

SWITZERLAND

1. LOCATION AND CAPABILITY OF NUCLEAR FACILITIES

Some 40% of the Swiss energy is generated from nuclear power; reactors required 596 tons of uranium in 2004.

In a 2003 referendum, the Swiss voters rejected two initiatives on a new 10-year moratorium on the construction of new nuclear power stations, “Moratorium plus” and a “Sortir du nucléaire”, a nuclear phase-out within 30 years. Thus, there will be no nuclear phase-out plan, but there are no plans for expansion either. The alternative law to the moratoriums doesn’t show any sign in favor of the construction of new nuclear units.

<http://www.world-nuclear.org/info/inf86.htm>

http://www.wise-paris.org/index.html?english/ournews/year_2003/ournews030612.html&english/frame/menu.html&english/frame/band.html

Power Reactors

Operational: 5

Shut down: 0

Decommissioned: 0

Planned: 0

<http://www.iaea.or.at/programmes/a2/>

Research Reactors

Operational: 3

Shut down: 2

Decommissioned: 1

Planned: 0

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

2. FISSILE MATERIAL HOLDINGS

Unirradiated Civil Plutonium

In country: 0.8 tons

In other countries: 0-2 tons

Three tons of plutonium in spent fuel or in separated form are located at foreign reprocessing plants, according to Switzerland’s declaration to the IAEA. At least one ton of this plutonium is estimated to remain in spent fuel, based on 2001 reprocessing schedules for Thorp and La Hague.

Separated Civil Plutonium

end 2002: 0.8-2.8 tons

2010-2020 (projected): 0

http://www.isis-online.org/global_stocks/separated_civil_pu.html

Radioactive waste disposal

Low- and intermediate-level waste: Two smaller interim storage sites for low- and intermediate-level wastes have been operating since 1993: Zwibez at Beznau and BZL at the Paul Scherrer Institute at Villigen. Plans are to develop a permanent low-level radioactive waste facility. The process is expected to start after the new legislation on nuclear energy enters into force and a site selection procedure is developed. <http://www.ocrwm.doe.gov/factsheets/doeymp0417.shtml>; <http://www.uic.com.au/nip86.htm>
<http://www.nea.fr/html/rwm/rf/switzerland.pdf>

High-level waste: In 2001, Zwiilag, an industry-owned organization, built Switzerland’s centralized interim storage facility for spent nuclear fuel, high-level radioactive waste and conditioning low-level radioactive waste at Wuerenlingen.

<http://www.ocrwm.doe.gov/factsheets/doeymp0417.shtml>

A permanent repository for the high-level and the long-lived intermediate level waste is planned. Two potential host rock formations, both in northern Switzerland, are being investigated for that purpose. The federal government is expected to take a decision around 2006 on the further procedure for the management of these wastes. <http://www.nea.fr/html/rwm/rf/switzerland.pdf>

3. NUCLEAR ACTIVITIES

Research Centers

ARAMIS: Swiss Research Information System

CERN: European Laboratory for Particle Physics

CUEPE: Centre Universitaire d'Étude des Problèmes de l'Énergie

EAWAG: Eidgenössische Anstalt für Wasserversorgung Abwasserreinigung und Gewässerschutz

EMPA: Eidgenössische Materialprüfungs und Forschungsanstalt

Environmental Radioactivity Centre

Grimsel Test Site

IGA: Institut de Génie Atomique

ISOLDE: Isotope Mass Separator

KBF: Coordination Office for Swiss Participation in International Research Projects

LES Waste Management Laboratory

PSI: Paul Scherrer Institute

RQF: Institut für Raum-Quanten-Forschung

SNF: Swiss National Science Foundation

Vision: Science & Innovation Made in Switzerland.

http://www.iaea.org/inis/ws/countries/switzerland_research_institutes.html#410

<http://www.radwaste.org/research.htm>

Nuclear Cooperation

France, Germany: Switzerland has well established bilateral relations with French and German authorities in the nuclear field. Within this framework, French and Swiss regulatory authorities have been collaborating in common inspections of their nuclear installations.

The Swiss authorities have been following the evolution of the international nuclear projects, in particular the MEGAPIE project, within the Fifth European Framework program, and have interest in joining the Generation IV Initiative.

http://www-pub.iaea.org/MTCD/publications/PDF/cnpp2003/CNPP_Webpage/PDF/2002/Documents/Documents/Switzerland%202002.pdf

4. INTERNATIONAL NON-PROLIFERATION EFFORTS

Treaties Signed and Ratified, date of deposit

APM Convention, 24 March 1998

Biological Weapons Convention, 4 May 1976

Certain Conventional Weapons Convention, 20 August 1982

Comprehensive Nuclear Test Ban Treaty, 1 October 1999

Chemical Weapons Convention, 10 March 1995

Nuclear Non-Proliferation Treaty, 9 March 1977

Outer Space Treaty, 18 December 1969

Sea Bed Treaty, 4 May 1976

Switzerland ratified the IAEA Additional Protocol 1 February 2005.

Multilateral Groups

Conference on Disarmament

Hague Code of Conduct against Ballistic Missile Proliferation

Missile Technology Control Regime

Nuclear Suppliers Group

Wassenaar Arrangement

Zangger Committee

5. POSITIONS TAKEN IN INTERNATIONAL FORA ON VARIOUS ISSUES OF NUCLEAR DISARMAMENT

Disarmament and vertical proliferation: “Nuclear Weapon States must multiply their efforts to reduce and eliminate these weapons completely (including the) implementation of measures which gradually reduce the role of the nuclear weapons in their strategies and military doctrines...the Nuclear Weapon States must cease their research and the development of new generations of nuclear weapons immediately.” - **Statement by Ambassador Christian Faessler to the 59th session of the General Assembly First Committee on Disarmament and International Security, 18 October 2004.**

<http://www.reachingcriticalwill.org/political/1com/1com04/thematic/Switzerland.PDF>

Universality: “The second most important measure is to increase our efforts to achieve the universalization of all agreements and treaties in the field of weapons of mass destruction. We call on those countries who have not yet done so to ratify without delay the Treaty on Nuclear Non-proliferation, the Comprehensive Nuclear Test-Ban Treaty, the Chemical Weapons Convention and the Convention banning biological weapons.”- **Statement by Ambassador Christian Faessler to the 59th session of the General Assembly First Committee on Disarmament and International Security, 5 October 2004.** <http://www.reachingcriticalwill.org/political/1com/1com04/statements/Switzerland.pdf>

Verification: “The recent discovery of a dangerous black market in nuclear technology does by no means diminish the importance of the existing system of safeguards of the IAEA. It is this system indeed which makes it possible to verify the peaceful nature of nuclear programmes, which is an essential aspect of nuclear non-proliferation. My country therefore calls on all States which have not yet done so to conclude without further delay full-scope agreements with the IAEA.” - **Statement by Mr. Andreas Friedrich to the Third Session of the Preparatory Committee to the 2005 NPT Review Conference, 3 March 2004.** <http://www.reachingcriticalwill.org/legal/npt/prepcom04/switzerlandCL2.pdf>