

Bulgaria

1. Location and capability of nuclear facilities

Since 1956, the Bulgarian government has favored the use of nuclear power for electricity; the first commercial reactor began operating in 1974. Currently about 40% of Bulgaria's electricity comes from its two nuclear reactors. In 2005, despite an opinion poll showing 75% support for keeping two reactors running, the government finally ordered them to be shut down at the end of December 2006. After these sites were shut down in 2006, the Nuclear Regulatory Agency then approved the Belene site for construction of a new plant, following 16 months assessment of NEK's proposal.

<http://www.world-nuclear.org/info/reactors.htm>; <http://www.world-nuclear.org/info/inf87.htm>; <http://www.uic.com.au/nip87.htm>

Power Reactors

Operational: 2 (Kozloduy 5, and 6)

Shut Down: 4 (Kozloduy , 1,2, 3 and 4)

Under Construction: 2 (Belene 1 and 2)

<http://www.iaea.org/programmes/a2/index.html>;

<http://www.world-nuclear.org/info/reactors.htm>

Research Reactors

Operational: 0

Shut Down: 1 (IRT-SOFIA)

Decommissioned: 0

Under Construction: 0

Planned: 0

<http://www.iaea.or.at/worldatom/rddb/>

Uranium Mines

Uranium production in Bulgaria ceased in 1992. Bulgaria's uranium deposits reach nearly 12,000 tons. Russia is considering mining uranium in Bulgaria after its nuclear services exporter won a tender to build a power plant outside Sofia, a senior nuclear official said in Nov, 2006.

<http://www.wise-uranium.org/upeur.html>

Decommissioned

Redki Metali Ltd. (Izgreve, Eleshnitsa-Polyane, Eleshnitsa-Drujba 1, Eleshnitsa-Drujba 2, Smolian-Shaft 7, Smolian-Shaft 8, Smolianovtci)

Trakia - RM - Ltd. (Selishte, Byalata voda)

Geostroikompekt Ltd. (Sborishte, Sliven, Zdravetz, Sarnitca)

Georesurs Ltd. (Struma-1, Igralishte, Senokos)

Podzemno stroitelstvo (Goten, V-ta shahta, Chora, Iskra, Chamilov Kamak, Borche)

Balkan Ltd. (Proboinitca)

Zlata Ltd. (Gabra)

Georedmet Ltd. (Narechen)

<http://www.antenna.nl/wise/uranium/uddbg.html>

2. Fissile Material Holdings

Highly Enriched Uranium: 0.006 tons (end of 2003)

Supplier- Russia

http://www.isis-online.org/global_stocks/end2003/civil_heu_watch2005.pdf

Unseparated Civil Plutonium: 8.5 tons (end of 2003)

Cumulative Plutonium Discharges from Civilian Power Reactors end 2002: 15 tons

http://www.isis-online.org/global_stocks/end2003/plutonium_watch2005.pdf

Radioactive waste disposal

Low- and Intermediate-level waste: Operation of a new facility at the Kozloduy nuclear power plant for processing and conditioning low- and intermediate-level radioactive waste started in February 2001. In January 2002, the Bulgarian government also approved the use of a new radioactive waste treatment, conditioning and storage complex at Kozloduy. The complex includes a radioactive waste treatment workshop, a conditioned waste storage facility and a service unit.

<http://www.world-nuclear.org/waste/report2002/chapter4.htm>

High-level waste: Since Bulgaria has no facility for disposing high-level waste, spent fuel rods are disposed in Russia. The plan for safe management of the nuclear fuel cycle at Kozloduy includes increasing the capacity of existing spent fuel wet storage facilities, and constructing a new dry storage. The construction of this treatment and storage facility for long-lived radioactive waste at the Kozloduy NPP has been completed and is now in operation. <http://www.euronuclear.org/e-news/e-news-11/bulgaria.htm>
http://www.bnsa.bas.bg/documents/JC_pdf/English/JC_NR_Eng.pdf

3. Nuclear Activities and Cooperation

Nuclear Research Center

Institute for Nuclear Research and Nuclear Energy (Sofia)

Nuclear Cooperation

EU: Units 3 and 4 of the Kozloduy nuclear power plant (NPP) are still in operation as of January 2007. However, the European Commission has insisted Units 3 and 4 must be shut down as a precondition to joining the European Union, although they have been modernized and are now as safe as any Western-type NPP. <http://www.euronuclear.org/e-news/e-news-11/bulgaria.htm>

EU, Russia, US: Modernization of units 5 and 6 of Kozloduy by the European Consortium Kozloduy (created in 1996 by Framatome, Siemens and Atomenergoexport of Russia) and Westinghouse. <http://www.foratom.org/Content/Default.asp?PageID=704>

Russia: Interest in constructing the second nuclear power plant in Belene by the Danube River. However, Bulgaria's National Electricity Transmission Company chose Parsons E&C Europe Limited for an architect. The contract has a term of ten years. <http://novinite.com>

Russia is also interested in mining for uranium in Bulgaria. See section on Uranium Mining.

4. International Non-Proliferation Efforts

Treaties Signed and Ratified, date of deposit

Antarctic Treaty, 11 September 1978
APM Convention, 4 September 1998
Biological Weapons Convention, 2 August 1972
Certain Conventional Weapons Convention, 15 October 1982
Chemical Weapons Convention, 10 August 1994
Comprehensive Nuclear Test Ban Treaty, 29 September 1999
Convention on the Physical Protection of Nuclear Material, 10 April 1984
Nuclear Non-Proliferation Treaty, 5 September 1969
Open Skies Treaty, 15 April 1994
Outer Space Treaty, 28 January 1967
Seabed Treaty, 16 April 1971
Vienna Convention on Civil Liability for Nuclear Damage, November 1994

Bulgaria ratified the IAEA Additional Protocol on 10 October 2000.

Multilateral Groups

Australia Group
Conference on Disarmament
Hague Code of Conduct against ballistic Missile Proliferation
Nuclear Suppliers Group
Wassenaar Arrangement
Zangger Committee

5. Positions Taken in International Fora on Various Issues of Nuclear Disarmament

NPT: "The NPT remains a cornerstone of the nuclear non-proliferation regime and a foundation for the pursuit of nuclear disarmament. Since its inception it has served as a milestone of the efforts of the international community to safeguard the international peace and security. Nowadays it is necessary more than ever to reconfirm its significance as constant stabilizing factor and not to allow any infringement on its integrity. We fully support the view that addressing adequately the three pillars of the Treaty is of particular importance for the achievement of a balanced outcome of this conference." - **Statement by Mr. Rayko Raytchev to the Seventh Review Conference of the NPT, 10 May 2005.**

<http://www.un.org/events/npt2005/statements/npt10bulgaria.pdf>

Nuclear Weapon Free Zones: "The nuclear free zones play an important part in safeguarding regional peace and security. We regard them as additional instruments which might contribute to confidence building and could be implemented with positive results in various regions. Within this context we express our support for the transformation of the Middle East into a nuclear weapons free zone." - **Statement by Mr. Rayko Raytchev to the Seventh Review Conference of the NPT, 10 May 2005.**

<http://www.un.org/events/npt2005/statements/npt10bulgaria.pdf>