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SUB. ES

ROLL NO. 14<sup>TH</sup>

CIE2 POSTER PRESENTATION

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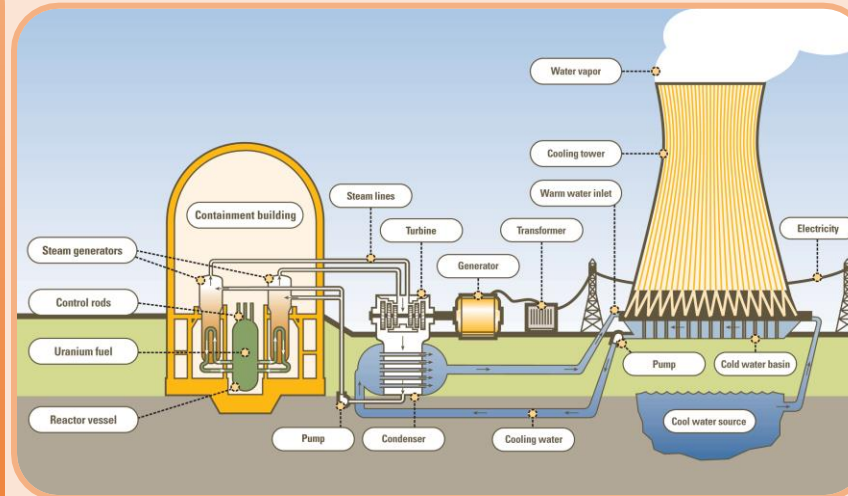
COURSE: 1BCA-A

# NUCLEAR ENERGY

## PROCESS OF GETTING NUCLEAR ENERGY

This process does in Nuclear Power Plant.

- 1: Containment Building
- 2: Large Tank Called as Calandria (Heart of The Nuclear Plant)
- 3: Small Pallets of Uranium Sealed in Metal Tubes and Makes Bundles from Tubes, It's Insert in Calandria. It Is More Than 200 Bundles. There Are Many Typical Assemblies. It Allows to Do Process of a **NUCLEAR FISSION**.
- 4: Inside the Calandria Large Amount of Heavy Water Are Flow in Vessels.
- 5: When Temperature Is High in Vessels Then Heavy Water's Temperature Is Also Increase.
- 6: Hot Water Goes in Steam Tank and It Produce an Air Pressure Help of Heated Heavy Water.
- 7: Air Pressure Goes in Turbine and Turbine Works.
- 8: Produce Electricity.



## NUCLEAR FISSION

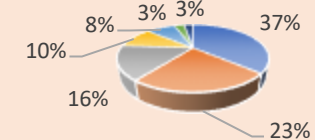
Nuclear Fission Is Process to Splitting a Uranium's Atoms.  
(i) In This Process One Neutron Hit a Uranium One Atom.  
(ii) Uranium Atom Split Into 2 Atoms and Release a 3 Neutrons with Huge Amount of Heat. (iii) Which Neutrons Are Released They Are Hit Another Uranium Atoms and There Are Also Release 3 More Neutron and Again Release Huge Amount of Heat. This Is a Chain Reaction.

Click Here to [https://en.wikipedia.org/wiki/Nuclear\\_power\\_plant](https://en.wikipedia.org/wiki/Nuclear_power_plant)

Know More About Nuclear Power Plant

## SOURCE of ELECTRICITY

- COAL 36.7%
- GAS 23.5%
- HYDRO 16.0%
- NUCLEAR 10.3%
- SOLAR, WIND, GEOTHERMAL & TIDAL 8.2%
- OIL 2.8%
- OTHER 2.6%



## Pros of Nuclear Energy

Carbon-Free Electricity.  
High Power Output.  
Reliable Energy Source.

## Cons of Nuclear Energy

Uranium is Technically Non-Renewable.  
Very High Upfront Costs.  
Malfunctions can be Catastrophic.