

**RIC 2005  
Session T-H1  
Power Uprates**

**Power Uprates Amidst Chaos**

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**Union of  
Concerned  
Scientists**

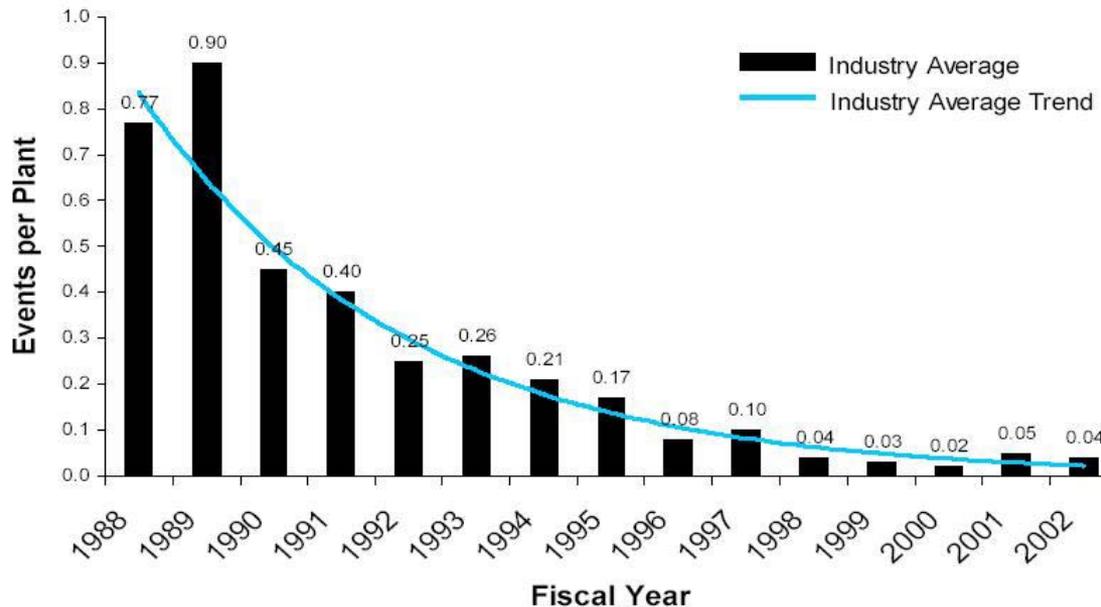
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# Nuclear Safety Trends

**NRC and industry often cite improving safety trends over past two decades, like:**

## Significant Events





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# Foundation for Nuclear Safety Trends

**Improving safety trends are a byproduct of prescriptive regulatory process and plethora of measures like worst-case calculations, ample margins for uncertainties, single-failure criterion, maximum credible accident design basis, etc.**



# Challenge to Nuclear Safety Trends

**Extended power uprate is just one of many concurrent regulatory changes. Others:**

- o Reduced testing/inspection scopes & frequencies**
- o Longer limiting condition of operation (LCO) durations**
- o “Best-estimate” calculations**



**Power uprates are but one of many concurrent initiatives that reduce safety margins.**

**Justification for each initiative is based on improving trends achieved using a regulatory process that is being sacked wholesale.**

**Quad Cities's shaky experience demonstrates that we simply do not know enough to undertake so many concurrent margin reducing initiatives – so why are we doing it?**



# Reversal of Nuclear Safety Trends?

**NRC and industry often cite improving  
safety trends over past two decades, like:  
Precursor Occurrence  
Rate**

