

RIC 2002

Session W4 Power Uprates

*NRC Region III -Extended Power Uprate
Experience*

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REGION III

Extended Power Uprate Experience

- Region III Plants are First to Seek and Obtain Large Extended Power Uprates

- Five Approved Extended Power Uprates
 - One Unit Approved for 15.3 Percent
 - Two Units Approved for 17 Percent
 - Two Units Approved for 17.8 Percent

- One 20 Percent Extended Power Uprate Under Review



Licensee Implementation

■ One Step

- All Necessary Modifications Made Prior to any Increase in Power Level
- Power is Increased to Full Uprate Value in One Step

■ Two Step

- Necessary Modifications Made In Steps Over Two Outages
- Power is Increased Partially Following First Outage
 - Magnitude of Power Increase Depends on Modifications
- Power is Increased to Full Uprate Value Following Second Outage and Additional Modifications



Inspections to Date

Inspected Modifications, Procedures, Power Ascension, Testing and Training

Used Existing Baseline Inspection Procedures:

- **Permanent Plant Modifications**
- **Refueling and Outage Activities**
- **Post Maintenance Testing**
- **Surveillance Testing**
- **Personnel Performance During Non-Routine Evolutions**



Observations to Date

No Major Problems Noted

No Problems Noted During Inspection of EPU Modifications and Modification Installation

Minor Discrepancies Noted During Power Ascension and Testing at One Unit:

- **Minor Turbine Control Valve Oscillations**
- **Incorrect Calc Discovered During APRM Flow Biased Scram Test**
- **Adjusted Feed Pump Low Suction Pressure Trip**

Startup at One Unit Resulted in Scram Due to Operator Mindset



Future Plans

Selection of Inspection Activities Based on Four Criteria:

- **Impact on ECCS initiation or ECCS mitigation ability**
- **Contribution to the initiation of an event**
- **Changes in Set Points on Risk Significant Equipment**
- **Mods which caused unexpected challenges at other plants**

Incorporate Lessons Learned From Past Experience

NRR Evaluating Development of Separate Inspection Procedure