Legal Weight Truck/Tractor Trailer Testing

Presentation to the Nuclear Waste Technical Review Board
Arlington, Virginia

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Outline

- Why we need a legal weight truck (LWT)
- LWT test background
- Test results to date
- Programmed test results
Why We Need a Legal Weight Truck

- Requirement to move some spent nuclear fuel by legal weight truck is known
- LWT system must comply with weight restrictions outlined in 1982 Surface Transportation Act
- LWT system could support transport of spent nuclear fuel via GA-4/GA-9 casks as early as 1998
Legal Weight Truck Test Background

- Test broken down into two basic parts
  - Durability of the GA-9 trailer
  - Operational assessment of LWT transport system
- Durability test of GA-9 trailer completed
  - 240,000 equivalent miles completed February 16, 1995
Test Results to Date

- Trailer designed, constructed, and tested in accordance with ANSI N14.30 standards
- Durability test verified overall structural integrity
  - All cracks occurred at connections
  - Stiffeners and gussets should not be welded around ends
  - Some structural connections required design mods
  - X-brace connections need reinforcement
- Trailer refurbished, inspected, and accepted by DOE in April 1995
Programmed Test Events

- Performance test—May 1995
- Human factors considerations—August 1995

Emphasis shifts from Civilian Radioactive Waste Management System to Tractor Management System.