

US Nuclear Country Report

11/1/08

Power Reactors

Operational – 104, 69 PWRs, 35 BWRS producing 20% of US electricity

Shut Down – 28

Decommissioned – 10, 13 in process

Under Construction – 1

Planned – 25 units Combined Operation License Applications

Research Reactors

Operational – 32

Shut Down – 6

Decommissioned – 5

Under Construction – 0

Planned - 0

Fuel Cycle Facilities

Uranium Fuel Fabrication Facilities – 6

Uranium Hexafluoride Production (Conversion) Facility – 1

Gaseous Diffusion Enrichment Facilities – 2 (1 on cold standby)

Gas Centrifuge Enrichment Facilities – 2 under construction

Mixed Oxide Fuel Fabrication Facility – 1

Fuel Bank/Assured Fuel Supply

In general, the US favors strategies that would provide reliable, economical supplies of fuel for states adding new nuclear power generation and that receipt of this fuel comes with security and safeguards requirements that must be met and a requirement that suppliers take back spent fuel. The US has already committed \$50M for IAEA managed LEU Fuel Bank.

Challenges to the Global Nonproliferation Regime

- One of the biggest challenges comes from what to do with spent fuel since globally, no long-term spent fuel or nuclear waste repository exists.
- Not all suppliers are members of the Nuclear Suppliers Group.

Suggestions for Strengthening the Global Nonproliferation Regime

- IAEA controlled LEU fuel bank with fuel take-back provisions.
- Enrichment and reprocessing of civilian spent fuel should only be performed by multilateral partnerships under strict international safeguards.

Nuclear WMD Threat Perceptions.

There is still significant interest and activity in seeking to develop or acquire nuclear weapons by states and by terrorist groups in many areas of the world

Sources:

<http://www.iaea.org/cgi-bin/db.page.pl/pris.charts.htm>

<http://www.nrc.gov/reactors/power.html>

<http://www.nrc.gov/about-nrc/regulatory/decommissioning.html>

<http://www.state.gov/documents/organization/105587.pdf>