Czech Republic

1. Location and capability of nuclear facilities

Coal remains the main source of energy and is estimated to cover about 40% of energy consumption in 2005; electricity generated from nuclear power plants currently represents 20% of total electricity production. The uranium requirement for the Czech nuclear power reactors was 474 tons in 2004. A shift to nuclear power in the 1950s was determined by scarce oil resources and the influence of the former Soviet Union. Soviet designs were used in construction of both Dukovany and Temelin nuclear power plants. Work is underway to complete the Temelin plant, upgrade the Dukovany plant and construct a spent fuel storage facility- initiatives that would increase the production of nuclear energy to 40-45%. In a recently approved long-term energy policy, the Czech government committed to a construction of two reactors before 2030. http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2002/index.htm; http://www.niauk.org,; http://www.world-nuclear.org/info/reactors.htm

Power Reactors
Operational: 6
Shut down:
Decommissioned: 0
Proposed: 2
http://www.iaea.or.at/programmes/a2/

Research Reactors
Operational: 3
Shut down: 0
Decommissioned: 2
Planned: 0
http://www.iaea.or.at/worldatom/rrdb/

Uranium Mines
No enrichment or reprocessing facilities.

Mine	Location	Status
Brevniste	North Bohemia	no information
Brzkov	West Moravia	closed
Brzkov deposit	West Moravia	exploration halted
Chotebor	Bohemia	no information
Dylen	Bohemia	reclamation ongoing
Hájek	Northwest	closed
Hamr mine	North Bohemia	closed
Horni Slavkov	Bohemia	reclamation complete
Jáchymov	Central Bohemia	closed
Jasenice	West Moravia	reclamation ongoing
Javornik-Zálesi	North Bohemia	no information
Krizany	North Bohemia	reclamation ongoing
Licomerice-Brezinka	South Moravia	reclamation complete
Okrouhlá Radoun	South Bohemia	reclamation complete
Olsi	West Moravia	reclamation complete
Predborice	North Bohemia	no information
Pribam	Bohemia	reclamation ongoing
Pucov	Moravia	reclamation complete
Rozná mine	West Moravia	operating
Slavkovice-Petrovice	Southeast	no information
Stáz pod Ralskem	North Bohemia	reclamation ongoing
Svatá Anna	Bohemia	no information
Vitkov	Central Bohemia	reclamation ongoing
Vnitrosudetská	North Moravia	no information
Zadni Chodov	West Bohemia	reclamation ongoing

2. Fissile Material Holdings

Unirradiated Civil Plutonium- 0
Irradiated Civil Plutonium- 5.6 tons
http://www.isis-online.org/global_stocks/plutonium_watch2004.html

Radioactive waste disposal
Low-level waste: In 1993 the former Czechoslovak Bohunice plant (currently Slovakia) ceased to accept spent fuel from the Dukovany plant. The same year, Russia decided it would only accept Czech's spent fuel for reprocessing and not disposal. A new interim storage facility will be constructed at the Dukovany site. The existing facility has a capacity of 600 tons, and the overall capacity should be sufficient to store all the spent fuel produced during the lifetime of the plant.
http://ceg.fsv.cvut.cz/EN/ceg-uvod/02_ukladani.htm
http://www.foratom.org/Content/Default.asp?PageID=705

High-level waste: Nuclear Research Institute is overseeing planning for a deep geological repository project to be operational in 2035. Several localities have been suggested to house both an underground repository and an underground laboratory; none of them has been selected yet.
http://ceg.fsv.cvut.cz/EN/ceg-uvod/02_ukladani.htm

3. Nuclear Activities

Research Centers
National Radiation Protection Institute
Nuclear Research Institute Rez
National Institute for Nuclear, Biological and Chemical Protection
Research Institute of Fuel and Energy Complex
Energoprojekt Praha, a.s.
Skoda - UJP Praha, a.s.
Nuclear Physics Institute (Academy of Sciences)
Institute of Plasma Physics
http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2002/index.htm
http://www.radwaste.org/research.htm

Nuclear Cooperation
US: Westinghouse company contracted to upgrade and complete two VVER-1000 units at Temelin, as well as supply plant information system to integrate maintenance, materials and documentation, management and operations support for 13 Czech nuclear and fossil-fueled power plants. The company also provides fuel for the Temelin plant; fuel is manufactured in the US, with Czech Skoda Plezn participating in fuel testing and development.

Russia: - Russian company Mashinostroyitelniy Zavod Electrosta supplies fuel for Dukovany plant.
- Agreement (1994) allows Russia to compete for contracts to supply enriched uranium and fabricated fuel for Czech nuclear power plants.
- Russia also provides uranium to Czech Republic, with exception of uranium used for the Dukovany plant. Russia also provides conversion, enrichment and fuel fabrication services.

UK: Enrichment and conversion services
http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2003/index.htm

Germany: Supplied fresh fuel for the Dukovany plant.

Canada: Starting in 1998, Cameco Corporation supplies uranium hexafluoride, produced at Cameco's facilities in Ontario, to Czech Republic.

EU: Czech Republic is part of the EU's Phare nuclear safety program, providing funding to update nuclear regulations and improve safety, as well as improve fuel cycle and waste management activities, and off-site emergency preparedness.
http://www.insc.anl.gov/neisb/neisb4/NEISB_4.2.html

4. International Non-proliferation Efforts

Treaties Signed and Ratified, date of deposit
APM Convention 26 October 1999
Biological Weapons Convention 29 September 1993
Certain Conventional Weapons Convention, signed 22 February 1993
Comprehensive Nuclear Test-Ban Treaty, 11 September 1997
Chemical Weapons Convention 6 March 1996
Nuclear Non-Proliferation Treaty, 9 April 1993
Outer Space Treaty, 29 September 1993
Sea Bed Treaty, 9 April 1993

Czech Republic ratified the IAEA Additional Protocol 8 Sept 2000.

Multilateral Groups
Hague Code of Conduct against Ballistic Missile Proliferation
Missile Technology Control Regime
Nuclear Suppliers Group
Proliferation Security Initiative
Wassenaar Arrangement
Zangger Committee

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

Disarmament: "The Czech Republic supports all international efforts in the field of disarmament, arms control, including verification of non-proliferation of weapons of mass destruction and their means of delivery. This process is a long-term priority of Czech foreign policy." - **Statement by Minister of Foreign Affairs Cyril Svoboda to the 58th Session of the General Assembly, 29 September 2003.**
http://www.un.org/webcast/ga/58/statements/czeceng030929.htm

Additional Protocol: "The Additional Protocol, which creates an integral part of the International Atomic Energy Agency safeguards system and strengthens the Nuclear Non-Proliferation Treaty, we consider to be a very important element of the verification system. That is why it is urgent for the States that have not entered into Safeguards Agreements with the International Atomic Energy Agency to do so and fulfill their obligations in accordance with Article III of the Nuclear Non-Proliferation Treaty. We are of the view that the Additional Protocol should be made the standard for all NPT Signatory States."- **Statement by Cyril Svoboda, Minister of Foreign Affairs to the 58th session of the General Assembly, 29 September 2003.**
http://www.un.org/webcast/ga/58/statements/czeceng030929.htm