

Kudankulam Nuclear Power Plant Generates Over 1.30 Lakh Million Units

Kudankulam Nuclear Power Plant has generated 1,30,627 million units of electricity since commissioning, preventing 11.22 crore tonnes of carbon dioxide emissions.

Kudankulam Nuclear Power Plant (KKNPP) is India's highest-capacity nuclear power station, built in Tamil Nadu in collaboration with Russia.

KEY EXAM POINTS

- Reactors 1 and 2 of **KKNPP** have generated a cumulative **1,30,627 million units** of electricity since inception.
- Power generation from both units has prevented over **11.22 crore tonnes** of **carbon dioxide** (CO₂) emissions.
- Both operational reactors are running at **capacity factors** exceeding **101.5%**.
- Reactor 1 was commissioned on **October 22, 2013**, while Reactor 2 began commercial generation on **October 15, 2016**.
- Four additional reactors of **1,000 MW** capacity each (Units 3 to 6) are under construction with **Russian** assistance.

DID YOU KNOW..!?

Kudankulam Nuclear Power Plant is located in **Tirunelveli** district, Tamil Nadu.

KKNPP utilizes Russian-designed **VVER-1000 pressurized water reactors** (PWR) using enriched uranium fuel and light water as coolant and moderator.

The Nuclear Power Corporation of India Limited (**NPCIL**), established in **1987** under the Department of Atomic Energy (DAE), operates all commercial nuclear power plants in India.

India's first commercial nuclear power station is **Tarapur Atomic Power Station** (TAPS) in Maharashtra, commissioned in **1969**.

Madras Atomic Power Station (MAPS) at **Kalpakkam** was India's first fully indigenously constructed nuclear power station, commissioned in **1984**.

India's three-stage nuclear power programme was formulated by **Dr. Homi J. Bhabha** in the 1950s to utilize India's vast **Thorium** reserves.

The **Atomic Energy Act** governing nuclear energy development and regulation in India was enacted in **1962**.

REVISION FLASHCARD

KKNPP in Tirunelveli uses Russian VVER-1000 reactors and has generated over 1.30 lakh million units of electricity.

Syllabus Relevance: Unit 1: Scientific developments; Unit 2: National & State energy infrastructure; Unit 9: Tamil Nadu industrial & energy development.

Free School Books

Read and study school textbooks for free on the Essaar Academy platform.

School Books: essaaracademy.in/school-books