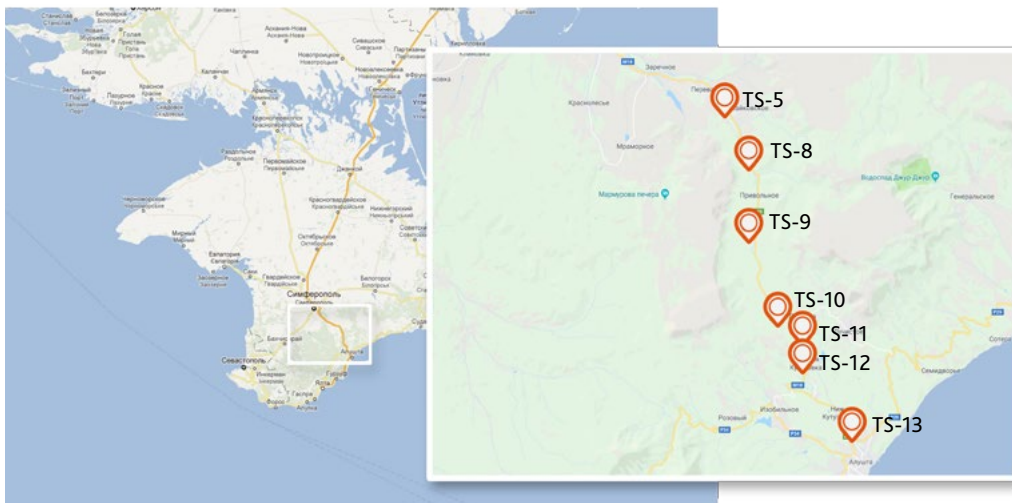
Reconstruction of mountain trolleybus line Simferopol-Alushta-Yalta substations.

2010  4 traction substations TS-9, TS-10, TS-11, TS-12.
Supply of equipment, installation works, commissioning, startup.

2011  3 traction substations TS-5, TS-8, TS-13.
Supply of equipment, installation works, commissioning, startup.

 DC Switchgear 600 V 37 units

 Auxiliaries cabinet 7 units
 Operating current cabinet 7 units



KERCH CITY ELECTRIC TRANSPORT



AUTONOMOUS REPUBLIC OF CRIMEA



2007, 2010





Turn-key projects:

2 traction substations for Kerch city electric transport

Supply of equipment, installation works, commissioning, startup.

 Chamber KSO-825 5 units
 DC Switchgear 600 V 12 units

 Transformer TSZP 3 units
 Rectifier 3 units

 Auxiliaries cabinet 2 units
 Operating current cabinet 2 units
 Input device 2 units
 Cables combined protection cabinet 1 unit





CRIMEAN TROLLEYBUS

RIGA CITY ELECTRIC TRANSPORT

RIGA, REPUBLIC OF LATVIA

2002 Supply of equipment for traction substations:



Rectifier
Transformer

33 units

8 units

BELTSY CITY ELECTRIC TRANSPORT

BELTSY, REPUBLIC OF MOLDOVA

2014 Turn-key projects:

Modernization of 4 traction substations for Beltsy city electric transport power supply network.

Dismantling, installation works, commissioning, startup.

The Project was financed with the support of the European Bank for Reconstruction and Development (EBRD).



Equipment for retrofit of existing
Switchgears 600 V

33 sets



Rectifier

12 units



CITY ELECTRIC TRANSPORT OF SWITZERLAND

2010-2017 Supply of MWA measuring modules and KUB cables insulation monitoring modules as a part of SGBA control and protection system (produces by ELPRO) for DC switchgears of city electric transport enterprises traction substations in Winterthur and Bern.

Module MWA	34	units
Module KUB	8	units



CITY ELECTRIC TRANSPORT OF GERMANY


2010-2017 Supply of MWA measuring modules and KUB cables insulation monitoring modules as a part of SGBA control and protection system (produced by ELPRO) for DC switchgears of traction substations of Germany city electric transport enterprises.

Module MWA	297	units
Module KUB	42	units




STOCKHOLM CITY ELECTRIC TRANSPORT


STOCKHOLM, SWEDEN

2013-2015  5 traction substations: Högberga, Baggeby, Käppala, Ropsten, AGA (Lidingöbanan light-rail line)

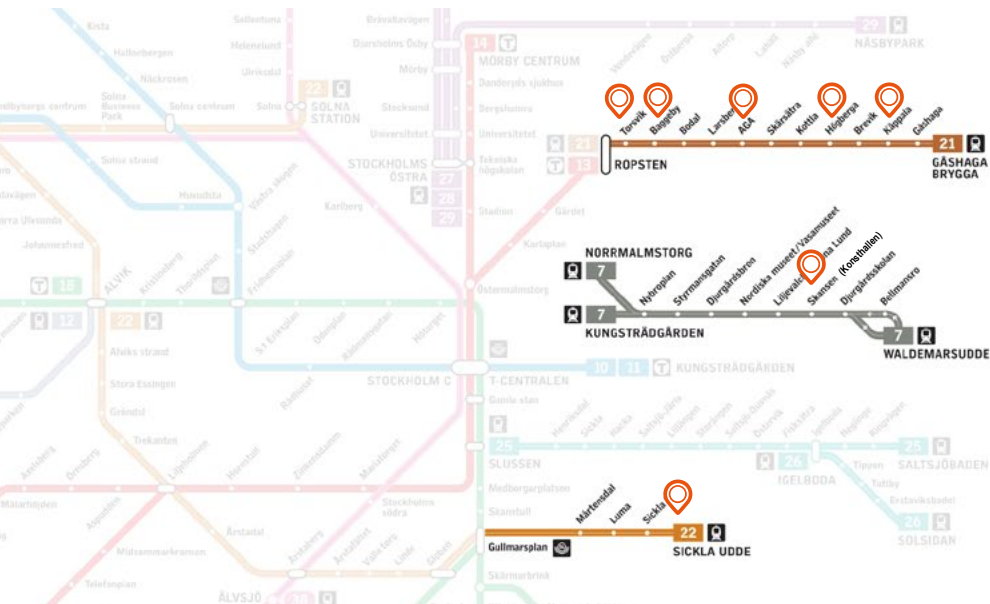
Supply of equipment, installation supervision and commissioning.

2018  Sikla traction substation (Tvärbanan light-rail line)

Supply of equipment, supervision, commissioning

2019  Konsthallen traction substation (Spårväg Cityn tram line)

Supply of equipment, supervision, commissioning



Rectifier 7 units



DC Switchgear 750 V 30 units

DC Switchgear 750 V with AFB® arc-free circuit breaker 3 units

High-speed circuit-breaker test device 6 units







STOCKHOLM CITY ELECTRIC TRANSPORT

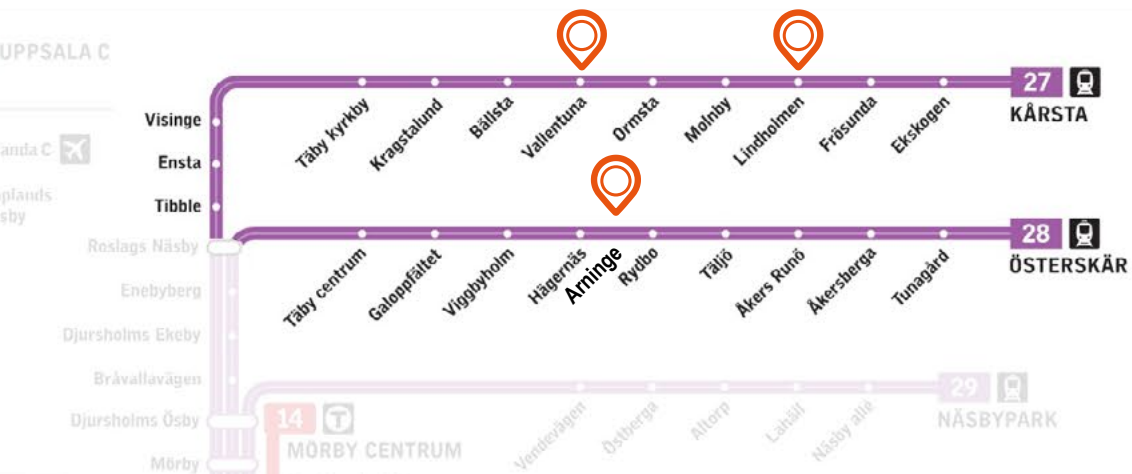
STOCKHOLM, SWEDEN

2019-
2022

 3 traction substations: Arninge, Vallentuna, Lindholmen (Roslagsbanan commuter railway system).

Supply of equipment, installation supervision and commissioning.

	Thyristor rectifier	3	units
	DC Switchgear 1500 V	18	units
	High-speed circuit-breaker test device	3	units
	Service equipment	3	sets





STOCKHOLM,
SWEDEN

DUSHANBE CITY ELECTRIC TRANSPORT

DUSHANBE, REPUBLIC OF TAJIKISTAN

2017-2018



Turn-key reconstruction of 3 trolleybus electric traction substations (TS-2, TS-4, TS-6) and supply of traction equipment for TS-3, TS-5, TS-7, TS-8, TS-9, TS-10 for State Municipal Unitary Enterprise Trolleybus, including power supply remote control system SCADA.

Dismantling, installation works, commissioning, startup, personnel training.

The Project was financed with the support of the European Bank for Reconstruction and Development (EBRD).



MV Switchgear 6 kV, 10 kV	3 sets
DC Switchgear 600 V	57 units



Equipment for retrofit of existing DC Switchgears 600 V	26 sets
---	---------



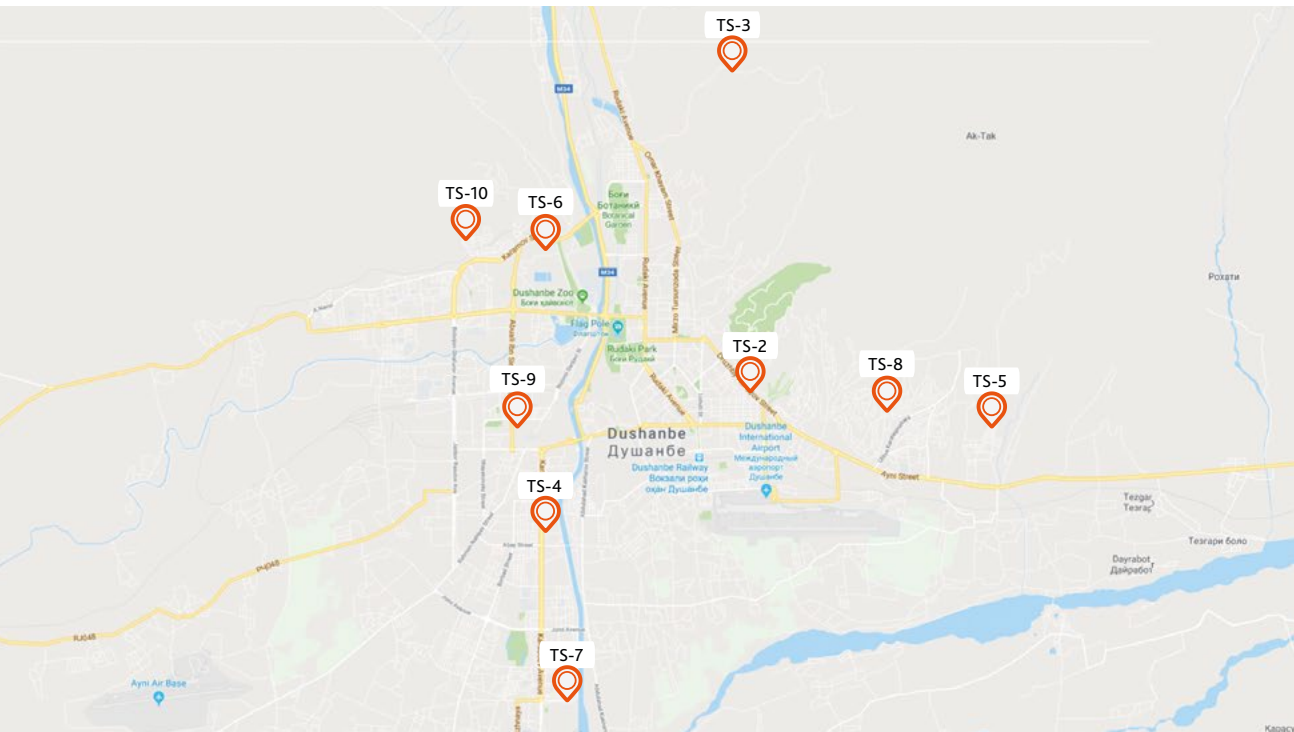
Converter Transformer	14 units
Rectifier	14 units



Equipment for substation power supply (auxiliary transformers, auxiliary cabinets, control current cabinets, UPS)	13 units
Cables combined protection cabinet	3 units



Telecontrol equipment	5 sets
SCADA system	1 set



POZNAN CITY ELECTRIC TRANSPORT

POZNAN, REPUBLIC OF POLAND

2019 Trial operation of DC switchgear at Bóznicza substation:
Supply of equipment, installation works, commissioning, startup.






DC Switchgear 660 V






1 unit



LODZ CITY ELECTRIC TRANSPORT

LODZ, REPUBLIC OF POLAND

- 2019**  **Turn-key project:** Telefoniczna traction substation.
Design, civil works, power cables laying, supply of equipment, installation works, commissioning, startup.
- 2022-2023**  **Turn-key project:** Current Chocianowice depot reconstruction project.
Re-design, supply of equipment, installation works.
- 2022-2023**  **Current turnkey project:** Reconstruction of Wacława and Zapolska traction substations.
Re-design, supply of equipment, installation works, commissioning, startup.

	MV Switchgear 17,5 kV	3 sets
	DC Switchgear 660 V	41 units
	Rectifier disconnecter DC Switchgear RU-660RV	11 units
	Positive busbar DC Switchgear RU-660PSH	3 units
	Transformer	14 units
	Rectifier	14 units
	Auxiliaries equipment	5 units
	AC Switchgear 0.23...0.4 kV	1 set
	Disconnectors control cabinets	1 unit
	Telecontrol equipment and SCADA software	3 sets
	Equipment for retrofit of existing DC Switchgears 600 V	12 units
	Equipment for retrofit of Auxiliaries	1 unit
	MV cubicles upgrade package	2 units
	MV relay protection and automation	3 units
	MV relay protection and automation upgrade package	4 units
	Current transformers	3 units
	Transformers upgrade package	3 units



LODZ,
REPUBLIC OF POLAND

LODZ CITY ELECTRIC TRANSPORT

LODZ, REPUBLIC OF POLAND

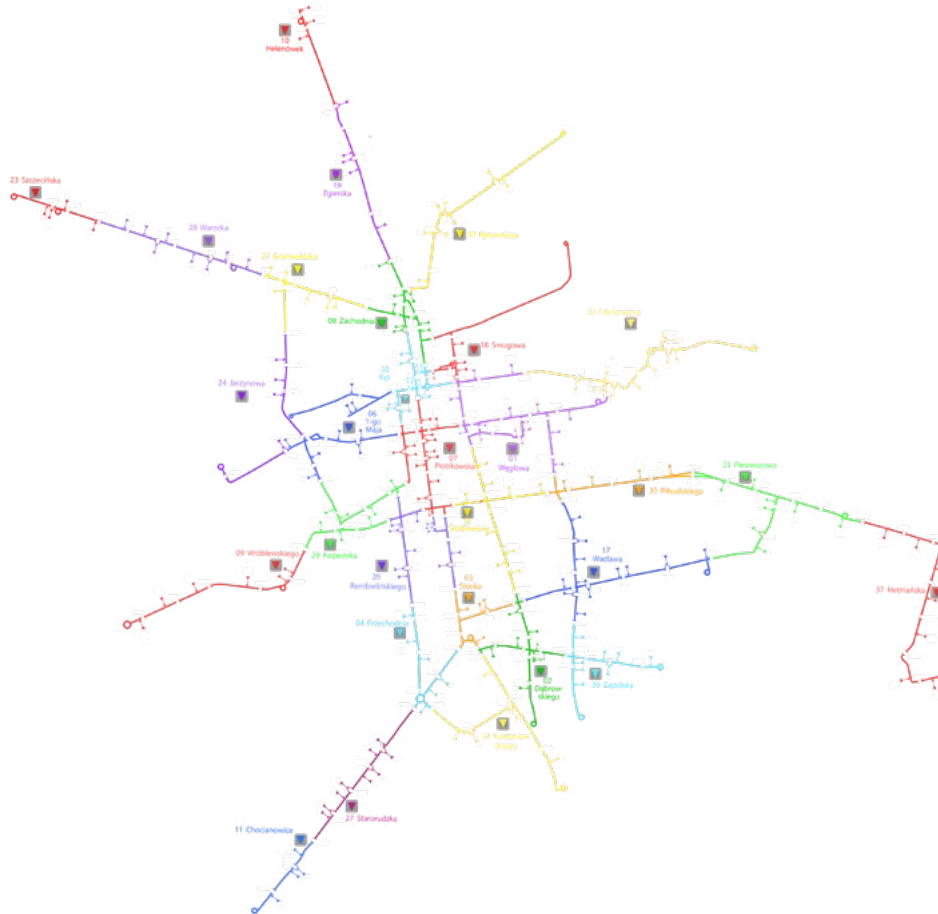
2022



Turnkey project: modernized automated operations control system for Lodz central operations control center and connection of 32 tram substations.



- reconstruction project;
- development of HMI design;
- equipment supply: power cabinet, server cabinet, 4x3 video wall, workstations;
- development of SCADA software;
- installation and commissioning.










ZGIERZ CITY ELECTRIC TRANSPORT

ZGIERZ, REPUBLIC OF POLAND

2021 Turn-key project:
Supply of Łąkowa two-unit modular traction substation.

Design, supply of equipment, installation, commissioning.

	Module	2 units
	MV Switchgear 17,5 kV	1 set
	DC Switchgear 660 V with AFB® arc-free circuit breaker	7 units
	Rectifier disconnect DC Switchgear RU-660RV	2 units
	Positive busbar DC Switchgear RU-660PSH	1 unit
	Traction transformer	2 units
	Rectifier	2 units
	Auxiliaries equipment	3 unit
	Auxiliaries transformer	1 unit
	Telecontrol equipment and SCADA software	1 set






KONSTANTYNÓW ŁODZKI CITY ELECTRIC TRANSPORT

KONSTANTYNÓW ŁODZKI, REPUBLIC OF POLAND

2023

Current turnkey project:
Supply of Przygraniczna two-unit modular traction substation.

Design, supply of equipment, installation supervision, commissioning.







	Module	2 units
	MV Switchgear 17,5 kV	1 set
	DC Switchgear 660 V with AFB® arc-free circuit breaker	9 units
	Rectifier disconnect DC Switchgear RU-660RV	2 units
	Positive busbar DC Switchgear RU-660PSH	1 unit
	Traction transformer	2 units
	Rectifier	2 units
	Auxiliaries equipment	3 units
	Auxiliaries transformer	1 unit
	Telecontrol equipment and SCADA software	1 set

ORADEA
CITY ELECTRIC TRANSPORT
 ORADEA, ROMANIA

2019 Turn-key project:
 Supply of Cicero two-unit modular traction substation.

Design, supply of equipment, installation supervision, commissioning.








	Module	2 units
	Medium voltage switchgear SM6 20 kV DC Switchgear 750 V Rectifier disconnecter DC Switchgear RU-750RV Negative busbar DC Switchgear RU-750OSH	1 set 3 units 2 units 1 units
	Traction transformer Rectifier	2 units 2 units
	Auxiliaries equipment Low-voltage switchgear series Prisma Auxiliaries transformer	3 units 3 units 1 unit
	Telecontrol equipment	1 set
	Contact network overvoltage protection unit OVLD Protection unit DEPEC	1 unit 1 unit



MEDIAS
CITY ELECTRIC TRANSPORT
 MEDIAS, ROMANIA

2022-2023 Supply of two single-unit modular traction substation.






Design, supply of equipment, installation supervision, commissioning.

	Module	2	units
	Medium voltage switchgear SM6 20 kV	2	sets
	DC Switchgear 750 V	8	units
	Rectifier disconnecter DC Switchgear RU-750RV	2	units
	Negative busbar DC Switchgear RU-750OSH	2	units
	Traction transformer	2	units
	Rectifier	2	units
	Auxiliaries equipment	4	units
	Auxiliaries transformer	2	units
	Protection unit DEPEC	2	units

VASLUI
CITY ELECTRIC TRANSPORT
 VASLUI, ROMANIA

2023 Supply of two-unit modular traction substation.

Design, supply of equipment, installation supervision, commissioning.

	Module	2	units
	Medium voltage switchgear SM6 20 kV	1	set
	DC Switchgear 750 V	6	units
	Rectifier disconnecter DC Switchgear RU-750RV	2	units
	Negative busbar DC Switchgear RU-750OSH	1	unit
	Traction transformer	2	units
	Rectifier	2	units
	Auxiliaries equipment	3	units
	Auxiliaries transformer	1	unit
	Protection unit DEPEC	1	unit








ANTANANARIVO CITY ELECTRIC TRANSPORT

ANTANANARIVO, REPUBLIC OF MADAGASCAR

2023 Current turnkey project:

Supply of 4 single-unit modular substations for Antananarivo city train line.



	Modul	4 units
	DC switchgear 1200 V	13 units
	Rectifier	4 units
	Auxiliaries equipment	4 sets
	Telecontrol equipment and SCADA software	4 sets






RAILWAYS


GEORGIA GEORGIAN RAILWAY	68
AUSTRALIA SYDNEY PASSENGER RAIL NETWORK	70
REPUBLIC OF POLAND POLISH RAILWAY	70
REPUBLIC OF ESTONIA ESTONIAN RAILWAYS	71
REPUBLIC OF AZERBAIJAN AZERBAIJAN RAILWAYS	71
UKRAINE UKRAINIAN RAILWAYS	72
KRYUKOVSKY RAILWAY CAR BUILDING WORKS	78

DEPARTMENTAL RAILWAYS

REPUBLIC OF KAZAKHSTAN KOSTANAI MINERALS JSC	80
UKRAINE SOUTHERN MINING COMPANY	80


GEORGIAN RAILWAY
GEORGIA


2011  Supply of sectioning point 3.3 kV for Tskhra-Dzma station of Marabda-Kartsakhi railway section.


 Sectioning point 1 unit






2023




 **Current project:**
Supply of Kvishkheti two-unit modular traction substation
Supply of equipment, commissioning.



 DC switchgear 3.3 kV 14 units

 Rectifier 2 units

 Auxiliaries cabinet 1 unit
 Output terminal block cabinet 1 unit
 Filter device 1 unit

 **Current project:**
Reconstruction of Moliti and Zestaponi traction substations
Supply of equipment, commissioning.

 Equipment for retrofit of 3.3 kV DC switchgear, including:
 Switching device UKR-3.3k 7 units
 Control cabinet SHU 9 units

 Rectifier 3 units
 Inverter 2 units



GR Georgian Railway

STADLER

TBLISI

SYDNEY PASSENGER RAIL NETWORK

SYDNEY, AUSTRALIA

2017 Supply of equipment for secondary power supply inverter of Sydney suburban passenger railway network.

Motor Alternator Governor MAG-129 1 unit



POLISH RAILWAY

REPUBLIC OF POLAND

2017 Rectifier set at Warsaw-Prague traction substation of Polish Railway (PKP Energetyka S.A.).
Trial operation, supply of equipment.



Transformer	1	unit
Rectifier	1	unit
Cathodic reactor	1	unit



ESTONIAN RAILWAYS REPUBLIC OF ESTONIA

2020 DC switchgear for Raasiku traction substation.
Supply of equipment.



- DC switchgear 3.3 kV 1 unit
- Negative busbar switchgear 3.3 kV 1 unit

AZERBAIJAN RAILWAYS REPUBLIC OF AZERBAIJAN

2023 Current project:
Supply of sectioning point 3.3 kV
Supply of equipment, commissioning.



Sectioning point 1 unit







Rectifier disconnecter DC Switchgear
RU-3300RV 4 units



UKRAINIAN RAILWAYS

UKRAINE

- 2011 - 2013** Supply of DC equipment package 3.3 kV for Bantysheve, Konstantynivka, Fenolne, Lozova, Blyzniuky substations of State Enterprise Donetsk Railway.
 - 2013** Supply of equipment package for Ingulets traction substation of Regional branch Cisdnieper Railway (Prydniprovska zaliznytsia) (Kryvyi Rih). Installation works, commissioning.
 - 2017** Supply of 4 equipment packages for retrofit of 10 kV cubicles with replacement of circuit breaker for Sknyliv, Striy traction substations, Regional branch Lviv Railway (Lvivska Zaliznytsia) (Lviv).
 - 2018** Development of design and estimate documentation on reconstruction of TS-15 10/0.4 kV, Fastiv-1 station, the Regional branch Southwestern Railway (Pivdenno-Zahidna Zaliznytsia) (Fastiv).
 - 2019** Development of design and estimate documentation on reconstruction of transformer substation TS-510 10/0.4 kV, Kyiv-Pasazhyrskyi station, the Regional branch Southwestern Railway (Pivdenno-Zahidna Zaliznytsia) (Kyiv).
 - 2020** Development of design and estimate documentation on reconstruction of transformer substation 110/27,5/10 kV and installation of DC switchgear 3.3 kV, the Regional branch Southern Railway (Krasnohrad).
- Supply of short line testers for the Regional branch Southern Railway (Kharkiv).

	Equipment for retrofit of existing Switchgears 10 kV	4 set
	DC Switchgear 3.3 kV	1 unit
	Rectifier	5 units
	Short circuit tester	18 units











UKRAINIAN RAILWAYS

UKRAINE

2020 Supply of 2 sectioning points for DC contact network 3.3 kV (for 2 and 6 feeders) for the Regional branch Southern Railway (Kharkiv, Liubotyn).

Supply of equipment, commissioning.



	Module	2 units
	High-speed circuit breaker	8 units
	Auxiliaries cabinet	2 units
	Telecontrol equipment	2 units
	Short line tester	7 units
	Traction network monitoring and protection system SMTN-3 with adaptation kit	8 sets







UKRAINIAN RAILWAYS

UKRAINE

2022 Reconstruction of 3.3kV DC contact network sectioning post for Prydniprovskia Railway regional branch (Vilnohirsk).








Dismantling of old sectioning post, installation of overhead lines section for connecting to contact network (installation of contact line supports, mounting of rigid jumper, installation and connection of contact line drives and disconnectors). Construction works, laying and connection of cable networks.

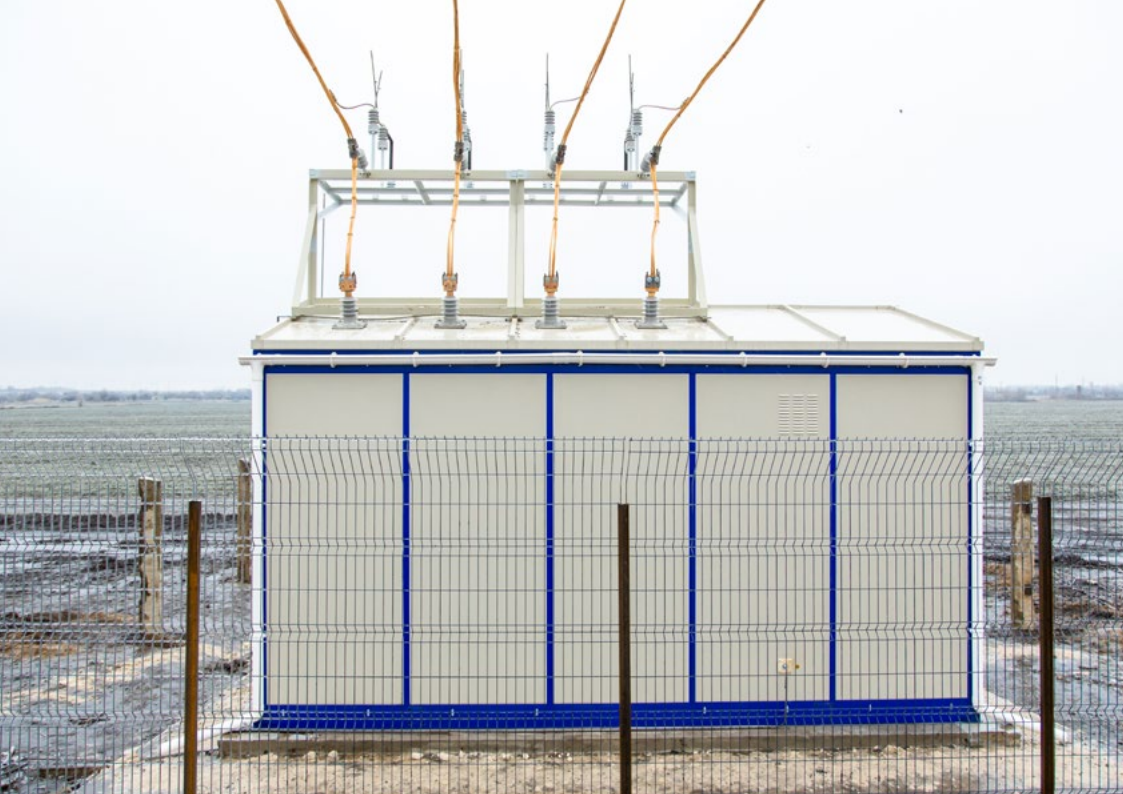
	Module	1	unit
	DC Switchgear 3.3 kV	4	units
	High speed circuit breakers tester (calibrator)	1	unit
	Auxiliaries cabinet	1	unit

2023

Current project for the supply of ZRP-3.3k modular substation and 11 MVA traction transformers for the regional branch of Prydniprovskia Zaliznytsia (Pavlohrad)

Supply of equipment, installation, commissioning.

	Module	1	шт.
	DC Switchgear 3.3 kV	15	шт.
	High speed circuit breakers tester (calibrator)	1	шт.
	Rectifier	2	шт.
	11 MVA Traction dry transformer	2	шт.
	Auxiliaries cabinet	1	шт.
	Filter device	1	шт.



KRYUKOVSKY RAILWAY CAR BUILDING WORKS

KREMENCHUK, UKRAINE

2013 Turn-key project:

Equipment for special-purpose traction substation of Kryukovsky Railway Car Building Works test site for catenary power supply 27.5 kV AC, 3.3 kV DC, 600 V DC and 825 V DC.

Supply of equipment, installation works, commissioning.



Switchgear 27.5 kV	1 set
NEX Switchgear 6 kV	1 set
DC Switchgear 3.3 kV	1 unit



Converter dry type transformer 2500 kVA	2 units
Multi-section thyristor rectifier	1 unit



Telecontrol equipment and SCADA software	1 set
--	-------



Auxiliaries and operative current cabinet	1 unit
Switching device	2 units



KRYUKOVSKY RAILWAY CAR
BUILDING WORKS, UKRAINE

KOSTANAI MINERALS JSC

ZHITIKARA, REPUBLIC OF KAZAKHSTAN

- 2019-** Supply of 3 rectifiers for DC traction substation 1.65 kV of
- 2013** Kostanai Minerals JSC (Zhitikara, Kostanay Region).

SOUTHERN MINING COMPANY

KRYVYI RIH, UKRAINE

- 2014-** Equipment for reconstruction of Southern Mining
- 2017** Company departmental railway traction substation TS-94.

Supply of equipment, installation supervision and adjustment.



DC Switchgear 1.65 kV

9 units



Rectifier

4 units

- 2018** Cubicles with disconnectors for traction substation reverse lines.

Supply of equipment, installation.





SOUTHERN MINING COMPANY,
UKRAINE



INDUSTRIAL, IRON AND STEEL, MACHINE-BUILDING, RESEARCH AND DEVELOPMENT ENTERPRISES

UKRAINE

MINING MACHINERY PLANT KRYVORIZHGORMASH	84
SCIENTIFIC AND PRODUCTION COMPLEX ISKRA	84
PRIVATE JOINT STOCK COMPANY ZAPOROZHTRANSFORMATOR (ZTR)	85
SPETSMONTAZHMODUL COMPANY	85
HEAVY ENGINEERING PLANT DNIPROTYAZHMASH	86
AZOVSTAL IRON AND STEEL WORKS	88
DONETSK METALLURGICAL PLANT	88
ALCHEVSK IRON AND STEEL WORKS	89
PUBLIC JOINT STOCK COMPANY VIT	89
ZAPORIZHSTAL STEEL WORKS	90
KONSTANTINOVSKY PLANT OF METALLURGICAL EQUIPMENT (KPME)	92
METALLURGY INDUSTRY ENTERPRISE	92
LLC GAL-KAT	92

REPUBLIC OF MOLDOVA

MOLDAVIAN IRON AND STEEL WORKS	93
--------------------------------	----

REPUBLIC OF UZBEKISTAN

JOINT STOCK COMPANY UZMETKOMBINAT	93
-----------------------------------	----

MINING MACHINERY PLANT KRYVORIZHGORMASH

KRYVYI RIH, UKRAINE

- 2002 Supply of electrical equipment package with frequency converters and automatic control system of drilling machine drives, provided for gypsum bottoms drilling.



SCIENTIFIC AND PRODUCTION COMPLEX ISKRA

ZAPORIZHZHIA, UKRAINE

- 2005 Supply of automated frequency-controlled induction double-motor electric drive of radar antenna.



**PRIVATE JOINT STOCK COMPANY
ZAPOROZHTRANSFORMATOR (ZTR)**
ZAPORIZHZHIA, UKRAINE

2008 Supply of equipment:



Transformers cooling system control cabinet
Connections cabinet

18 units
7 units



**SPETSMONTAZHMODUL
COMPANY**
MARGANETS, UKRAINE

2006 Supply of electrical equipment for gas cutting manipulator, including induction drive with frequency converter for industrial equipment production company Spetsmontazhmodul.



HEAVY ENGINEERING PLANT DNIPROTYAZHMASH

DNIPRO, UKRAINE

Supply of equipment:

- 2006** Electric drive for car mule with asynchronous traction electric motors, including:
 - Cabinet with voltage inverters 1 unit
 - Three-phase bridge rectifier 1 unit
 - DC voltage filter 1 unit

- 2008** Thyristor traction DC electric drive, car mule drive 2 units



Supply of equipment:

- 2009-2010** Traction AC electric drive (frequency-controlled), car mule drive 2 units

- Thyristor traction DC electric drive, car mule drive 4 units

- Automated control system of blast furnace discharge system with converting power units 2 units

- 2011** Traction AC electric drive (frequency-controlled), electrical equipment package and car mule automated control system 2 units

- 2013** Traction AC electric drive (frequency-controlled), car mule drive 1 unit



AZOVSTAL IRON AND STEEL WORKS

MARIUPOL, UKRAINE

2003, 2004 Supply of equipment:



Rectifier

6 units

DONETSK METALLURGICAL PLANT

DONETSK, UKRAINE

2007 Supply of equipment:



Synchronous motor thyristor exciter

1 unit



ALCHEVSK IRON AND STEEL WORKS

ALCHEVSK, UKRAINE

2006 Supply of 2 package semiconductor substations KVPP-4.0k-230:



Rectifier

4 units



Line Circuit Breakers Cabinet
(DC Switchgear 230 V)

8 units

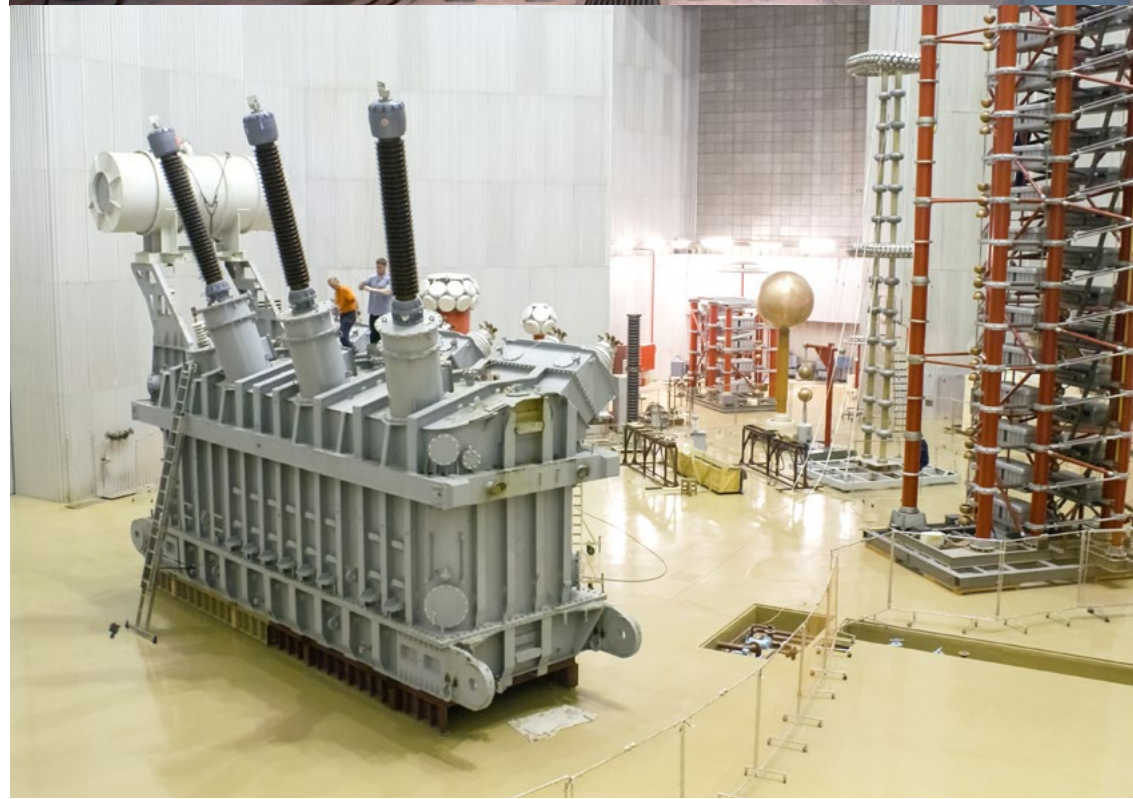
PUBLIC JOINT STOCK COMPANY VIT

ZAPORIZHZHIA, UKRAINE

2016 Supply of transformers cooling automated control cabinets for Public Joint Stock Company Ukrainian Research, Design and Technological Transformer Institute (VIT):



Transformers cooling system control cabinet 2 units



ZAPORIZHSTAL STEEL WORKS

ZAPORIZHZHIA, UKRAINE

Supply of equipment for PJSC Zaporizhstal Steel Works:

2002	Frequency converters and Collecting roller table automated control system, including:		
	Control desk	3	units
	Speed range control cabinet	2	units
	Remote input device	6	units
	Frequency converters VSI-RP-400/430	18	units
2005	Coilbox coiling-uncoiling unit redundancy switch of nonstop hot rolling thin sheet mill	7	units
	Coilbox coiling-uncoiling unit of nonstop hot rolling thin sheet mill. Automated process control system (design, software, testing, startup)	1	unit
	Traction electric drive of portal car pusher with frequency converters VSI-T 400/540 (250 kW)	2	units



2007	NXS frequency converter for blast furnace batcher	10	units
	VSI-PN frequency converter, capacity of 320 kW, for drive stoves drive (Blast-furnace-2)	2	units

2010	Automatic control system and frequency converter for the new hot rolling table drive (light-sheet hot rolling workshop)	15	sets
-------------	---	----	------

2012	Rectifier	1	unit
-------------	-----------	---	------

2019 Restoration of performance and reliable operation of speed setting cabinet for new hot roller conveyor.
Turn-key supply of package semiconductor substation KVPP-4.0κ-230N. Design, manufacturing, supply, dismantling, installation and commissioning.

	Rectifier	2	units
	Converter transformer	2	units
	Input circuit breakers cabinet	2	units
	Section disconnectors cabinet	2	units
	Line circuit breakers cabinet	4	units
	Feeder lines connection cabinet	4	units

ВАПОРІЖСТАЛЬ



KONSTANTINOVSKY PLANT OF METALLURGICAL EQUIPMENT (KPME)

KOSTIANTYNIVKA, UKRAINE

2013 Supply of thyristor water-cooled rectifier V-TPV-18k-32-4N200SM for electrolysis baths power supply for LLC "KPME":



Thyristor converter section 18 kA 32 V 1 unit

METALLURGY INDUSTRY ENTERPRISE LLC GAL-KAT

LVIV, UKRAINE

2018 Supply of water-cooled rectifier V-TPV-18k-64-6N200SM for metallurgy industrial enterprise LLC GAL-KAT:



Thyristor converter section 18 kA 64 V 2 units

Transformer TSZPU-2000/6G 1 unit

Remote control panel RCP-E 1 unit



MOLDAVIAN IRON AND STEEL WORKS

RYBNITSA, REPUBLIC OF MOLDOVA

2008 Supply of equipment:



Transformers cooling system control cabinet

2 units

JOINT STOCK COMPANY UZMETKOMBINAT

BEKABAD, REPUBLIC OF UZBEKISTAN

2020 Supply of package semiconductor substation KVPP-4.0κ-230N:



Rectifier

1 unit

Converter transformer

1 unit



Line circuit breakers cabinet

2 units





POWER INDUSTRY

REPUPLIC OF LITHUANIA

SUBSTATION ALITUS

96

UKRAINE

KIROVOGRADOBLENERGO PRJSC

96

SUBSTATION 35/6 KV YERYSTOVO

97

DTEK KRYVORIZKA THERMAL POWER STATION

97

ZUIVSKA THERMAL POWER STATION

98

MARIUPOL HEAT SUPPLY NETWORKS MUNICIPAL AND COMMERCIAL
ENTERPRISE

98

SUBSTATION ALITUS

REPUBLIC OF LITHUANIA

2001 Supply of equipment for substation:



Transformers cooling system control cabinet 2 units

KIROVOGRADBLENERGO PRJSC

KROPYVNYTSKYI, UKRAINE

2007 Supply of equipment for Chervonohutirska hydroelectric station:

Generator excitation system 2 units



SUBSTATION 35/6 KV YERYSTOVO

HORISHNI P LAVNI, UKRAINE

- 2010** Turn-key project:
35/6 kV substation modernization. Supply of power transformers TMN-6300/35-U1, installation and commissioning works on replacement of two transformers, type TMN-4000/35-6U1 for two transformers TMN-6300/35-U1.

DTEK KRYVORIZKA THERMAL POWER STATION

UKRAINE

- 2014 -** Reconstruction of pulverized coal feeders electric drives
2015 (24 units) and raw-coal feeders electric drives (4 units) including electric motors replacement and transfer to frequency regulation.



ZUIVSKA THERMAL POWER STATION

UKRAINE

2012-2013 Supply of equipment for Zuivska Thermal Power Station

Inspection of car pusher current collector system and provision of recommendations on reliable operation during winter.



Thyristor exciter for synchronous motors. 1 unit
Installation and commissioning of mills.

MARIUPOL HEAT SUPPLY NETWORKS MUNICIPAL AND COMMERCIAL ENTERPRISE

MARIUPOL, UKRAINE

2019 Development of the project design and estimate documentation on capital repair of 6 kV distribution center.





For further information
please visit our website at:
<https://pluton.ua>

LLC PLUTON IC

4-B Lukasha M. st., of. 1
Lviv, 79026 Ukraine

Telephone/Fax:
+380 (61) 239-7900
+380 (61) 239-7901

E-mail: info@pluton.ua
www.pluton.ua

© 2023. LLC PLUTON IC. All rights reserved