



RIC 2015

FACTOID SLIDESHOW



The first Chairman of the NRC, Major General William A. Anders, USAFR (Retired), was the lunar module pilot for Apollo 8, the first lunar orbit mission in December 1968.



To help the NRC stay current, the agency sponsors an Advisory Committee on the Medical Uses of Isotopes (ACMUI). This expert committee includes scientists, physicians, and other health care professionals. ACMUI members serve four year terms.



To monitor the manufacture, distribution, and ownership of the most high-risk sources, the NRC set up a National Source Tracking System (NSTS) in January 2009. The NSTS tracks more than 80,000 high risk sources held by about 1,400 NRC and Agreement State licensees.



August 8-20, 1955 - Geneva, Switzerland, hosts the first United Nations International Conference on the Peaceful Uses of Atomic Energy.



Vogtle Unit 3 CA20 module was successfully placed on March 8, 2014. The 1100 ton CA20 module is more than 5 stories tall, will house various plant components, including the spent fuel storage pool.



There are currently 437 operating reactors worldwide. United States (99 reactors) is the country with the most operating reactors followed by France (58 reactors).



Brachytherapy treatments use sealed radioactive sources placed near or even directly in cancerous tissue. The radiation dose is delivered at a distance of up to an inch from the target area.



The NRC and Agreement States license about 50 large commercial irradiators.



1986 - The first dry storage installation was licensed by the NRC in 1986 at the Surry Nuclear Power Plant in Virginia.



The Office of Nuclear Material Safety and Safeguards (NMSS) approved 63 sealed source and device registrations in Fiscal Year 2013.



Commercial irradiators expose products such as food, spices, medical supplies, and wood flooring to gamma radiation. This process can be used to eliminate harmful bacteria, germs, and insects or for hardening or other purposes.



The NRC regulates only the use of radioactive material, which is why the NRC does not regulate X-ray machines or other devices that produce radiation without using radioactive materials.



There are 11 uranium recovery facilities in safe storage under NRC jurisdiction, which are in various stages of decommissioning.



September 2, 1957 - The Price-Anderson Act provides financial protection to the public and AEC licensees and contractors if a major accident occurs at a nuclear power plant.



- The first nuclear island concrete placement for Vogtle Unit 3 was completed on 3/14/2013. A total of 6,871 cubic yards of concrete were placed in a 41 hour continuous pour.
- The first nuclear island concrete placement for Vogtle Unit 4 was completed on 11/21/2013. Approximately 7,000 cubic yards of concrete were placed in 40 hours and 46 minutes.



NTEU Chapter 208 of the National Treasury Employees Union, which represents NRC employees, was organized in 1938 and now represents over 150,000 employees in 31 Federal agencies.



The NRC works with its Agreement States, other Federal agencies, the IAEA, and licensees to protect radioactive materials from theft or diversion.



By the end of 2014, 31 nuclear power reactors in U.S. had been operating more than 40 years.



April 7, 1977 - President Jimmy Carter announces the United States will defer indefinitely plans for reprocessing spent nuclear fuel.



There are currently 71 reactors under construction worldwide. China (25 reactors) is the country with the most reactors under construction followed by Russia (9 reactors) and India (6 reactors).



About 3 million packages of radioactive materials are shipped each year in the United States by road, rail, air, or water. This represents less than 1 percent of the Nation's yearly hazardous material shipments.



- The first nuclear island concrete placement for VC Summer Unit 2 was completed on 3/11/2013. Approximately 7,000 cubic yards of concrete were placed in a 51.5 hour continuous pour.
- The first nuclear concrete placement for VC Summer Unit 3 was completed on 11/4/2013. The placement took 42 hours.



The NRC and Agreement States review the facilities, personnel, program controls, and equipment involved in using radioactive materials in medical, industrial, and academic settings. These reviews ensure the safety of the public, patients, and workers who might be exposed to radiation from those materials.



August 1, 1946 - The Atomic Energy Act of 1946 creates the Atomic Energy Commission (AEC) to control nuclear energy development and explore peaceful uses of nuclear energy. The AEC is the forerunner to the NRC and the Department of Energy (DOE) today.



Vogtle Unit 3 - Containment Vessel Ring 1 was successfully placed on October 3, 2014. Standing 51' tall and weighing approximately 950 tons, this was one of the largest lifts of the project.



Contrary to published reports, the Windscale reactor accident of 1957 did not involve a “graphite fire.” Photographs taken during recent Windscale decommissioning activities show that the core graphite is largely still in place. The reactor fire was in fact driven and fueled predominantly by the burning of metallic fuel elements.



In 1983 - Nuclear power generates more electricity than natural gas for the first time in the U.S. and was second only to coal in electrical production at that time.



Thirty of the 50 States have nuclear power plants that generate electricity.



1990 - America's 110 nuclear power plants set a record for the amount of electricity generated, (historical note: this is the largest number of U.S. plants achieved so far). With the recent shutdown of Vermont Yankee, there are now 99 units operating in the U.S. as of January 2015.



The NRC and the U.S. Department of Transportation (DOT) share responsibility for regulating the safety of radioactive material shipments.



1996 - The final NRC license of the “first era” of US commercial nuclear power is issued to Watts Bar Unit 1. NOTE: Watts Bar Unit 2 is now undergoing license review and the NRC staff is working towards supporting an operating license decision in 2015. See more about Watts Bar Unit 2 reactivation and licensing at:

<http://www.nrc.gov/info-finder/reactor/wb/watts-bar.html>



The NRC's main Twitter account, which opened in August 2011, has more than 5900 followers.



The most highly viewed blog to date, published in May 2011, is “Putting the Axe to the Scram Myth,” with more than 10,600 views.



In 1971 - Twenty-two commercial nuclear power plants are in full operation in the U. S. They produce 2.4 percent of U.S. electricity at this time.



After only five months, the NRC Facebook page achieved more than 1,100 likes.



75 power reactors have successfully completed license renewal as of 2014.



Viewers have spent more than 156,000 minutes watching the NRC's YouTube Videos.



December 22, 1987 - The Nuclear Waste Policy Act (NWPA) is amended. Congress directs the Department of Energy (DOE) to study only the potential of the Yucca Mountain, Nevada, site for disposal of high-level radioactive waste.



The Office of Nuclear Regulatory Research (RES) has implemented over 100 bilateral or multilateral agreements with regulators and research organizations in over 30 countries. These agreements enable the NRC to collaborate with international partners, to identify and resolve safety issues, and to support nuclear safety worldwide.



The NRC's Chapter 208 of the National Treasury Employees Union has had only four Presidents since organizing in 1978; three of whom still work at the NRC.



Chicago Pile-1 was the first nuclear reactor in the world to achieve a stable, self-sustaining nuclear chain reaction on December 2, 1942, and led to the development of nuclear power as a viable energy source. It consisted of a large pile of uranium and graphite blocks and was part of the wider Manhattan Project.



The US Aircraft Reactor Experiment (ARE) was the first Molten Salt Reactor. It was built in 1954 to power strategic bombers.



By the start of 2020, 93 power reactors will have operated for greater than 30 years, 49 of those power reactors will have operated for greater than 40 years, and the average operating age of U.S nuclear power reactors will be 39.5 years.



August 24, 1992 - Hurricane Andrew directly passes over Turkey Point Nuclear Plant south of Miami, FL. Very limited damage to the safety-related portions of the plant occurred and both nuclear units were able to return to service and continue to operate safely today.



In a Molten Salt Reactor, Thorium-232 can be used as a fuel source by breeding it into Uranium-233. Thorium is a waste product from the mining of industrially important rare-earth elements. It is four times as plentiful as Uranium and does not require enrichment.



Fort Saint Vrain (FSV) was a helium-cooled High Temperature Gas Reactor (HTGR) that operated in Colorado from 1979 until 1989. It was fueled with microspheres containing a combination of fissile Uranium-235 and fertile Thorium-232. The fissile U-235 bred the fertile Th-232 into fissile U-233.



RII is responsible for inspection at construction sites which are licensed in accordance with 3 different regulations: 10 CFR Part 50 (Watts Bar), 10 CFR Part 52 (Vogtle and VC Summer) and 10 CFR Part 70 (MOX and LES).



Dresden Unit 1 was the first commercial nuclear power plant to operate in the country. Its Operating License was issued September 28, 1959; it first went critical in October 1959 and went into commercial operation in October 1960.



1989 - One hundred and nine nuclear power plants provide 19 percent of the electricity used in the U.S.; 46 units entered service during the decade of the 1980's.