



Management of LLW at Operating Power Plants

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Steve Garry, C.H.P.

Senior Health Physicist

Reactor Inspection Branch DIRS/NRR

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LLW Storage at Reactor Sites

- Consolidated and clarified NRC LLW positions
 - LLW storage must meet NRC requirements for ALARA, monitoring, labeling, and record keeping
 - Construction of new LLW storage facilities must meet 10 CFR 50.59

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LLW Storage at Reactor Sites (cont.)

- Power reactors and research and test reactors are already licensed to store radioactive materials
- Separate Part 30 license not needed

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LLW Storage at Reactor Sites (cont.)

- Safe storage considerations
 - Container integrity from corrosion
 - Packaging and storage to prevent explosive gas generation

Regulatory Guide 1.143

- RG 1.143, "Design Guidance For Radioactive Waste Management Systems, Structures, and Components"
- Provides design and construction guidance for new LLW storage facilities

EPRI Guidelines for Operating LLW Storage Facilities

- Includes guidance on interim LLW storage
- Acknowledges that volume reduction and concentration of Class B/C waste to GTCC is technologically feasible

NRC Reviewed EPRI Guidelines

- Acknowledged that EPRI LLW Operating Guidelines were consistent with NRC guidance
except:
- Did not take a position that volume reduction and concentration of Class B/C to GTCC was consistent with NRC guidance

Waste Transfer to Off-Site Radwaste Processors

- Studsvik (Erwin, TN)
 - Licensed by State of Tennessee
 - Co-mingling waste from different generators
 - Volume reducing Class B/C waste to a stable Class B/C waste form

Waste Transfer to Off-Site Radwaste Processors (cont.)

- Studsvik (Erwin, TN)
 - New stable waste form is “attributable” to Studsvik who is classified as the waste generator
 - Stored (not disposed) at WCS with financial assurance until first available disposal site opens

Waste Transfer to Off-site Radwaste Processors

- Duratek, Inc (Oak Ridge, TN)
 - Licensed under State of Tennessee
 - Approved, temporary pilot testing of equipment and processes for blending
 - Potential disposal at the Energy Solutions facility at Clive, UT

Conclusions

- Class B/C waste is being safely stored on-site
 - NRC has guidance for on-site storage
 - EPRI has guidance for operating LLW storage facilities

Conclusions (cont.)

- Class B/C waste is being volume reduced to a stable form and stored as Class B/C waste in Texas
- Potential blending and disposal as Class A waste in Utah