

TURKEY POINT'S TROUBLED HISTORY

Sources include public material from newspapers, NRC filings, and court filings.

- 1972** The power plant begins commercial operation. The total cost is \$235 million.
- 1974** First problems detected in steam generators. FPL sues Westinghouse for more than the cost of repairs and loses, appeals and loses, takes case to FL Supreme Court and loses.
- 1975** 880 gallons of radioactive wastewater stored in 55 gallon drums is inadvertently pumped into a storm drain from the Unit 4 Cask Wash Area.
2960 gallons of radioactive water in Unit 4 Spent Fuel Pit leaks through a concrete wall into the ground.
- 1978** Unit 4 Spent Fuel Pit Cooling Pump seal failed causing ~150 gallons of radioactive water to spill out to a paved area.
- 1979** Unit 3 Refueling Water Storage Tank leaks ~25 gallons of radioactive water into the soil.
Unit 4 Refueling Water Storage Tank valve misalignment causes Spent Fuel Pit to fill and overflow ~3000 gallons of radioactive water onto the ground.
- 1981** FPL fined \$40,000 after operator is discovered away from controls of one unit.
- 1982** ~600 gallons radioactive water spilled from the B Monitor tank and potentially to the storm drain system.
FPL gets NRC permission to cover 10,000 square feet of radioactive ground with 5.5 ft of earth.
- 1983** FPL fined \$100,000 failure to properly maintain the backup water pumps.
NRC drops \$40,000 fine for 2 workers exposed to radiation.
- 1984** FPL fined \$150,000 for allowing failure of the backup cooling water pumps and violations of rules on electrical design changes. FPL's profits are \$300 million this year.
- 1985** FPL fined \$100,000 for the improper safety margins & open valves in spent fuel pool.
FPL fined \$25,000 for leaving core cooling water line closed for 5 days.
- 1986** FPL fined \$25,000 for allowing worker to enter high radiation area.
FPL fined \$300,000 because the core cooling water system is not fully operable. NRC staff finds violations of six main areas of FPL 's operation of the backup cooling water system, which is designed to keep the reactor core from melting if the primary system should fail. The violations include inadequate control of design modifications, failure to properly evaluate the safety consequences of design changes, inadequate procedures for documenting safety regulations, poor management oversight and failure to promptly correct problems with the cooling water systems, failure to shut down the plant within 72 hours, as required, when tests showed three valves weren't in proper condition.
FPL spokesman says *"We think Turkey Point is on the road to improvement."*
FPL fined \$50,000 for conducting improper tests of accident systems and not conducting startup tests.
The reactor is tripped manually following a loss of turbine governor oil system pressure and the subsequent rapid electrical load decrease. Control rods fail to insert automatically because of two cold solder joints in the power mismatch circuit. During the transient, a power-operated relief valve opens but fails to close. NRC report 12/27/86
- 1987** FPL fined \$75,000 for inadequate security during refueling.
FPL fined \$75,000 for sleeping security guards and failure to escort visitors.
FPL fined \$225,000 for improper operation and maintenance of backup reactor cooling systems.
FPL fined \$100,000 for failing to correct leak leading to corrosion and build-up of 550 pounds of boric acid crystals on reactor head. Steam leak resulting from poorly fit clamp had been observed and ignored.
NRC ponders fine after unlicensed technician allowed to operate reactor.
Turkey Point goes on the NRC's "Watch List" of troubled plants.
- 1988** FPL fined \$150,000 for security violations at Turkey Point.
Unit 4 Spent Fuel Pit Cooling Pump leaked again spilling ~1460 gallons of radioactive water.
The NRC threatens to close the nuclear reactors at Turkey Point.
- 1989** Eleven of 24 reactor operators fail requalification exams. One unit shut down for lack of operators.
FPL fined \$100,000 for security violations.
Leak found in weld of instrument tube in reactor core.
FPL gets serious and invests money to address the problems. The next 15 years are relatively quiet.
- 1990** Turkey Point goes off the NRC "Watch List." Both units set a record for length of operation before scheduled shutdown at the end of the year.
- 1996** FPL fined \$100,000 by NRC for firing an employee who reported safety concerns. However, between 1988 and 2003, over a dozen employees file retaliation cases against FPL under the ERA.

- 2002** NRC extends Turkey Point's 40-year licenses for another 20 years. Licenses set to expire in 2012 and 2013 will expire in 2032 & 2033.
- 2003** Unknown amount of radioactive water leaked from a temporary pump to the ground.
Radioactive tritium at 10-30X background level is detected by FIU and UM scientists in well 1 mile inland of Turkey Point. This level of tritium is not a danger itself, but indicates saltwater intrusion of aquifer from Turkey Point cooling canals.
- 2004** FPL profits rise 12%.
- 2005** Valve was left partially opened spills radioactive water (~5 gal?) at Unit 4 Tendon Gallery.
Turkey Point reactor is taken off-line after a transformer catches fire outside the reactor building.
- 2006** Turkey Point cited by NRC for failure to adequately assess and manage the increase in risk before performing maintenance on the A-train 480-volt 3C load center.
NRC issues Notice of Violation for 2 year malfunction of feedwater pump caused by improper installation.
Although NRC regulations require supervision of all visitors and contractors on a nuclear site, an unsupervised contractor drills hole in pipe in retaliation over payment issue. FPL charges customers for \$6.2 million in lost revenue while plant is repaired. State orders FPL to return the money to its customers.
- 2007** Senior licensed nuclear plant operator David Hoffman resigns rather than follow FPL orders to restart Turkey Point plants prior to completing NRC-mandated safety checks after emergency shut-down.
FPL announces plans for 2 new reactors at Turkey Point.
- 2008** NRC fines FPL \$208,000 after two security guards found to have disabled their weapons.
NRC objects that Turkey Point is seriously understaffed, with plant operators working overtime, up to 72 hours/week.
NRC fines FPL \$130,000 after security guards are found to be napping on the job and covering for each other.
Turkey Point reactor taken off-line to repair leak caused by structural weld crack.
FPL conducts anonymous survey of Turkey Point Employee Concerns Program (ECP).
In the report: 29% disagreed with the statement: *"I am confident that nuclear safety and quality issues reported through the ECP are thoroughly investigated and appropriately resolved."*
35% disagreed with the statement: *"I can use the ECP without fear of retaliation."*
Narrative of employee interviews reads: *"A lot said that there is retaliation for using ECP."*
The lead author of the report, a licensed plant operator at Turkey Point, was fired after submitting the report to the NRC but won a court settlement against FPL. A respected professional, he now works for a different utility.
Chairman of NRC visits Turkey Point because of chronic safety violations.
- 2009** NRC tightens overtime rules after chronic abuses by FPL.
Turkey Point unit 3 shut down to repair steam leak.
Control rods jam while refueling Turkey Point unit 3, forcing extended shut-down for repairs.
20 plant operators sue FPL for covering overtime with long-term retention bonuses rather than issuing true overtime pay for long hours worked.
NRC finds design flaw in new Westinghouse AP1000 reactors that FPL plans to build at Turkey Point. The reactor is not designed to withstand hurricanes.
Undetected by security guards, 34 Cuban immigrants are dropped off on the Turkey Point grounds. After waiting around for eight hours they phone the control room, requesting that someone pick them up.
Following a shutdown of Turkey Point unit 4 for refueling, the control rods were lifted and tested. When all control rods were supposed to be up, two rods dropped into the reactor core of the shutdown reactor; however the remaining control rods apparently failed to automatically drop into the reactor core as designed and had to be manually released. While this particular malfunction posed no danger, any malfunction of the control rod drive mechanism constitutes a serious failure of the nuclear reactor's most significant safety feature.
FPL is fined \$25 million for mistakes that caused the 2007 blackout, the same one in which Turkey Point operator David Hoffman refused to restart reactors prematurely. This state-issued fine is 10,000 times larger than the largest ever imposed by the NRC.
FPL has accumulated 2,000,000 pounds of nuclear waste at Turkey Point.
Under pressure, FPL agrees to design a program to monitor tritium and salinity in the local aquifer.