



ROSATOM

STATE ATOMIC ENERGY CORPORATION "ROSATOM"

Rosatom Global Development, International Cooperation Perspective

"Atomex-Europe 2013" Forum

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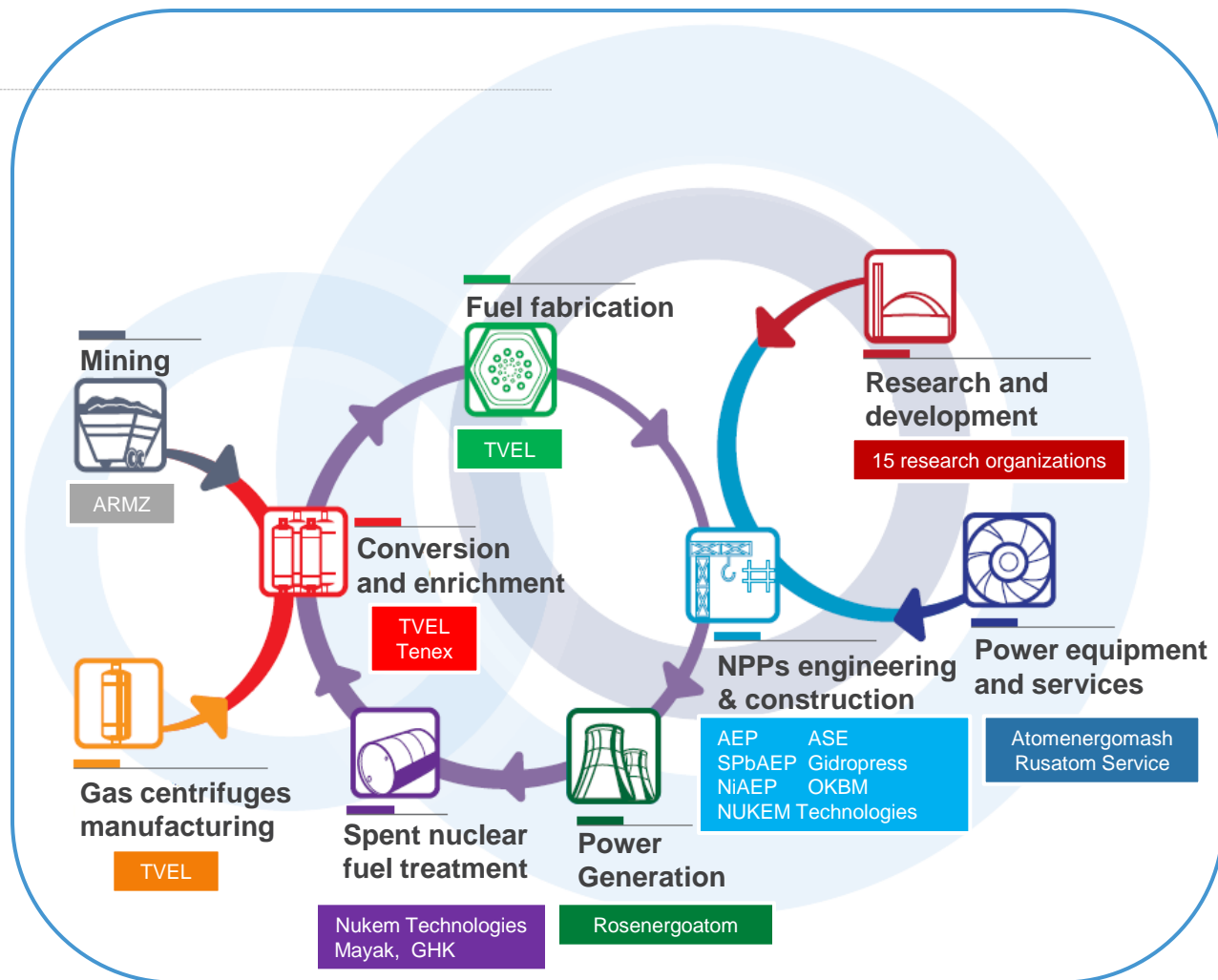
Rosatom offers complete solution from uranium supplies to NPP construction operation and decommissioning

Key Activities of Rosatom*

Guaranteed supply
of complete life-cycle products
and services

Flexible capabilities
of NPP supply from
components and services to
turn-key and BOO projects

Being a state corporation
Rosatom is taking advantage
of unique industry
**access to privilege
resources**



* Boxes include names of key Rosatom's subsidiaries in the relevant sector

Rosatom Global Operations

#1 in key segments

5 continents. More than 40 countries.

#1

in uranium enrichment

#1

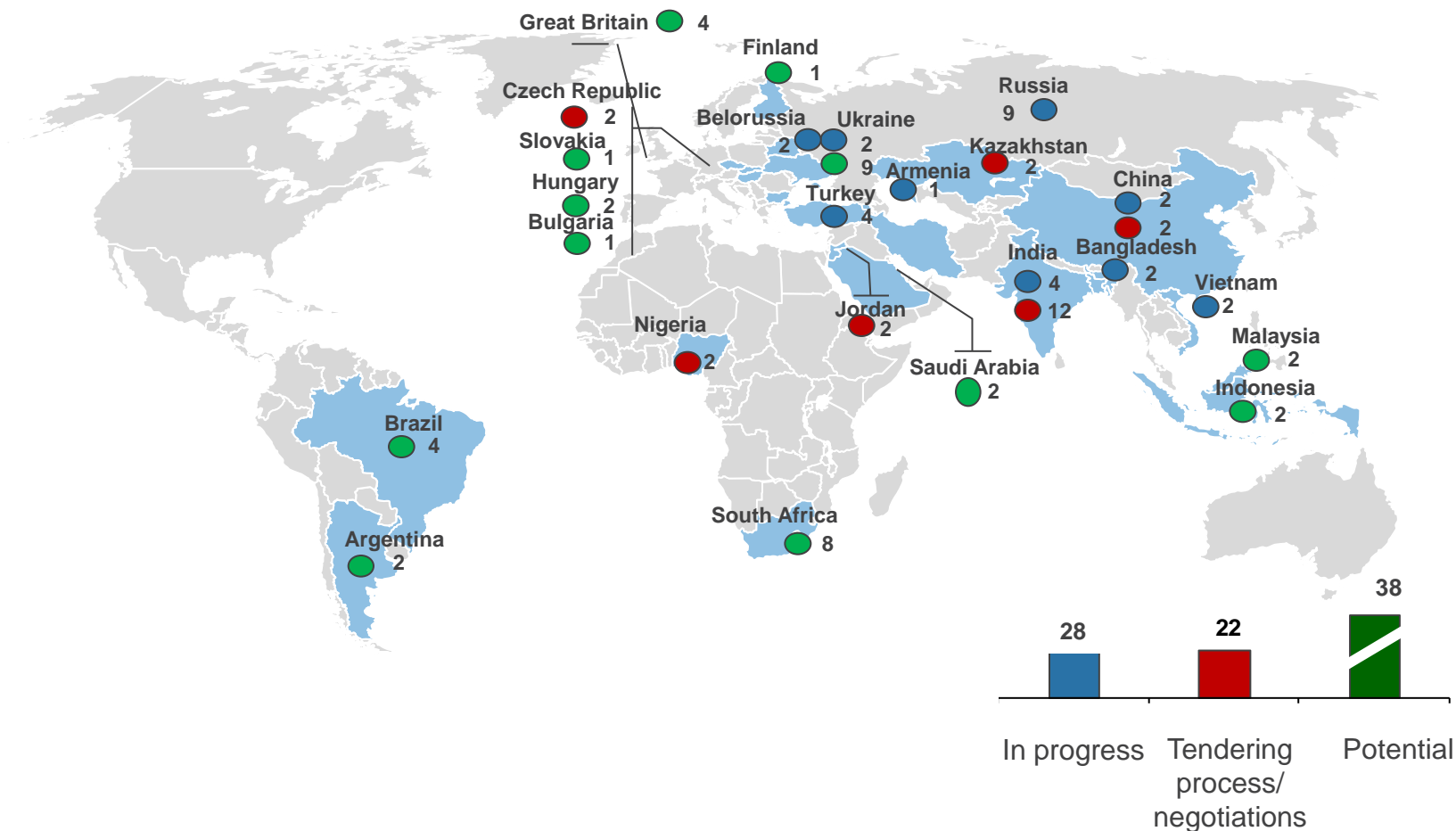
in new NPPs construction

#1

Russian electricity generation company, 25,2 GWe installed capacity

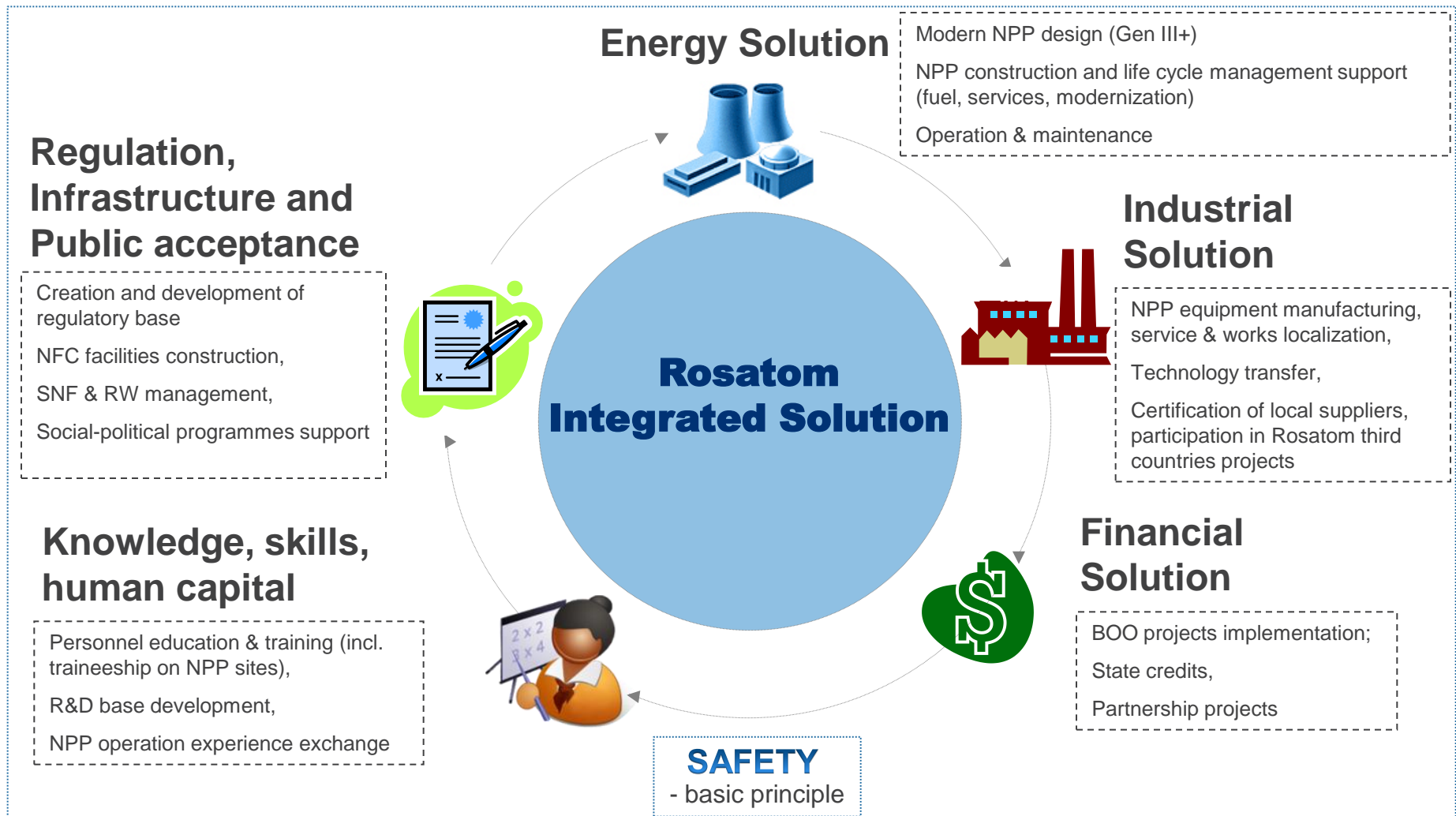


Rosatom safe and mature VVER technology is highly welcomed worldwide...



Rosatom NPP construction perspective backlog – more than 80 units

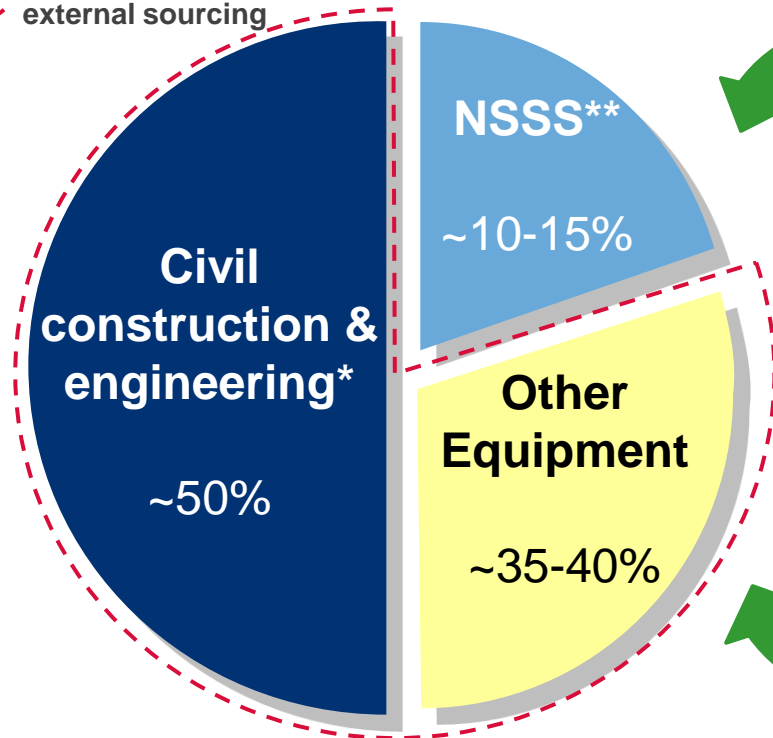
... being a part of Rosatom unique integrated NPP construction solution



Construction of a nuclear power plant brings numerous opportunities to suppliers



Potential for external sourcing



Exclusive Russian supply



Examples of realized supplies

- Valves, pumps and piping (6%)
- Other equipment (5%)
- Air cooling systems (3%)
- Turbine and generator equipment (6%)
- Electrical equipment (9%)
- I&C (6%)

~ 15% - Russian supply

~ 30-40% - local content

~ 45-50% - global sourcing

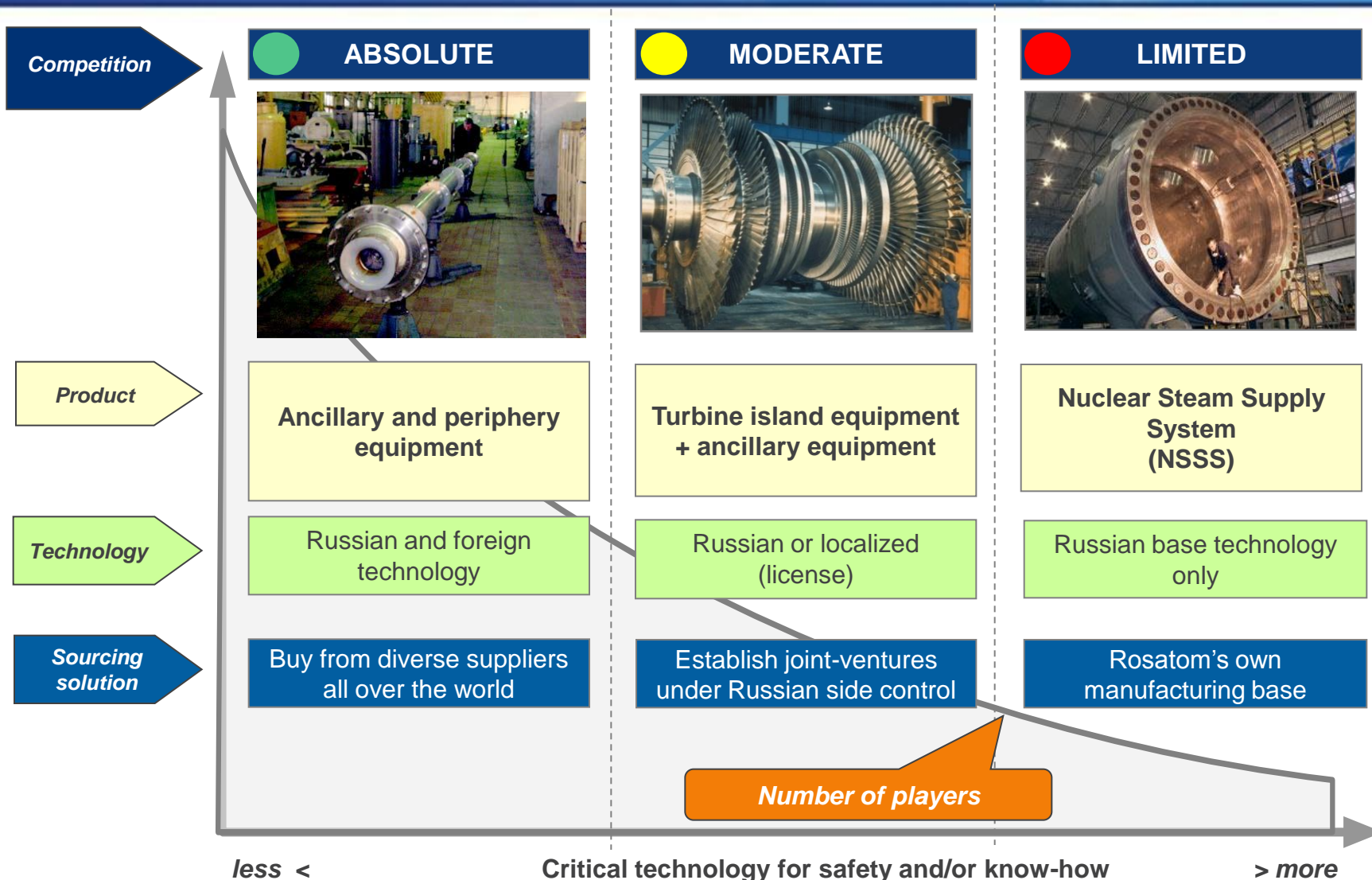
➤ Rosatom is ready for and has extensive experience in sourcing & localizing goods and services for new NPP construction projects

➤ Orders volume for 2013-2030 – more than \$300 bln.

* Including design, project management, erection and commissioning works, training, etc.

**Nuclear steam supply system

Sourcing Approach For NPP Equipment



Rusatom Service – new Rosatom interface for international sourcing



The merged company JSC NIAEP – JSC Atomstroyexport (ASE-NIAEP)

EPC-contractor for NPP construction projects in Russia and abroad



OJSC Atomenergomash

Integrated supplier of NSSS and turbine islands for NPP construction projects in Russia and abroad



JSC Rusatom Service

Integrator of import supplies of Rosatom O&M and service & modernization projects

- Participant of international equipment sourcing in NPP construction projects in Russia and abroad

Thank You for Attention!

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Rosatom safe and mature VVER technology is one of the most referenced in the world

VVER Global Fleet

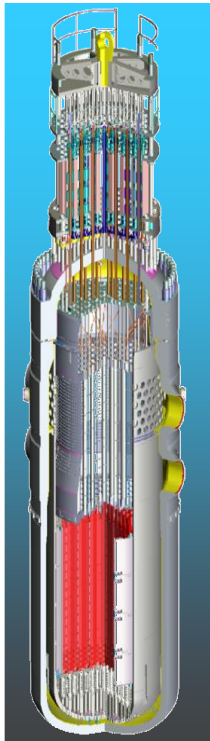


Country	Constructed	In operation
Armenia	2	1
Bulgaria	6	2
China	2	2
Czech Republic	6	6
Finland	2	2
Germany	6	-
Hungary	4	4
Iran	1	1
Russia	17	17
Slovakia	6	4
Ukraine	15	15
TOTAL	67	54

- All Russian designed reactors, including 37 VVER units operating outside Russia, successfully passed stress-tests, among those - 18 VVER units in 5 EU countries
- Rosatom actively supported and is confident in the results

Rosatom Gen III+ NPP design

What is VVER? (Water-Water Power Reactor)



- **Forefront** of nuclear technology – Generation **3+** reactor
- **Proven and mature** solutions – **≈1400** reactor years of total operating time
- A high level of **internal safety** gained through evolution of design
- Most **demanded capacity** suitable for various grid conditions – **1000-1200 MWe**
- **Long – run** facility – design lifetime of the main equipment: **60 years**
- **High performing** source of supply – availability factor **≈ 92 %**

Protection from outer impacts



Airplane crash



Outside explosions



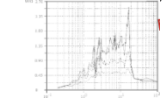
Hurricanes, tornadoes



Snow load



Tsunamis, floods



Earthquakes

- Meets **all** current Russian and international **safety standards** and the **IAEA requirements**
- Widely **referenced** by utilities
- **EUR certified**