



Nuclear Liability Insurance Inspection Experience

NEI RETS-REMP Workshop

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# RECENT CHANGES TO THE ANI ENGINEERING RATING FACTOR

American Nuclear Insurers



*Since 1981, American Nuclear Insurers has implemented a performance measure for insured power reactors known as the Engineering Rating Factor. Traditionally, this factor has taken as input the level of activity released from insured power reactors as reported in the annual radiological effluent reports, or their equivalents.*

*Last year, several changes were made to the Engineering Rating Factor program and those changes are described here.*



## Safety Systems and Scrams

*Previously, the rating factor looked at individual events such as safety system failures and unplanned automatic scrams.*

*These could be additive for a single event and did not always include a broad look at the plant.*



*Currently, the Engineering Rating Factor includes input from the ROP Action Matrix:*

- *Publicly available data*
- *Broader performance measurement, while reducing potential for multiple counting*



## Errata and Calendar years

*Notice was provided to insurance risk managers regarding use of calendar year data and effluents.*

*Effluent data input to the rating factor is now more lagging.*

*Errata reports are needed if corrections need to be made.*



**TABLE 1A**  
**EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (YEAR)**  
**GASEOUS EFFLUENTS—SUMMATION OF ALL RELEASES**

	Unit	Quarter	Quarter	Est. Total Error, %
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**A. Fission & activation gases**

1. Total release	Ci	. E	. E	. E
2. Average release rate for period	μCi/sec	. E	. E	
3. Percent of Technical specification limit	%	. E	. E	

**B. Iodines**

1. Total iodine-131	Ci	. E	. E	. E
2. Average release rate for period	μCi/sec	. E	. E	
3. Percent of technical specification limit	%	. E	. E	

**C. Particulates**

1. Particulates with half-lives >8 days	Ci	. E	. E	. E
2. Average release rate for period	μCi/sec	. E	. E	
3. Percent of technical specification limit	%	. E	. E	
4. Gross alpha radioactivity	Ci	. E	. E	

**D. Tritium**

1. Total release	Ci	. E	. E	. E
2. Average release rate for period	μCi/sec	. E	. E	
3. Percent of technical specification limit	%	. E	. E	



**TABLE 2A**  
**EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (YEAR)**  
**LIQUID EFFLUENTS—SUMMATION OF ALL RELEASES**

Unit	Quarter	Quarter	Est. Total Error, %
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**A. Fission and activation products**

1. Total release (not including tritium, gases, alpha)	Ci	. E	. E	. E
2. Average diluted concentration during period	$\mu\text{Ci/ml}$	. E	. E	
3. Percent of applicable limit	%	. E	. E	

**B. Tritium**

1. Total release	Ci	. E	. E	. E
2. Average diluted concentration during period	$\mu\text{Ci/ml}$	. E	. E	
3. Percent of applicable limit	%	. E	. E	



- Please let us know your questions or comments.