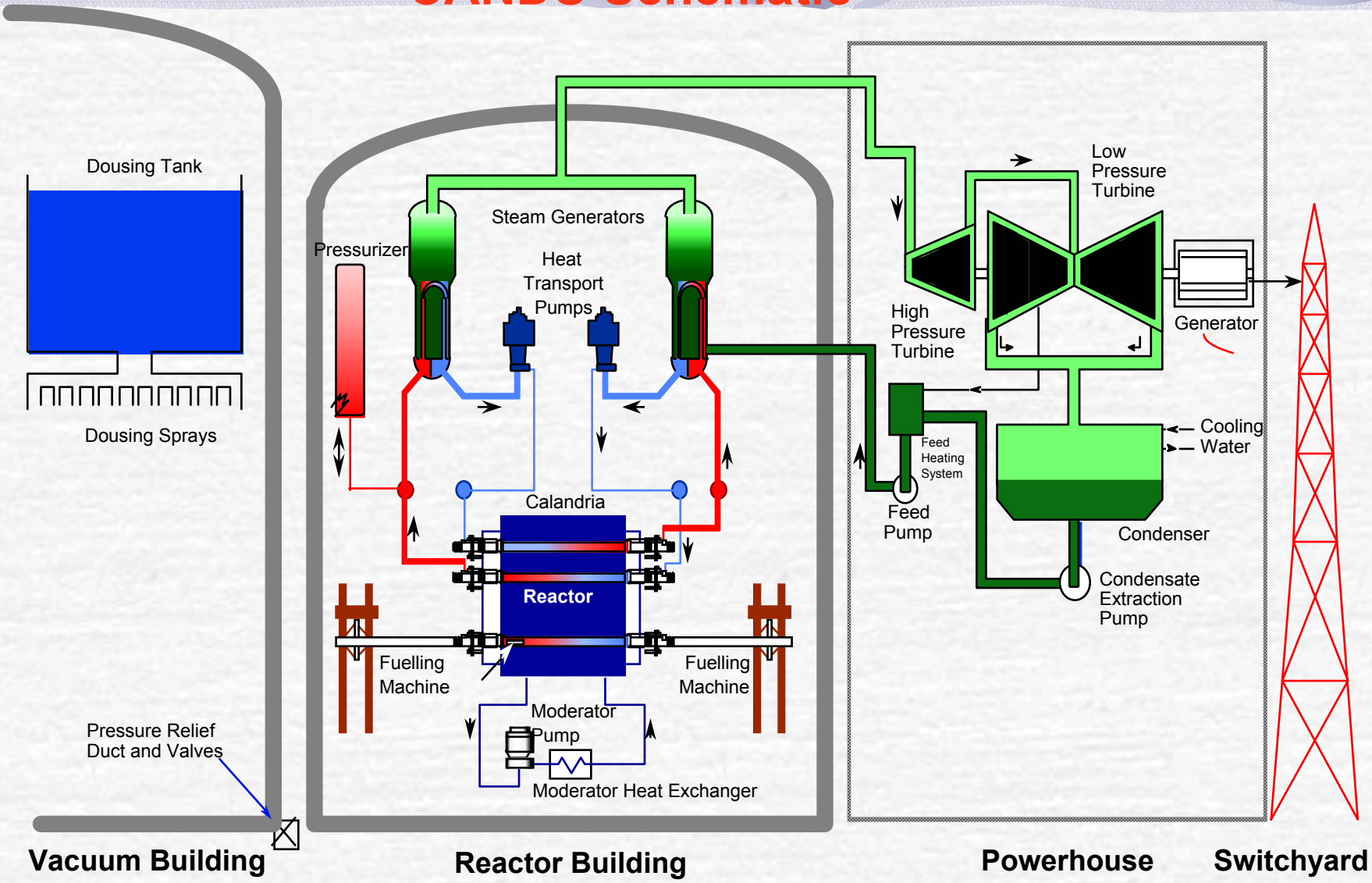


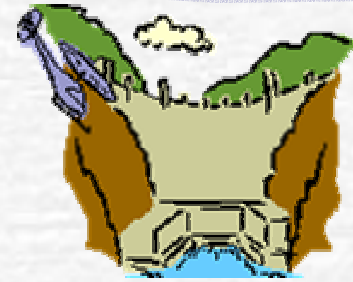


Nuclear Power Reactors



CANDU Schematic





What are some methods of producing large amounts of electrical energy?

What are the pros and cons of each method?



Capacity Factor

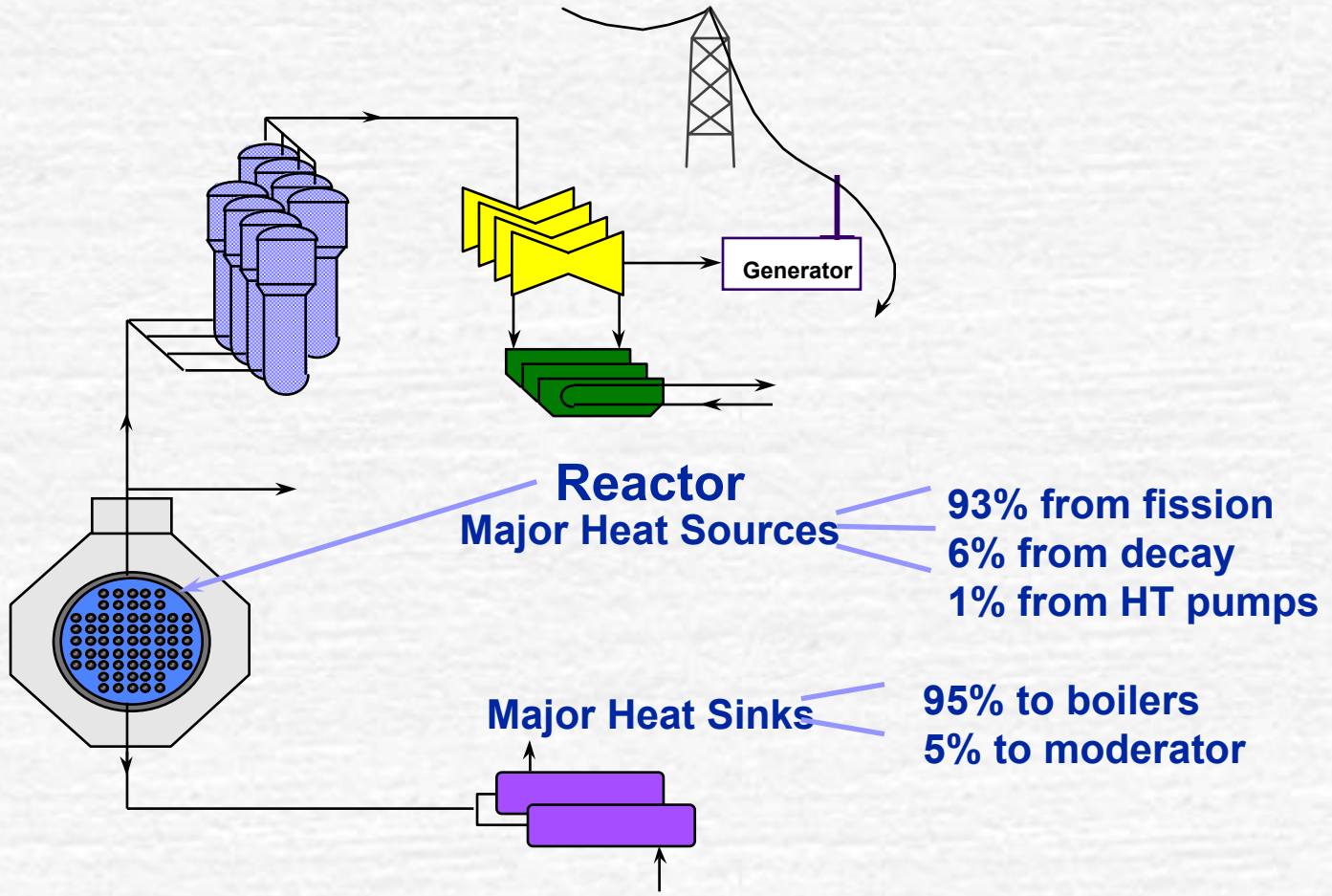
$$\frac{\text{Electricity produced in a year}}{\text{What could have been produced}} \times 100$$

Bottom Line

Nuclear maintains a cost advantage so long as a high capacity factors is maintained.



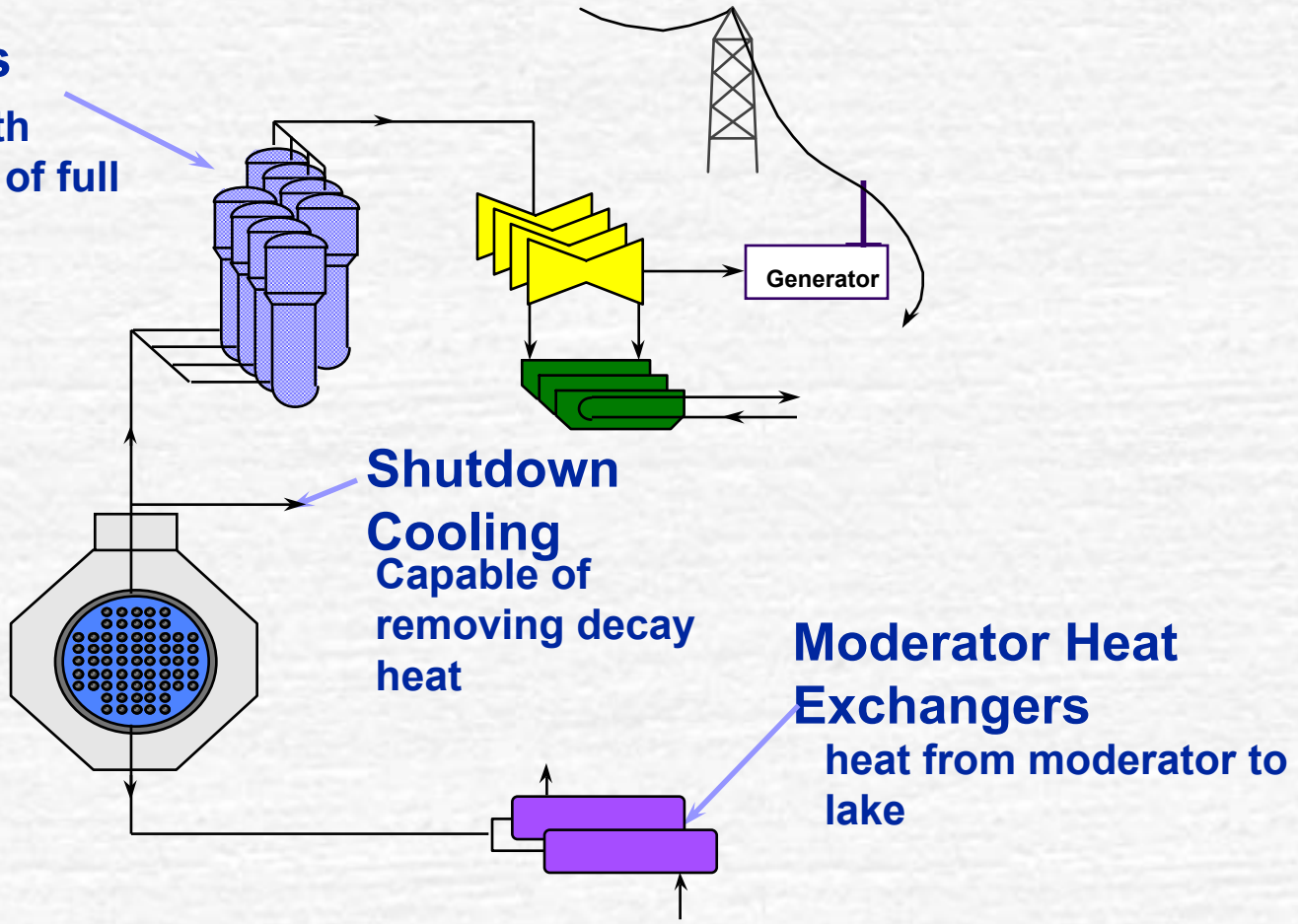
Major Heat Flow



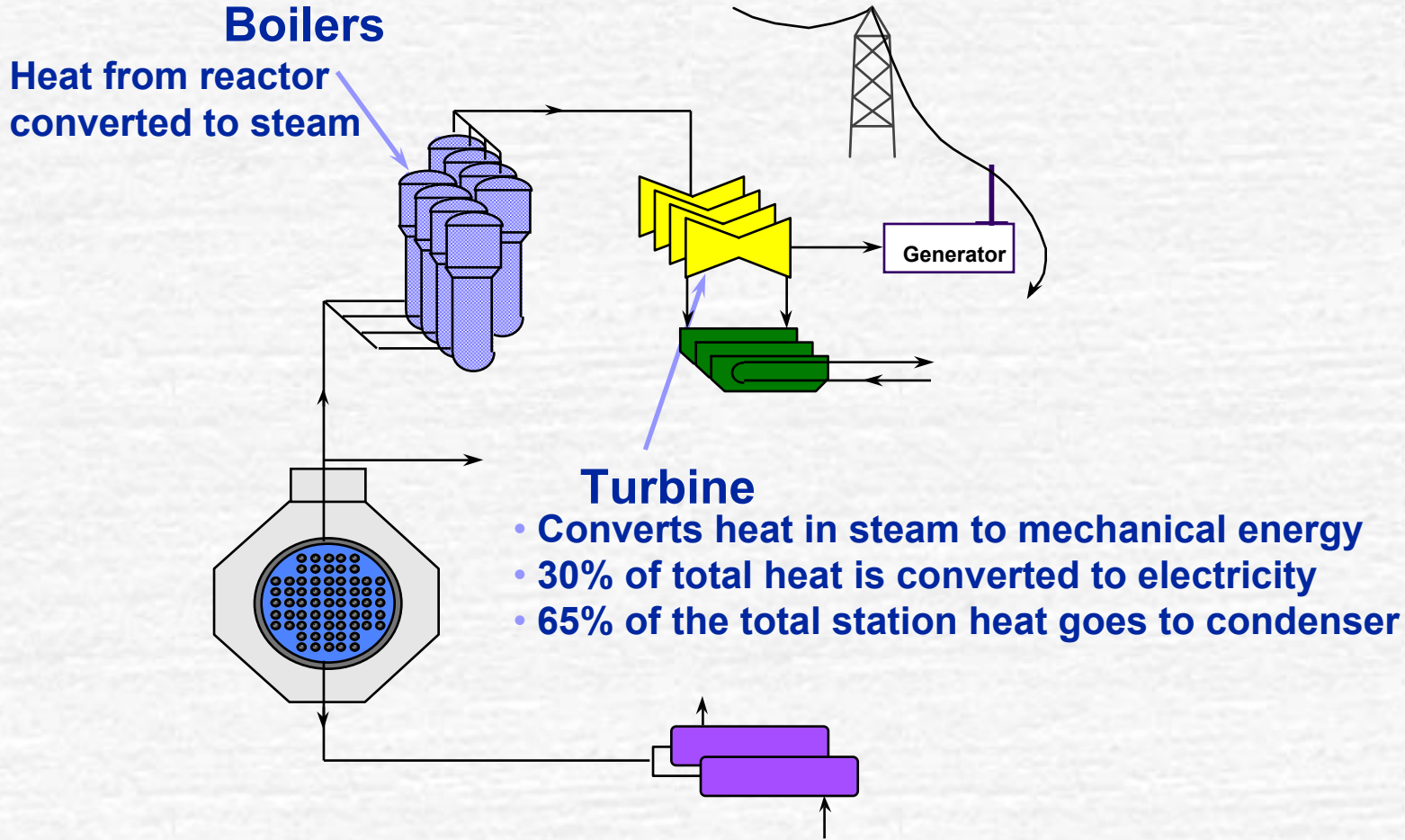
Major Heat Flow

Boilers

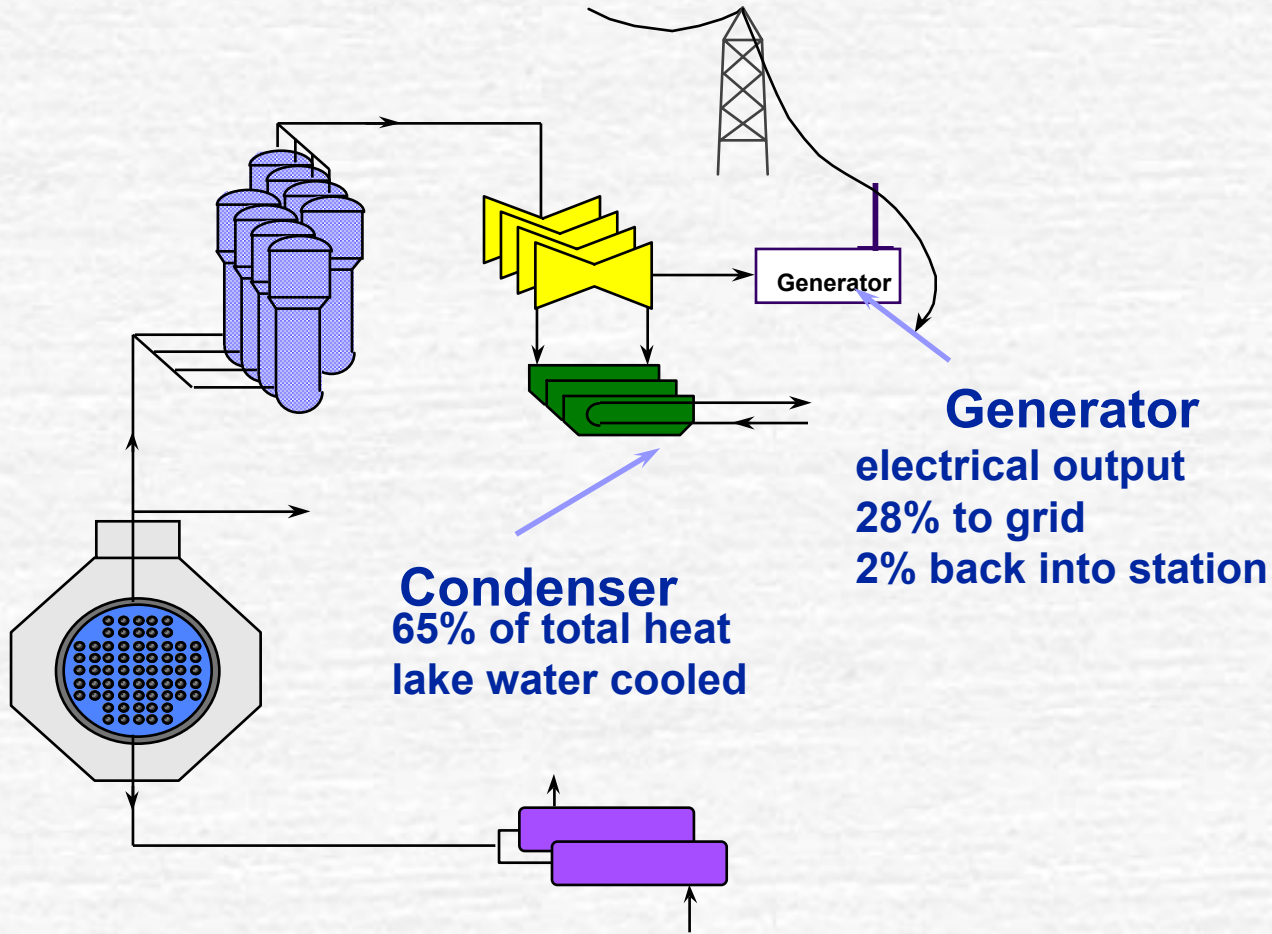
Only path capable of full power



Major Heat Flow



Major Heat Flow



Efficiency

- Gross reactor fission power
 - Power from fission
- Reactor thermal power
 - Power to the boilers
- Gross electrical power
 - Power from generator
- Unit thermal efficiency
- Overall Efficiency