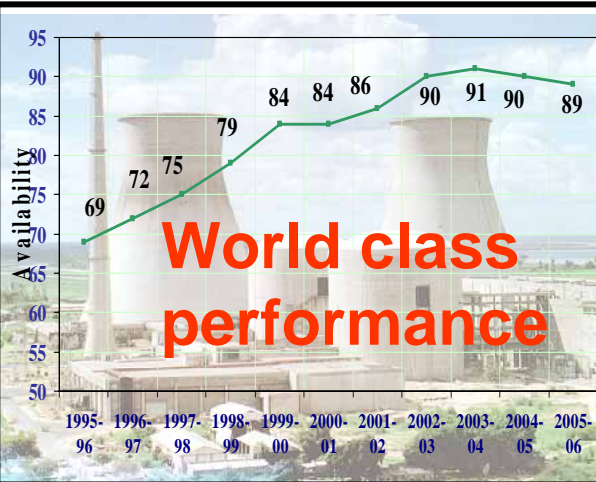


# Indian Nuclear Power Programme: Near Term

| REACTOR TYPE AND CAPACITIES   | CAPACITY (MWe) | CUMULATIVE CAPACITY (MWe) |
|---|----------------|---------------------------|
| > <b>17 reactors at 6 sites in operation</b><br><b>Tarapur, Rawatbhata, Kalpakkam, Narora, Kakrapar and Kaiga</b> | 4,120          | 4,120                     |
| ➤ <b>3 PHWRs under construction at Kaiga 4 (220 MWe), RAPP-5&amp;6(2x220 MWe)</b>                                 | 660            | 4,780                     |
| ➤ <b>2 LWRs under construction at Kudankulam(2x1000 MWe)</b>  | 2,000          | 6,780                     |
| ➤ <b>PFBR under construction at Kalpakkam (1 X 500 MWe)</b>   | 500            | 7,280                     |
| > <b>Projects planned till 2020</b><br><b>PHWRs(8x700 MWe), FBRs(4x500 MWe), AHWR(1x300 MWe)</b>                  | 7,900          | 15,180                    |
| > <b>TOTAL by 2020</b>  |                | 15,180 MWe                |

# Three Stage Nuclear Power Programme



## Stage – I PHWRs

- 15 – Operating
- 3 - Under construction
- Several others planned
- Scaling to 700 MWe
- Gestation period has been reduced
- **POWER POTENTIAL  $\cong$  10,000 MWe**

## LWRs

- 2 BWRs Operating
- 2 VVERs under construction

## Stage - II

### Fast Breeder Reactors

- 40 MWth FBTR - Operating since 1985  
Technology Objectives realised
- 500 MWe PFBR- Under Construction
- **POWER POTENTIAL  $\cong$  530,000 MWe**

## Stage - III

### Thorium Based Reactors

- 30 kWth KAMINI- Operating
- 300 MWe AHWR- Under Development
- **POWER POTENTIAL IS VERY LARGE**  
Availability of ADS can enable early introduction of Thorium on a large scale