

Safety Analyses and their importance in Final Safety Analyses Report

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Power reactors

- Cernavoda Unit 1
 - construction start: 1979
 - first criticality : 16 April 1996

Research/irradiation facilities

- TRIGA Research Reactor
 - first criticality 18 November 1979
- VVER's Research Reactor
 - first criticality 1957

Support facilities for Nuclear Power Plants

- Turnu Severin Heavy Water Factory

Fuel fabrication factory

- FCN Pitesti

Radwaste facility

- Fort Magurele, Intermediate Radioactive Waste Storage Dump Cernavoda

Mining

- Baita, Avram Iancu, Crucea, Tulghes

Radioactive sources and irradiation devices

- Hospitals, Factories, Laboratories



Main Romanian nuclear facilities



- CANDU
- CANada Deuterium Uranium
- Reactor power :2180 MWt
- Electric power: 706.5 MW
- Pressure tubes number: 380
- Moderator: Heavy water
- Coolant: Heavy water
- Coolant pressure: 9.9 MPa (a)
- Coolant temperature:
 - Core inlet: 266 C
 - Core outlet: 309 C
- Steam pressure: 4.8 MPa (a)
- Boiler number: 4
- Main circulating pumps: 4
- Channel flow:
 - min 14 kg/s
 - max 28 kg/s
- Coolant title at the outlet of core
max 4%
- Maximum channel power: 7.3 MWt
- Maximum bundle power: 935 kWt
- Number of fuel bundles /channel:12
- Containment design
pressure 1.24 bar (g)
- Moderator temperature:
 - min :49 C
 - max: 77 C





