**RADIOACTIVE WASTE MANAGEMENT PROGRAMMES IN OECD/NEA**

**MEMBER COUNTRIES**

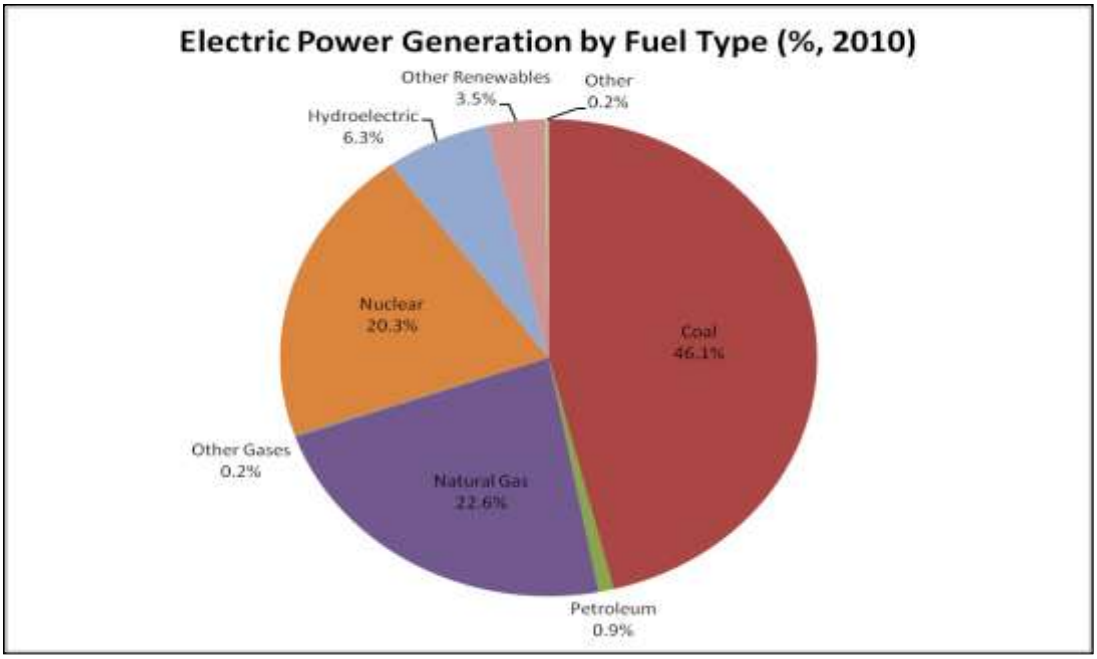
# UNITED STATES
# [2011]

## NATIONAL NUCLEAR ENERGY CONTEXT

Commercial utilisation of nuclear power in the U.S. started in 1960; as of 2010 there were 104 nuclear power units in operation. In 2010, these plants generated 803 TWh of electricity, about 20% of the total electricity generated in the U.S. that year. Globally, the U.S. reactor fleet generates about 30% of the world's nuclear electricity.

Nuclear fuel for these reactors is fabricated at four plants in the U.S., with total capacity of over approximately 3 000 tonnes heavy metal per year (tHM/yr) in 2010. The amount of spent fuel generated in 2010 was projected to be about 2 100 tonnes HM. By the end of 2010, the total amount of discharged spent fuel was about 65 000 tonnes HM, of which about 49 000 tonnes HM is in pool storage and the rest in at-reactor dry storage.

According to the U.S. Department of Energy's (DOE) Energy Information Administration's 2010 reference case, U.S. nuclear electricity generating capacity is expected to increase from 101 GWe in 2010 to approximately 111 GWe by 2035. This increase includes capacity expansion at existing plants (3.8 GWe), new plant capacity (5.2 GWe), and the retirement of one older unit by 2019 (0.6 GWe). The other existing units are expected to continue operating through 2035, based on the assumption that they will all receive 20-year reactor license renewals. Projected capacity may change significantly in the future. A total of 17 Combined Operating License (COL) applications, to build and operate new reactors were filed between 2007 and 2009. Following the submission of COL applications, no new Letters of Intent to file a COL were received by the U.S. Nuclear Regulatory Commission (NRC) in 2010. Nevertheless, the NRC expects to review three new applications in 2012. Between 2007 and 2016, the NRC expects to receive a total of 23 COL applications.




**Source: DOE/EIA, 2010**

## SOURCES, TYPES AND QUANTITIES OF WASTE

Radioactive waste is solid, liquid, sludge, or gaseous waste that contains radionuclides. The types of radioactive waste are broadly explained below.

### Spent nuclear fuel

Spent nuclear fuel (SNF) is fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated by reprocessing. SNF inventories from commercial nuclear power plants are growing at an annual rate of approximately 2 100 tonnes HM. By end-2010, approximately 65 000 tonnes HM of SNF has accumulated. Assuming that all 104 U.S. commercial reactors receive 20-year life extensions, it is projected that by the completion of the total life cycle of the current 104-reactor fleet, the total SNF inventory will be about 130 000 tonnes HM by the year 2055. This does not take into account any future new reactor build in the U.S. DOE also manages about 2 500 tonnes HM of unreprocessed spent nuclear fuel from defence-related activities.

### High-level radioactive waste

High-level radioactive waste (HLW) is the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations and other highly radioactive material that the NRC, consistent with existing law, determines by rule to require permanent isolation.

The DOE currently stores approximately 340 000 $m^3$ of highly radioactive waste in 230 large underground steel tanks. [An additional 4400 $m^3$ of calcine (granular solid) HLW is stored in bin sets.] Since the mid-1990s, DOE has been treating liquid and sludge tank HLW using the vitrification treatment method to immobilize (i.e. solidify) and place the HLW glass inside of stainless steel canisters for interim storage, pending final disposition.

By the end of May 2011, the DOE had produced over 3000 canisters of HLW glass. By approximately 2055, an estimated 22 500 to 36 000 canisters of vitrified HLW will have been produced and stored in the interim, pending final disposition.

**Low-level radioactive waste**

Low-level radioactive waste (LLW) is radioactive waste that is not high-level radioactive waste, spent nuclear fuel, transuranic waste, or certain types of by-product material. Low-level radioactive waste is generated from nuclear reactor operations, uranium enrichment processes, isotope production, medical procedures, nuclear medicine and research, and biotechnological research.

NRC regulations identify four classes of low-level radioactive waste (Class A, B, C, and Greater-than-Class C (GTCC)) on the basis of the concentrations of long-lived radionuclides and their shorter-lived precursors, and the concentration of shorter-lived radionuclides. The classification of the LLW determines applicable requirements on institutional controls, waste form, and disposal methods.

Low-level radioactive waste owned or generated by DOE is not subject to the NRC LLW classification system. DOE disposes of DOE-owned or generated LLW and certain other LLW generated by the Federal Government in accordance with applicable law and DOE directives. Under the Low-Level Radioactive Waste Policy Amendments Act of 1985, DOE is also responsible for the disposal of GTCC LLW that results from NRC or Agreement State-licenced activities. DOE is currently evaluating alternatives for disposal of GTCC LLW and issued a Draft Environmental Impact Statement (EIS) for the disposal of GTCC LLW and DOE GTCC-like radioactive waste in February 2011. DOE plans to issue a Final EIS in 2012.

As of the end of September 2010, a total of about 16 million $m^3$ of LLW and mixed LLW (MLLW) have been disposed of. Of this total, about 4.9 million $m^3$ of commercial LLW and MLLW have been disposed of at commercial disposal facilities (3 are currently operating, 1 under construction, and 3 are closed). The remaining 11 million $m^3$ of DOE-owned LLW and MLLW have been disposed of at DOE sites, with a majority of the volumes resulting from cleanup activities.

**Transuranic waste**

Transuranic (TRU) waste is a type of DOE waste which is contaminated with alpha-emitting radionuclides with half-lives greater than 20 years and concentrations greater than 100 nCi/g (3700 Bq/g). Transuranic waste is generated during reactor fuel assembly, weapons fabrication, and chemical processing operations. From March 1999 through May 2011, DOE has disposed of over 74 500 $m^3$ of defence-related TRU wastes at the Waste Isolation Pilot Plant (WIPP) in New Mexico.

**Mixed waste**

Mixed low-level waste is waste that contains radioactive constituents under the purview of the *Atomic Energy Act* and other constituents that are hazardous as defined and regulated by the *Resource Conservation and Recovery Act*. Many government-owned transuranic and low-level waste streams are mixed wastes because of their hazardous components.

The types and amounts of radioactive waste are summarised in the table below:

| Radioactive waste | Description | Quantity |
|---|---|---|
| Spent fuel | Cumulative quantity discharged (as of end-2010) | 65 000 tonnes HM |
| High-level radioactive waste | Total liquid waste stored in 230 large underground tanks | 350 000 $m^3$ |
| | Total number of vitrified canisters (as of April 30, 2009) | 2 820 canisters |
| | Total number of canisters to be produced (by 2050) | 22 500 canisters (up to 36 000) |
| Transuranic waste | | |
| | Total disposed of (1999 – May 2, 2011) | 74 500 $m^3$ |
| Government-owned low-level and mixed low-level waste | Total in stored inventory | About 97 000 $m^3$ |
| | Total disposed of (as of 2010) including waste derived from cleanup sites | About 11 million $m^3$ |

## RADIOACTIVE WASTE MANAGEMENT POLICIES AND PROGRAMMES

### WASTE management policies

The primary objective of radioactive waste management policy in the United States is to provide for the management, treatment, storage, transportation, and ultimate disposal of radioactive wastes generated during past and future activities in a manner that assures public and worker health and safety, and protects the environment.

### PROGRAMMES and projects

#### Commercial spent nuclear fuel and high-level radioactive waste

Storage of commercial SNF and HLW is the responsibility of the waste generator until the Federal government takes title. At nuclear reactor sites, spent nuclear fuel is temporarily stored in specially designed, water-filled pools and aboveground, dry storage facilities.

The *Nuclear Waste Policy Act* of 1982 (NWPA) established the Federal government's responsibility to provide for the permanent disposal of commercial spent nuclear fuel in a geologic repository, and designated the DOE Office of Civilian Radioactive Waste Management (DOE-OCRWM) to manage the program. The NWPA also assigned roles to the U.S. Environmental Protection Agency (EPA) (public health and environmental standards) and NRC (licensing). The President subsequently determined in 1985 that a separate repository for disposal of defence spent nuclear fuel and high-level waste was not necessary, and decided that these wastes would be disposed in the commercial repository. The waste

generators and owners fund the commercial portion of the system through a fee on the commercial generation of nuclear power. The portion of the cost for the disposal of waste generated or owned by the Federal government is paid for by the government.

In response to the NWPA, DOE-OCRWM undertook an intensive national screening process for candidate sites for the geologic repository for the nation's SNF and HLW. Between 1983 and 1986, DOE narrowed the number of potential sites for consideration from nine to three. In 1987, Congress directed DOE to discontinue studying the other sites, and to study the volcanic tuff site at Yucca Mountain, Nevada exclusively to determine its suitability as a potential repository. The strategy for evaluating Yucca Mountain relied on engineered barriers, geologic features, and natural processes to delay and minimize the release of radionuclides to the environment and minimize exposure to the public.

In 2002, after more than 20 years of site characterization activities at Yucca Mountain, the site was approved by the U.S. President after a joint resolution was passed by Congress for development of a repository. DOE submitted the license application (LA) to the NRC on June 3, 2008, and it was docketed on September 8, 2008. The NRC was provided a 3 to 4 year review period before making its decision whether to grant a license to authorize construction of a repository. In 2009, the Administration announced its intention to terminate the Yucca Mountain program and to convene a "blue ribbon" panel of experts to evaluate alternative approaches for meeting the Federal responsibility to manage and ultimately dispose of spent nuclear fuel and high-level radioactive waste from both commercial and defense activities.

The President's Budget Request to Congress for FY 2011 included a new U.S. policy "…the Administration determined that developing a repository at Yucca Mountain Nevada is not a workable option and has decided to terminate the Office of Civilian Radioactive Waste Management. The Nation needs a different solution for nuclear waste disposal." The Department of Energy filed a motion with the NRC on March 3, 2010 to withdraw the license application for a high-level nuclear waste repository at Yucca Mountain. NRC's Atomic Safety and Licensing Board rejected DOE's motion to withdraw in June 2010, but NRC continues to review this decision. Other suits to prevent DOE from withdrawing the license application were filed in the U.S. Court of Appeals, but were dismissed in July 2011. Subsequently, an additional suit was filed in the U.S. Court of Appeals to compel the NRC to act on its review of the DOE motion to withdraw the license application. The U.S. National program direction is expected to be further clarified when NRC and the U.S. Courts reach decisions.

The Secretary of Energy established a Blue Ribbon Commission on America's Nuclear Future in January 2010 to evaluate alternative approaches for managing spent (used) nuclear fuel and HLW from commercial and defense activities. In 2011, the Administration closed the Yucca Mountain Project and the Office of Civilian Radioactive Waste Management (OCRWM). Related activities that were performed by OCRWM are now being performed elsewhere in the Department. DOE continues to support research and technology development for long-term solutions and for storage, transportation, and disposal of spent nuclear fuel and wastes generated by existing and future nuclear fuel cycles.

The DOE Office of Nuclear Energy (NE) will lead used nuclear fuel activities previously performed by the Office of Civilian Radioactive Waste Management. Within NE, the Used Nuclear Fuel Disposition Research and Development Office (UFD) will develop and execute a research and development (R&D) program that will address critical scientific and technical issues associated with the long-term management of used nuclear fuel. The UFD office will focus on sustainable fuel cycle options and technologies that minimize waste generation, improve safety, and complement institutional measures in limiting proliferation risk. In addition, fuel cycle alternatives will be studied within the following components: separations

alternatives, used fuel disposition (evaluation of fuel degradation effects over long-time storage periods), and fuel cycle system evaluations (addressing the open, modified open, and closed fuel cycle options). The UFD will identify alternatives and conduct scientific research and technology development to enable storage, transportation, and disposal of used nuclear fuel and wastes generated by existing and future nuclear fuel cycles. The UFD office is also participating in international and bilateral activities, in order to provide the U.S. with an understanding of the fuel cycle activities of other countries, and allow the staff to leverage the expertise and technical assessments for different geologic media and waste forms.

The Blue Ribbon Commission will conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle. It will also provide recommendations for "…developing a safe long-term solution to managing the Nation's used nuclear fuel and nuclear waste." The Commission released a draft report in July, 2011 which included a preliminary set of recommendations on a new strategy, and will produce a final report to the Secretary of Energy by January 2012.[1]

**DOE spent nuclear fuel**

Historically, spent nuclear fuel generated by the DOE was stored for a short time and reprocessed to recover fissile materials. In April 1992, the United States phased out reprocessing for defence purposes. Most of the DOE's inventory of spent nuclear fuel, about 2 500 tonnes HM, is stored at three sites. These are the Hanford Reservation, Washington; the Idaho National Laboratory (INL), Idaho; and the Savannah River Site, South Carolina.

**Foreign research reactor spent nuclear fuel**

In the late 1950s, the U.S. began taking back foreign research reactor spent fuel containing U.S.-supplied enriched uranium. Since 1996, DOE has implemented the current version of this policy through a program to return eligible U.S.-origin fresh and spent nuclear fuel from countries around the world to the U.S. for secure storage and disposition. In 2004, DOE approved a ten-year extension of the program. Currently, the U.S. will accept eligible spent fuel that is irradiated by May 2016 and returned to the U.S. by May 2019. The program includes spent fuel from both the Materials Test Reactors (MTR) and Training, Research, Isotope, General Atomics (TRIGA) research reactors. DOE has completed more than 50 shipments of U.S.- origin spent fuel from 28 countries.

**Transuranic waste**

DOE TRU waste is stored either at the waste generating facility or at a designated DOE storage facility. Storage methods include retrievable burial, below-ground bunkers, concrete caissons, above-ground concrete pads, and inside buildings.

In 1979, Congress authorised construction of the Waste Isolation Pilot Plant (WIPP), a facility for the safe disposal of defence-related transuranic waste resulting from atomic energy defence activities. WIPP, located in the New Mexico desert, is designed to store transuranic waste in salt deposits approximately 650 m beneath the desert surface. WIPP is managed by the DOE Office of Environmental Management (DOE-EM). After 20 years of scientific study, public input, and regulatory challenges, WIPP began operations in March 1999; it was recertified in 2006 and again in 2010 as having met environmental standards. In November 2010, EPA officially recertified that WIPP continues to comply with EPA standards and is authorized to continue operating. The next recertification application will be submitted in

[1] See http://www.brc.gov.

2014. In addition, the State of New Mexico renewed permits for hazardous waste management for another 10 years. Over a 35-year period, WIPP is expected to receive about 19 500 shipments of transuranic waste. As of May 2011, WIPP had received over 9 500 shipments from eight DOE sites, comprising over 74 500 $m^3$ of contact-handled transuranic waste. In January 2007, DOE received approval to dispose of waste that is more highly radioactive, requiring remote (automated) handling. As of May 2011, DOE has disposed of 244 $m^3$ of remote-handled waste.

**Low-level waste**

Low-level waste ranges from low activity waste that can be disposed of by shallow land disposal techniques to high-activity waste that requires greater confinement. Generators usually store the wastes onsite for short time periods, e.g. for a few weeks to a few months, until enough waste is available for a full shipment to a disposal site.

The *Low-level Radioactive Waste Policy Amendments Act* of 1985 (LLRWPAA) gave each state responsibility for the disposal of Class A, B, and C LLW generated with the state (except for certain waste generated by the Federal government) and authorized the states to enter into compacts for the establishment and operation of regional LLW disposal facilities.

There are currently three commercial low-level waste disposal facilities in the United States that accept various types of LLW, and a fourth commercial facility is under construction. All are in NRC Agreement States. One of the three operating LLW disposal sites for commercial LLW in the U.S., the Barnwell facility in South Carolina, closed to out-of-compact waste in June 2008.

DOE is responsible for the disposal of LLW it owns and generates. DOE currently operates LLW disposal facilities at six sites. DOE policy is to dispose of radioactive waste at the site where it is generated, if practical, or at another DOE site. If disposal at a DOE facility is not practical or cost effective, DOE may also utilize commercial disposal facilities.

Under the LLRWPAA, DOE is also responsible for the disposal of GTCC low-level radioactive waste, that results from NRC or Agreement-state licenced activities. In February 2011, DOE issued a draft EIS for the disposal of GTCC LLW and DOE GTCC-like wastes. DOE plans to issue a final EIS in 2012. The EIS evaluates four disposal technologies: geologic repository, intermediate-depth borehole, enhanced near-surface trench, and above-grade vault.

**RESEARCH and development**

Both industry and the Federal government conduct research and development to understand and improve waste management science and technology. Work in association with WIPP and new disposal options is conducted by the DOE through several national laboratories, the United States Geological Survey (USGS), and private sector contractors. Scientific and engineering activities continue at WIPP, focused on performance confirmation, monitoring, and waste characterisation.

Site characterisation activities were conducted through the 1970s, 1980s, and 1990s in support of the certification of WIPP and of site designation of Yucca Mountain. In light of the current situation in the U.S. on radioactive waste management, the primary objective of all of the repository science technical work is to continue R&D activities initiated under the Yucca Mountain program that are relevant to the new used fuel disposition campaign, administered by the Office of Nuclear Energy. The main objective in this R&D is to develop a suite of options that will enable future decision makers to make informed choices about how best to manage the used fuel from reactors. This R&D will be performed on functions in

storage, transportation, and disposal, including research in a variety of geologic environments. An additional objective is the demonstration of technologies necessary to allow commercial deployment of solutions for the sustainable management of used nuclear fuel that is safe, economic, and secure.

As part of its responsibility to clean up 114 geographic sites around the U.S. of radioactive and chemically hazardous wastes, DOE-EM in 2002 completed a comprehensive review to find greater efficiencies and cost effectiveness in its cleanup programmes, emphasising risk reduction to workers, the public, and the environment. Cleanup schedules at virtually all the contaminated DOE facilities have been revisited and accelerated after working with local regulatory agencies and citizens. As of September 2010, DOE has 18 remaining geographic sites to clean up.

## DECOMMISSIONING AND DISMANTLING POLICIES AND PROJECTS

Over the last 40 years, operations at licensed nuclear facilities have caused radiological contamination at a number of sites. This contamination must be reduced or stabilised in a timely and efficient manner to ensure protection of the public and the environment before the sites can be released and the licence terminated. NRC has regulatory and oversight authority for decommissioning activities, which involve removing NRC-licensed facilities safely from service and reducing residual radioactivity to a level that permits the properties to be released for unrestricted or restricted use. This action is taken by a licensee before termination of the licence. In other cases, non-NRC licensed facilities may also be required to decontaminate and decommission the site in order to meet NRC release limits. This activity includes associated research, rulemaking efforts, and the technical interface with EPA for resolution of issues of mutual interest, in accordance with the March 1992 and October 2002 Memoranda of Understanding.

## TRANSPORT

The Federal government and the states have a joint role in ensuring the safety of transport of radioactive materials. At the Federal level, the NRC and the Department of Transportation (DOT) have primary responsibility for the regulation of commercial radioactive material transportation. The NRC regulates the packaging, preparation, and transfer of commercial nuclear materials, while the DOT has regulatory authority over the commercial transportation of all hazardous materials, including radioactive material. Among its responsibilities, the DOT approves highway routing of nuclear materials. In addition, the DOE has authority to regulate all aspects of activities involving radioactive materials undertaken by DOE or on its behalf. DOE exercises this authority to regulate certain DOE shipments, such as shipments undertaken by government employees or shipments involving special circumstances. In most cases that do not involve national security, DOE utilizes commercial carriers that undertake DOE shipments under the same terms and conditions as commercial shipments. These shipments are subject to regulation by DOT, NRC and other entities as appropriate. Also, the Department of Homeland Security (DHS) has an oversight role regarding the security and safeguards of nuclear materials.

State, local, and tribal governments also participate in the regulation of nuclear material transportation, such as through their law enforcement and emergency-response agencies.

Transportation of commercial low-level waste is the responsibility of the commercial waste generator. These wastes are usually transported by truck under contract with commercial carriers using equipment that meets NRC and DOT regulations.

Since the 1960's, more than 3 000 spent nuclear fuel shipments have been made within the U.S. without any release of radioactive material, including the current program to remove eligible spent nuclear fuel from foreign research reactors discussed above. More than 9 000 shipments of transuranic wastes have also been made to the WIPP site since 1999. In addition, the DOE makes thousands of low-level waste shipments a year to its disposal sites.

## COMPETENT AUTHORITIES

Various Federal agencies are responsible for radioactive waste management, as described below:

The **Department of Energy (DOE)** is responsible for the management and disposal of radioactive waste it owns or generates and for regulating DOE radioactive waste disposal facilities except as otherwise provided by law. Under the NWPA, DOE is also responsible for the disposal of SNF and HLW generated by commercial activities. The **DOE Office of Civilian Radioactive Waste Management (DOE-OCRWM),** which previously had specific responsibility to provide for the permanent disposal of the spent nuclear fuel and high-level radioactive waste no longer exists; related activities that were performed by OCRWM are now being performed elsewhere in the Department, including the **Office of Nuclear Energy**. The **DOE Office of Environmental Management (DOE-EM**) has responsibility for cleanup of the DOE weapons production and nuclear research sites across the U.S., and also manages the nuclear materials on those sites until they are ready for disposition. The Department also has regulatory authority over health, safety, and environmental protection regarding radioactive waste generated at its facilities.

The **Nuclear Regulatory Commission (NRC)** regulates the storage and disposal of commercial nuclear waste, as well as the packaging aspects of the transport casks. The NRC safety role is to ensure that the spent fuel packages and waste facilities meet strict regulatory design rules, and includes approving packaging designs and Quality Assurance Programmes. The NRC is responsible for setting technical standards and criteria, and for implementing overall offsite release standards set by the Environmental Protection Agency.

The **Environmental Protection Agency (EPA)** promulgates applicable standards for protection of the general environment from offsite releases of radioactive material in repositories, including the proposed repository at Yucca Mountain in Nevada and the Waste Isolation Pilot Plant in New Mexico.

The **Department of Transportation (DOT)** has authority to regulate commercial transportation of all hazardous materials, including radioactive materials.

The **Nuclear Waste Technical Review Board (NWTRB)** was established by Congress to provide independent oversight of the activities of OCRWM in its efforts to develop a national geologic repository.

The **Defense Nuclear Facilities Safety Board (DNFSB)** was also established by Congress to provide safety oversight of the nuclear weapons complex operated by the DOE.

The **Blue Ribbon Commission on America's Nuclear Future (BRC)** was established by the Secretary of Energy to provide advice, evaluate alternatives, and make recommendations for a new plan to address issues on alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel, high-level waste, and materials derived from nuclear activities.

## FINANCING

### Costs of radioactive waste programmes

Congress appropriates funds for the Department of Energy waste management programmes. These appropriations are made in two accounts: Nuclear Waste Disposal and Defence Nuclear Waste Disposal.

### Spent nuclear fuel and high-level radioactive waste

Under the *Nuclear Waste Policy Act*, as amended, the civilian portion of the radioactive waste management programme must be funded by the waste generators and owners through a fee on the commercial generation of nuclear power. This fee, which is assessed at 1/10 US-cent per kilowatt-hour (KWh), is deposited in the Nuclear Waste Fund to be used for waste management. Utility fees and investment income together amounted to approximately US$1.8-billion in fiscal year 2010. The U.S. Congress makes an annual appropriation from the Nuclear Waste Fund, plus a separate annual appropriation to cover disposal costs for defence SNF and HLW. Since the Fund's inception in 1983, it has accumulated over US$33.1-billion and expended approximately US$7.6-billion, leaving a net balance by September 2010 of approximately US$ 25.5-billion.

### Low-level waste

States can assess user fees from waste generators for access to the existing three commercial LLW disposal facilities. Each generator of commercial LLW provides the funds for radioactive waste storage from its operating budget. Disposal site operators levy fees on waste generators upon receipt of the wastes for disposal. The initial cost for developing low-level waste disposal facilities is paid by waste generators, or through some type of assessment or tax fee imposed by the state or compact region.

## PUBLIC INFORMATION

The following sources of information on radioactive waste management are available:

### Government

**Department of Energy**
Washington, DC

- **Department of Energy**
  Website: http://www.energy.gov

- **Office of Environmental Management**
  Website: http://www.em.doe.gov

- **Office of Nuclear Energy**
  Website: http://www.ne.doe.gov

**Nuclear Regulatory Commission**
Washington, DC
Website: http://www.nrc.gov

**Environmental Protection Agency**
Washington, DC
Website: http://www.epa.gov

### Oversight Organisations

**Nuclear Waste Technical Review Board**
Washington, DC
Website: http://www.nwtrb.gov

**Defense Nuclear Facilities Safety Board**
Washington, DC
Website: http://www.dnfsb.gov

**Blue Ribbon Commission on America's Nuclear Future**
Washington, DC
Website: http://www.brc.gov

### Industry

**Nuclear Energy Institute**
(The Nuclear Energy Institute is the nuclear energy industry's Washington-based policy organisation.)
Washington, DC
Website: http://www.nei.org