

**GE Nuclear Energy** 

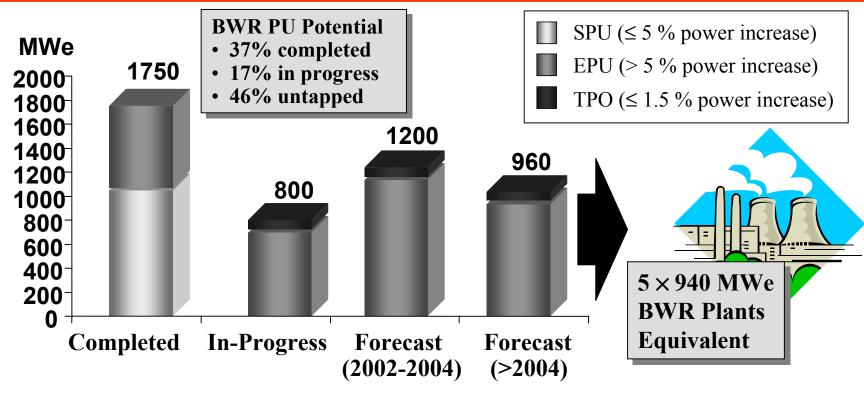
# RIC 2002 Session W4 Power Uprates

GE BWR Power Uprate Program Hoa Hoang Power Uprate Program Manager GE Nuclear Energy March 6, 2002





## GE BWR PU MWe Time Line

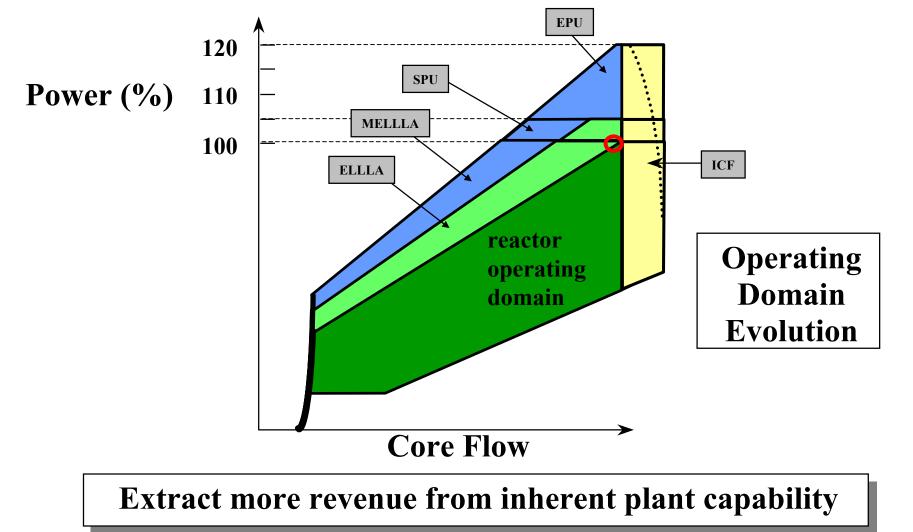


Supports NRC Staff Requirements memo on additional PU

High power uprate volume for NRC review is anticipated



#### **BWR Power Flow Map Extensions**





- Plant licensed power level up to 120% of original rated
- NRC approved Extended LTR (ELTR) 3Q 1998
  - Generic licensing methodology with some generic dispositions
- Constant Pressure Power Uprate LTR (CLTR)
  - Introduces simplification and focus into analytical and licensing process
- CLTR Rev. 1 submitted to address NRC input 7/01

Efficient Licensing and Implementation Process



## Licensing and Implementation

- Licensing Process
  - Nominal 12 months for Safety Evaluation Report (SER)
  - Nominal 12 months for NRC SER Approval
- On-Line Power Uprate Implementation
  - License and implement power uprate without increase in maximum operating reactor dome pressure
  - Permits initial power increase to existing BOP capacity immediately following receipt of OL amendment
  - Subsequent BOP mods to achieve full uprate



# Experience

| Completed  |  | Active/Projected  |
|--|--|---|
| <ul> <li>Extended Power Uprate:</li> <li>KKM (114%)</li> <li>KKL (112%)</li> <li>Hatch-1,2 (113%)</li> <li>Monticello (112%)</li> <li>Duane Arnold (120%)</li> <li>Dresden -2,3 (117%)</li> <li>Quad Cities -1,2 (117%)</li> <li>Cofrentes (110%)</li> </ul> | <ul> <li>105% Power Uprate:</li> <li>Susquehanna - 1, 2</li> <li>WNP-2</li> <li>Limerick - 1, 2</li> <li>Peach Bottom - 2, 3</li> <li>Fermi 2</li> <li>FitzPatrick</li> <li>Brunswick - 1, 2</li> <li>NMP-2</li> <li>Browns Ferry - 2, 3</li> <li>LaSalle - 1, 2</li> <li>Laguna Verde</li> <li>Perry</li> <li>River Bend</li> </ul> | <ul> <li>EPU in Progress:</li> <li>Brunswick-1,2 (120%)</li> <li>Clinton (120%)</li> <li>Browns Ferry-2,3 (120%)</li> </ul> |