### NRC Public Meeting

### Brunswick Nuclear Plant April 10, 2002







#### **Unit 1 Performance**

- 707 Day Breaker to Breaker Run
  - LWR Continuous Run World Record
  - Refueling Outage Completed in 29 days
    - Major Extended Power Uprate Modifications Installed Successfully
    - No Human Performance Events
    - No Reportable Events
    - Recordable Accidents and Occupational Dose Lowest Ever





#### **Unit 2 Performance**

- Previous Refueling Outage 32 days
  - Completed 157,000 Hours of Maintenance and Modifications
  - No Human Performance or NRC Reportable Events
  - Outage Standards Met
  - Improved Reliability
  - Increased Production by 4 MWe
- 378 Day Run
- Mid-cycle Safety/Reliability Outage 04/18/02
  - Scheduled 8 Day Duration





### **Extended Power Uprate**

- 15% Power Increase by 2005
  - Two Phase Uprate Required
    - 1st Phase = 7 to 10% Increase
      - ◆2002 Unit 1, 2003 Unit 2
    - ▶ 2<sup>nd</sup> Phase = 5 to 8% Increase
      - ◆2004 Unit 1, 2005 Unit 2
  - 208 MWe Total Increase Expected



### **Extended Power Uprate**Phase 1 – Modifications



- Replace High Pressure Turbine
  - Modify Electro-Hydraulic Controls (EHC)
  - Replace Rx Feed Pump Turbines
  - Replace Feedwater Heaters (2)
  - Improve Grid Stability
  - Improve Generator Isophase Cooling



## **Extended Power Uprate Phase 2 – Modifications**

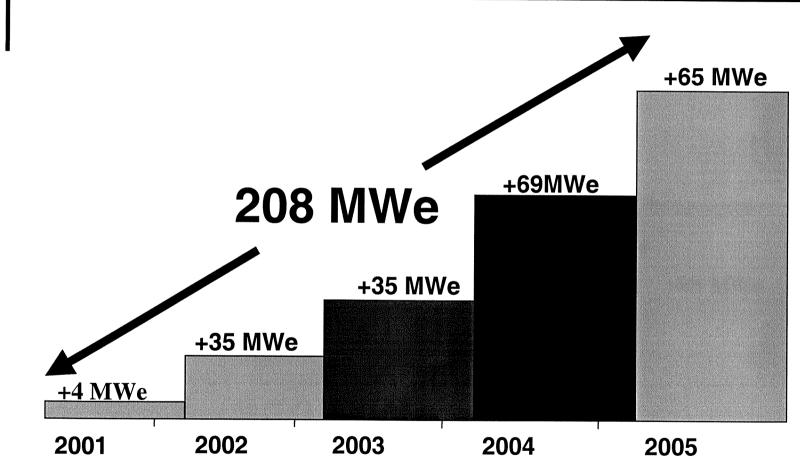


- Replace Main Transformers
  - Upgrade Rx Feed Pumps
  - Upgrade Condensate Pump & Motor
  - Replace Feedwater Heaters (3)
  - Upgrade Moisture Separator Reheaters



## **Extended Power Uprate**Total Power Addition 2001-2005

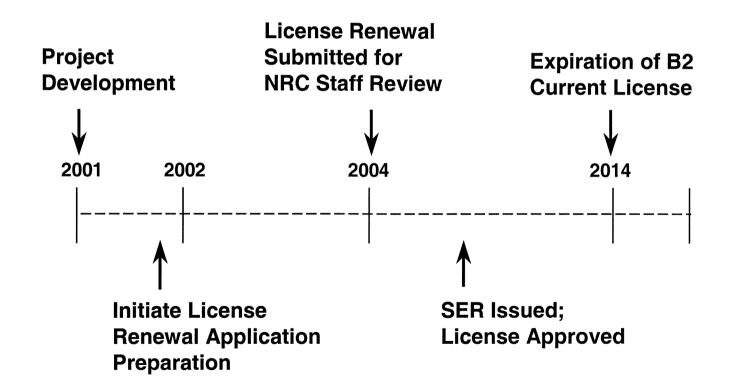






### **License Renewal**

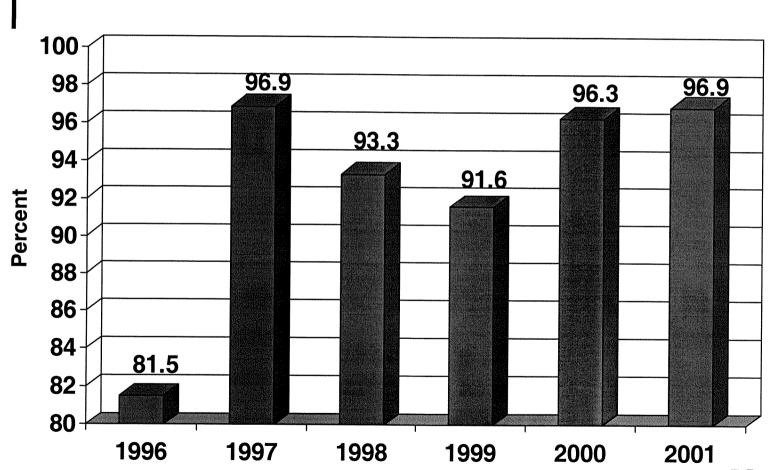








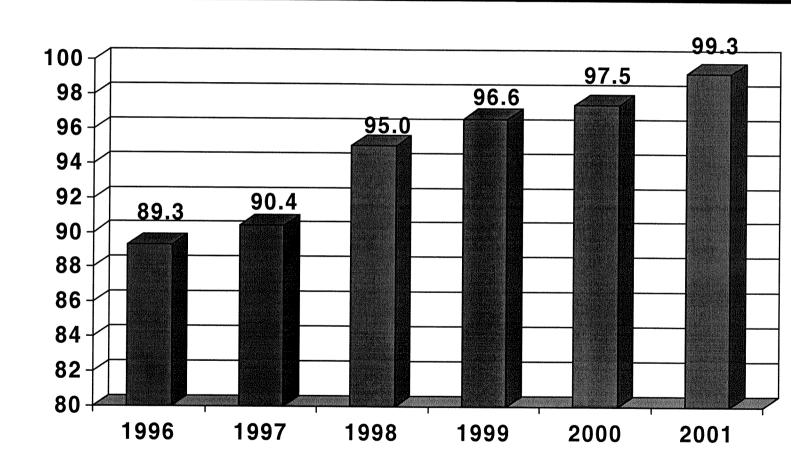
### **Combined Capacity Factor**







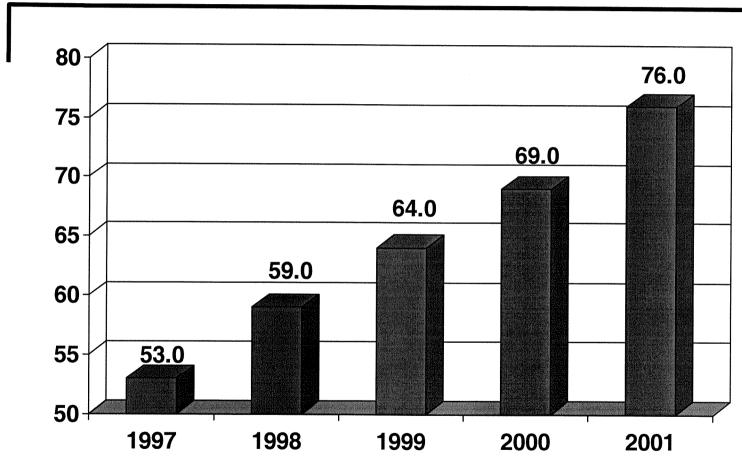
### **INPO Index**





# **BNP Employee Opinion**Survey Results







#### List of Documents Reviewed

#### <u>3PP1 And 3PP2</u>

Various Licensee Event Reports and Trending Reports

Key and Lock Daily and Annual Inventory Logs for months July, 2001 and March, 2002

Semi-Annual Fitness for Duty Report, July - December, 2001

Brunswick Nuclear Plant/Carolina Power & Light Company:

Brunswick Physical Security Plan

Plant Access and Radiation Worker Training, GET SSG

Key and Lock Procedure, 0SI-01-02

Maintenance and Testing of Security Systems, 0SI-12

Vehicular Traffic And Material Access Control, 0SI-10

Access Control, Personnel Identification and Badging Procedure, 0SI-09

Progress Energy/Carolina Power & Light Company:

Continual Behavior Observation Program, SEC-NGGC-2130

Fitness For Duty Unscheduled Work Call Outs, SEC-NGGC-2141