

State Corporation for Atomic Energy "ROSATOM"

The "Road map" of NPP construction in the Russian Federation

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Nuclear generation fleet in Russia





Plans on nuclear generation construction according to the General scheme update, approved 6/3/2010





Reference scenario:

- Completion of 5 NPPs (Leningrad NPP-2, Kalinin NPP, Novovoronezhskaya NPP-2, Volgodonsk NPP and Beloyarsk NPP) with 11 units, cumulative capacity of 12.1 GWt.
- Development of 12 new sites (Baltic NPP, Kolsk NPP, a new NPP in the European part, Central NPP, Smolensk NPP, Kursk NPP, Bashkirskaya NPP, Nizhegorodskaya NPP, Tatarskaya NPP, South-Urals NPP, Severskaya NPP, Primorskaya NPP) with 29 units, cumulative capacity of 31.3 GWt.
- The possibility of a floating NPP (capacity of 70 MW) construction in Pevek is taken into consideration

Optimistic scenario:

- It is recommended to use the same sites of NPP construction, however with earlier commissioning of some units
- It is recommended to additionally install 3 units on the new NPP in the European part, 2 units on the Nizhegorodskaya NPP and one unit on Primorskaya NPP

Installed capacity and power generation structure in the updates General Scheme

In accordance with the General Scheme, the share of nuclear power generation is growing: <u>every</u> <u>4th GWt</u> in the country till 2030 will be produced at NPP

The share of NPPs in the total installed capacity is also growing with the rate exceeding the expected growth rates and remains at the level of 16%, and the share of power generation is growing from 20% to 23%

The Road Map of Units' Construction

Construction cost management

Construction costs breakdown of a typical nuclear unit

Key directions of construction costs management

- 1. Unification and optimization of technical solutions in NPP projects
- 2. Procurement efficiency growth
- 3. Alignment of cost pricing system
- 4. Monitoring and costs controlling systems
- 5. Establishment of suppliers' and contractors' database