

# Three Mile Island: The Nuclear Disaster

"If the radiance of a thousand suns were to burst at once into the sky, that would be like the splendor of the Mighty One... I am become Death, the Shatterer of Worlds."  
 - J. Robert Oppenheimer, quoting "The Bhagavad Gita"

**1932**: James Chadwick Discovers The Neutron

**1942**: The Manhattan Project Begins

**1945**: Two Atomic Bombs Dropped On Japan

**1946**: (The Manhattan Project was the first time nuclear power was ever extensively researched. Although the goal of the project was to produce an Atomic Bomb, much of the same research was applied to nuclear energy.)

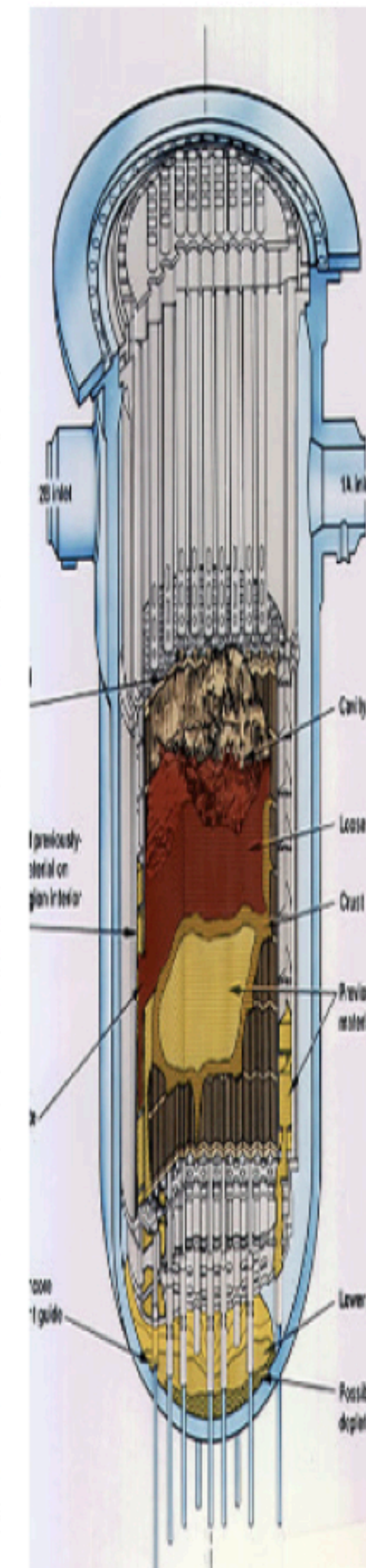
**1946**: The Manhattan Project Begins

**1946**: A coin commemorating the Manhattan Project with the text "MANHATTAN PROJECT BOMB".

**1966**: FERMI 1 Reactor Suffers Partial Meltdown

**1979**: Three Mile Island Nuclear Disaster Occurs

**2011**: Unit 2 Decommissioned, Unit 1 Still Operating



**Where:** Three Mile Island, on Susquehanna river, South of Harrisburg, PA



**When:** March 28, 1979,



**What:** This was the site of the first real nuclear emergency in any powerplant in North America. This was a nuclear gas leak of a meltdown in the power plant's core. There was a lot of radioactive gas leaking into the air (Approximately 43,000 curies-1.59 PBq).

**Why:** There was a failure in the plant's cooling system, therefore causing a meltdown in the plant's reactor core. Because of this, the plant began emitting large amounts of radioactivity

**Who:** None of the workers of the plant or the members of the nearby cities of Harrisburg or Middletown, PA were harmed because of this incident.

## Government Response

Post-Three Mile Island, the Nuclear Regulatory Commission adopted licensing rules that assume state and local participation in emergency evacuation plans. It also brought about sweeping changes involving emergency response planning, reactor operator training, human factors engineering, radiation protection, and many other areas of nuclear power plant operations.



For more information, visit our resources doc:  
 Sanchez, Natalie, Barry McGrorty, and Tyrone Kidd. "Three Mile Island Resources BMCGRORTY, TKIDD, NSANCHEZ." <https://docs.google.com/a/scienceleadership.org/document/d/1O1cMeB-Fxypd9gB-ELQFouxAwGNCyYJUenfz-tXqRzM/edit?hl=en#>.