

Pittsburgh, PA

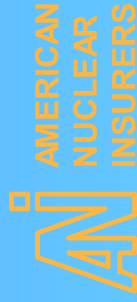
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“ RETS – REMP WORKSHOP ”

Nuclear Liability Insurance Impact Due To Nuclear Power Plant Radioactive Effluent Releases

William Wendland, P.E.

*American Nuclear Insurers
West Hartford, Connecticut USA*



Overview

❖ **Snapshot - The effect that effluent releases have on nuclear liability insurance at NPPs**

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Effluent Releases

- ❖ Direct Financial Impact (ERF)
- ❖ Indirect Financial Impact (ICRP)

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Nuclear Liability Insurance Risk

- ❖ **Increased Public Awareness of NPP Effluent Releases & Perception of Personal Risk**
- ❖ **Do not differentiate between Isotope of Cobalt-60 and Tritium**
- ❖ **1 atom Co-60 ~ 1 atom of Tritium (perception)**
- ❖ **NPP Releases Cause Harm !**
- ❖ **Majority of Claims from Offsite BI & PD**

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Nuclear Liability Insurance Risk

- ❖ **\$300 US Million Provided to Each US Site**
- ❖ **Protection Covers Operators & Suppliers Against Bodily Injury or Property Damage Caused by Nuclear Hazard**
- ❖ **Losses Can Be Catastrophic or Non-Catastrophic**
- ❖ **Claims Defense Costs Can Be Major Portion of Claim**



Nuclear Liability Insurance Risk

- ❖ **Can Mitigate Excessive Claims Defense Costs Through Evidence of Due Care and Proper Operation**
 - **ANI's Performance Indicator Areas Can Be Used To Demonstrate Such Care (ERF)**



Nuclear Liability Insurance Premium

- ❖ Ave Nuclear Liability Premium
- ❖ ~ \$725,000 (Single Operating Unit)

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ANI Engineering Rating Factor (ERF)

- ❖ Implemented 1981
- ❖ Collaborative Effort
- ❖ Comparative Rating Basis
- ❖ Reflect Varying Performance of Individual Insureds and Thus the Insurance Risk to the Pools Arising out of that Performance
- ❖ Redistribute Total Nuclear Liability Insurance Premium Based on Individual Plant Performance (Premium Neutral)
 - 20% Credit Best Performers
 - 30% Surcharge Higher Risk Performers

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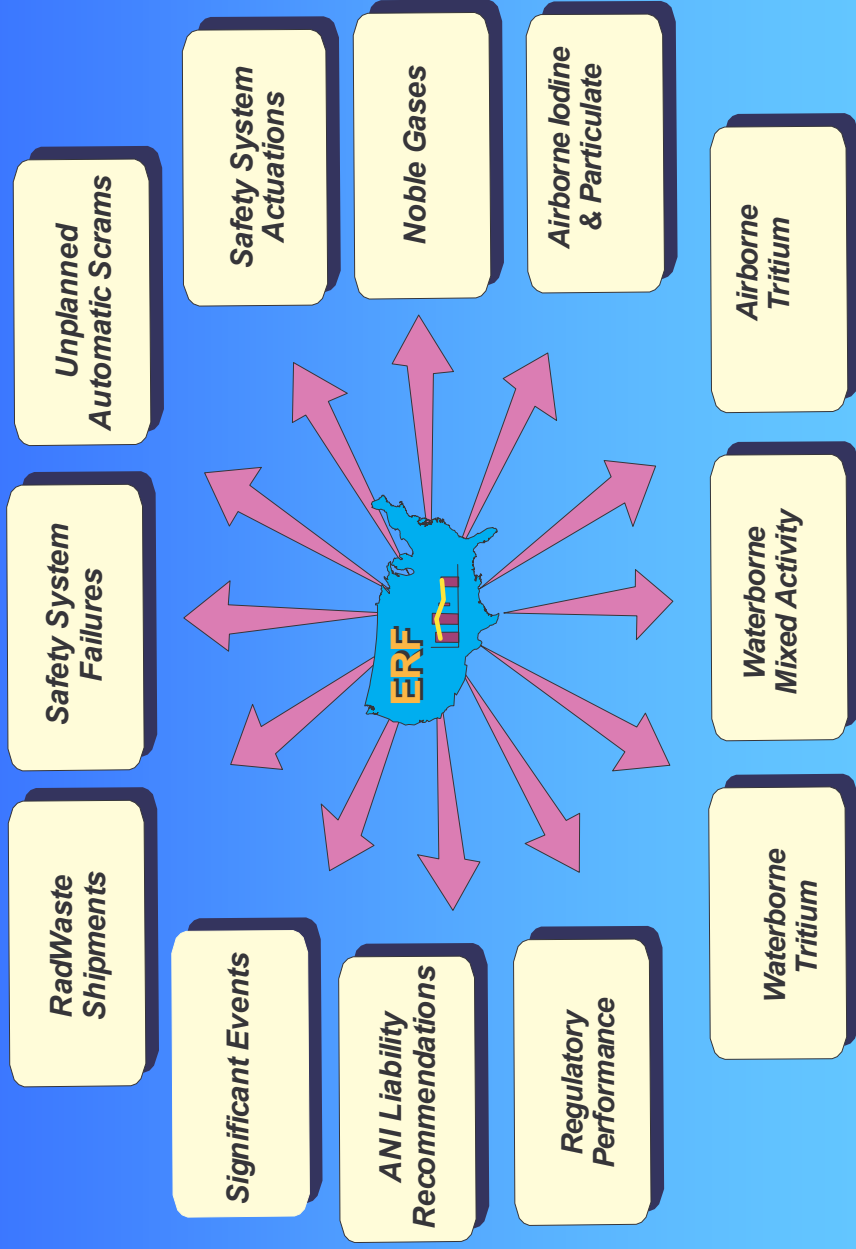


Power Reactor Liability Rating - 6 Components

- ▶ Reactor Type
- ▶ Reactor Use
- ▶ Reactor Size
- ▶ Reactor Location
- ▶ Type of Containment
- ▶ ERF (Introduced 1981)



8 Performance Areas (12 Subfactors)



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Effect of ERF on Premium

- ❖ Components Evaluate on Comparative Basis
- ❖ Direct Multiplier on Premium
- ❖ ANI Recommendation Impact within ERF can be
~ \$3,000 - \$52,000 (Single Unit)
~ 1.5 x for Multiunit Site
- ❖ Relative Contribution of aggregate environmental component in ERF for plant with best industry performance -
~ \$20,000 - \$250,000



Indirect Effects on Premium

- ❖ ICRP – Industry Credit Rating Plan
- ❖ ~ 75% of Premium Set Aside in Reserve Fund
- ❖ Held for 10 Years
- ❖ Refunds Decreased from 90+% (Claims Expenses)

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Concluding Remarks

- ❖ Risk Minimization
- ❖ High Quality Decisions
- ❖ Balanced Effluent Release Program

