СИСТЕМНЫЙ ОПЕРАТОР
ЕДИНОЙ ЭНЕРГЕТИЧЕСКОЙ СИСТЕМЫ
RUSSIAN POWER SYSTEM OPERATOR

JSC “SYSTEM OPERATOR OF THE UNITED POWER SYSTEM OF RUSSIA”

COMPANY OVERVIEW

JOINT STOCK COMPANY
“SYSTEM OPERATOR OF THE UNITED POWER SYSTEM”
(SO UPS, JSC)

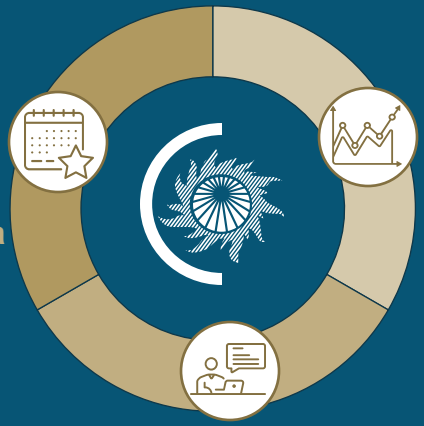
SO UPS as a specialized infrastructural organization is entitled to solely provide centralized dispatch control of the UPS of Russia and isolated power systems

SO UPS was founded on the 17th of June 2002 due to unbundling of RAO UESR.

SO UPS is 100% state-owned and in the list of key strategic Russian companies

MAIN ACTIVITIES OF SO UPS

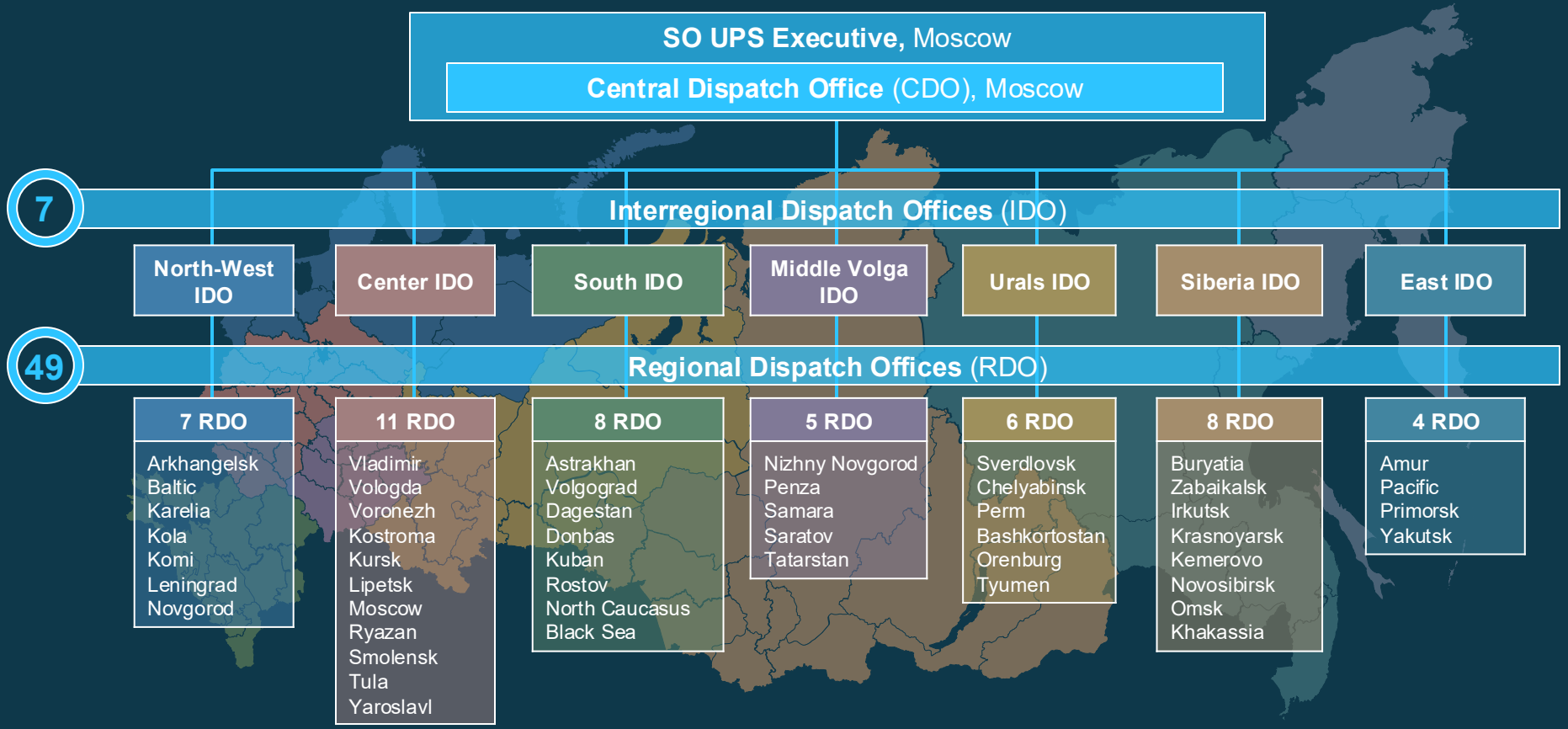
Long-term planning & development of the UPS of Russia



Unified and effective operation of technological mechanisms for the wholesale and retail markets of electric power and capacity

Real-time control of power facilities’ operation to maintain parameters of electricity quality (frequency, voltage, etc.) within admissible values

CURRENT DISPATCH CONTROL SYSTEM OF THE POWER SYSTEM OF RUSSIA



COMPANY STRUCTURE.
UNIFIED THREE-LEVEL MANAGEMENT VERTICAL

Hierarchy of operational dispatch control defines the structure of the SO UPS – a single three-level vertical with rigid separation of authority

CENTRAL DISPATCH OFFICE

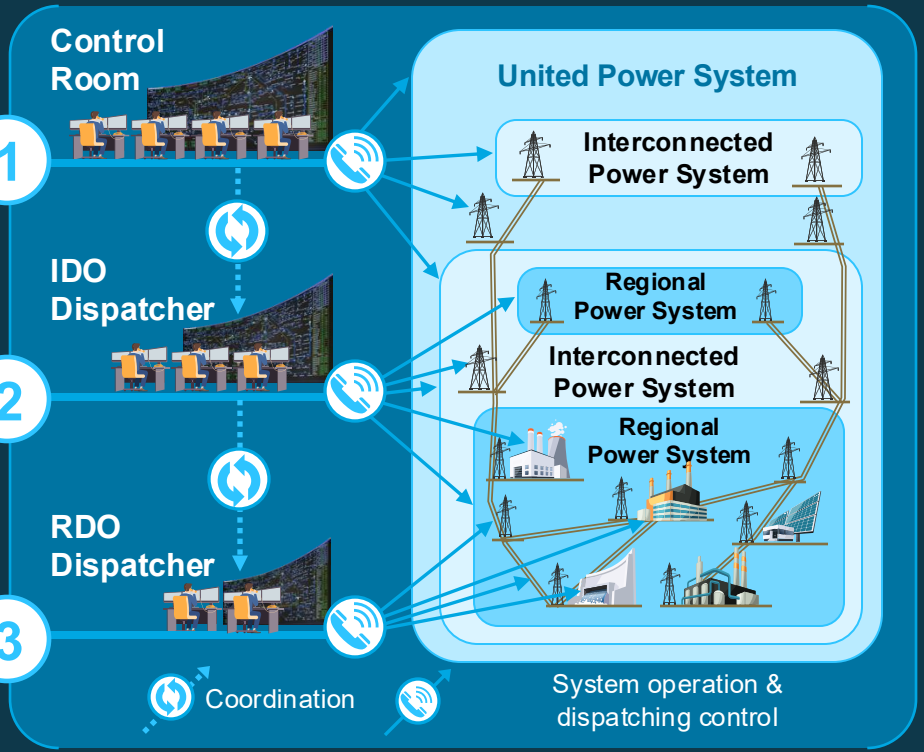
Main task – 24-hour control of the UPS operation and electricity quality parameters, coordination of the IPS synchronous operation, and synchronous operation with foreign systems

INTERREGIONAL DISPATCH OFFICE

Main task – 24-hour control of the Interregional Power System (IPS) operation and generating and network facilities, which affect the IPS significantly, and coordination of low level branches' activities

REGIONAL DISPATCH OFFICE

Main task – 24-hour control of the Regional Power System and coordinated operation of all connected facilities



SYSTEM OPERATOR AT A GLANCE

1. **Operation & dispatch control** of all UPS facilities in 89 subjects of the Russian Federation over 11 time zones from the Russian Far East to Kaliningrad

2. **Corporation of innovative technology** with notable scientific and intellectual potential

3. **Coordinator of modern information and telecommunication technologies' implementation,** emergency and operational automation systems in the industry

4. **Control of UPS synchronous operation with 10 neighboring states' systems** (Belarus, Kazakhstan, Azerbaijan, Georgia, Uzbekistan, Kyrgyzstan, Mongolia, Tajikistan, Abkhazia and South Ossetia)

5. **Member of interstate commissions and agreements, member of international electric power associations**

UPS OF RUSSIA AND ISOLATED POWER SYSTEMS UNDER CONTROL

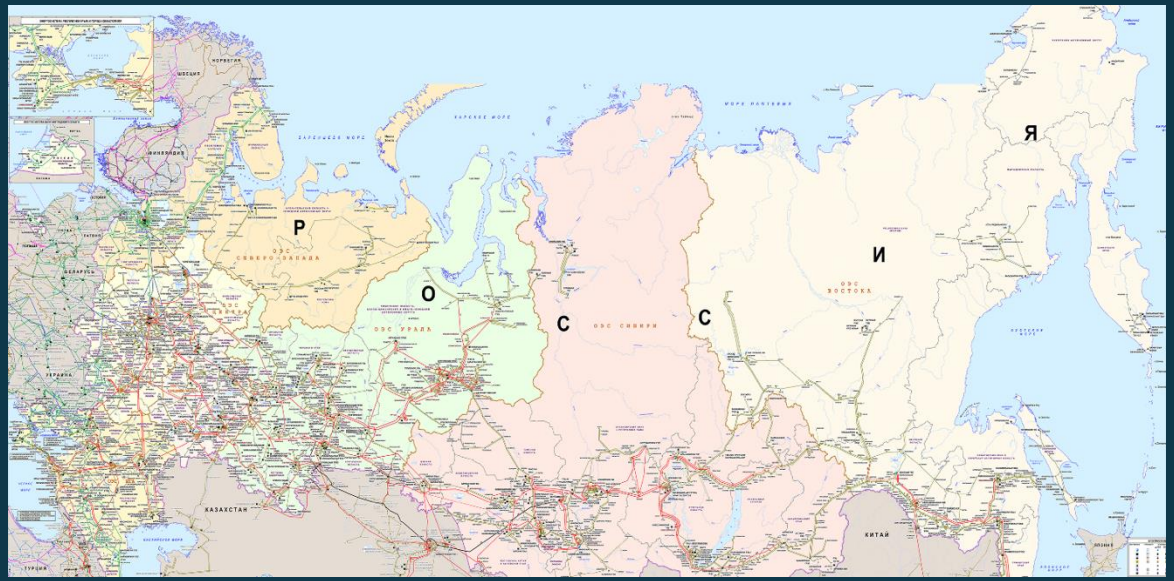
UPS OF RUSSIA: STRUCTURE

75 Regional Power Systems

7 Interconnected Power Systems: East, Siberia, Urals, Middle Volga, South, Center and North-West

UPS of Russia

5 Isolated Power Systems



(as of 1 January 2025)

POWER FACILITIES

1 174 power plants

269,1 GW total installed capacity

NETWORK FACILITIES

10 500+ substations

17 000+ transmission lines 110–750 kV with the length of **554 700** km

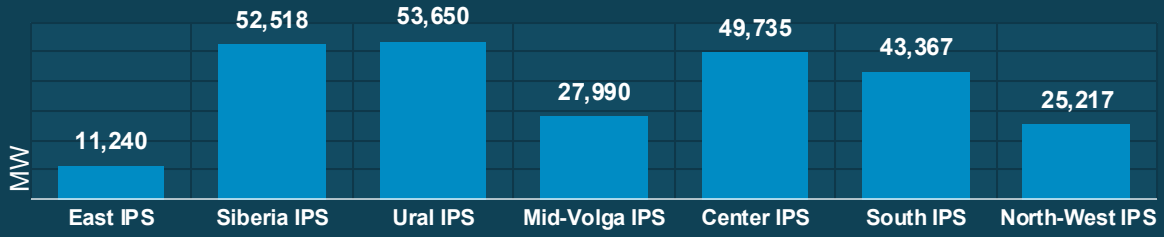
UPS GENERATION UNITS

269 139,3 MW
Power plants' total installed capacity (as of 01.01.2025)

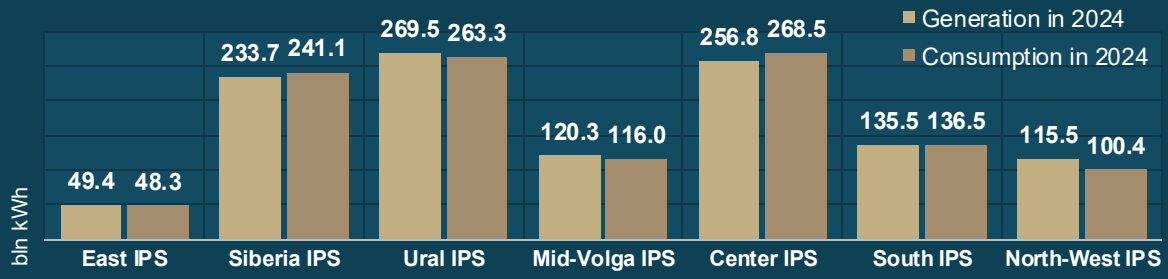
1 196,9 bln kWh
Generation in 2024

1 190,2 bln kWh
Consumption in 2024

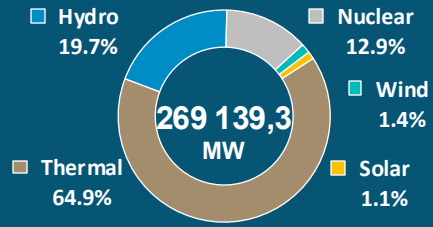
INSTALLED CAPACITY IN IPS AS OF 01.01.2025



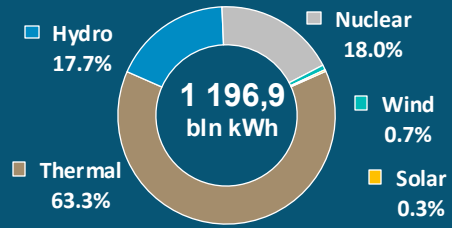
GENERATION & CONSUMPTION IN IPS



UPS OF RUSSIA: INSTALLED CAPACITY (AS OF 01.01.2025)



UPS OF RUSSIA: GENERATION (AS OF 01.01.2025)



ELECTRICITY BALANCES IN UPS OF RUSSIA (2024)

CONSUMPTION IN IPS 2023–2024 (bln kWh)