

Charting a Course to Energy Independence

**Providence, RI
August 9-12, 2009**





ENERGY SECURITY TRACK

Energy Security Overview Session

Presented by:

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National Nuclear Security Administration

August 10, 2009



Respite - Past Activities

Energy Security has always been a central focus of the NNSA Culture.



Adspice - Current Initiatives

EPACT 2005

EISA

Executive Order 13423



DOE Order O 430.2b

Executable Plans

Energy Modernization and Investment Plan



Executable Plans

Planning Document (ECM Listing)
Resource Commitment Document
Expectations Document
Achieved Performance Document

Gap Analysis



Current Initiatives

- Reduce demand
 - Traditional Energy Conservation Measures
 - Cool Roofs (Roof Asset Management Program)
 - Disposition Activities
 - Data Centers
 - SERF
 - Sustainable – Guiding Principles Buildings
- New Construction to LEED Buildings



Update Ventilation System





Replace Chillers



BEFORE



AFTER



Distribution Switchgear Upgrade



Original Power Distribution



New 480 VAC Switchboards



Roof Asset Management Program

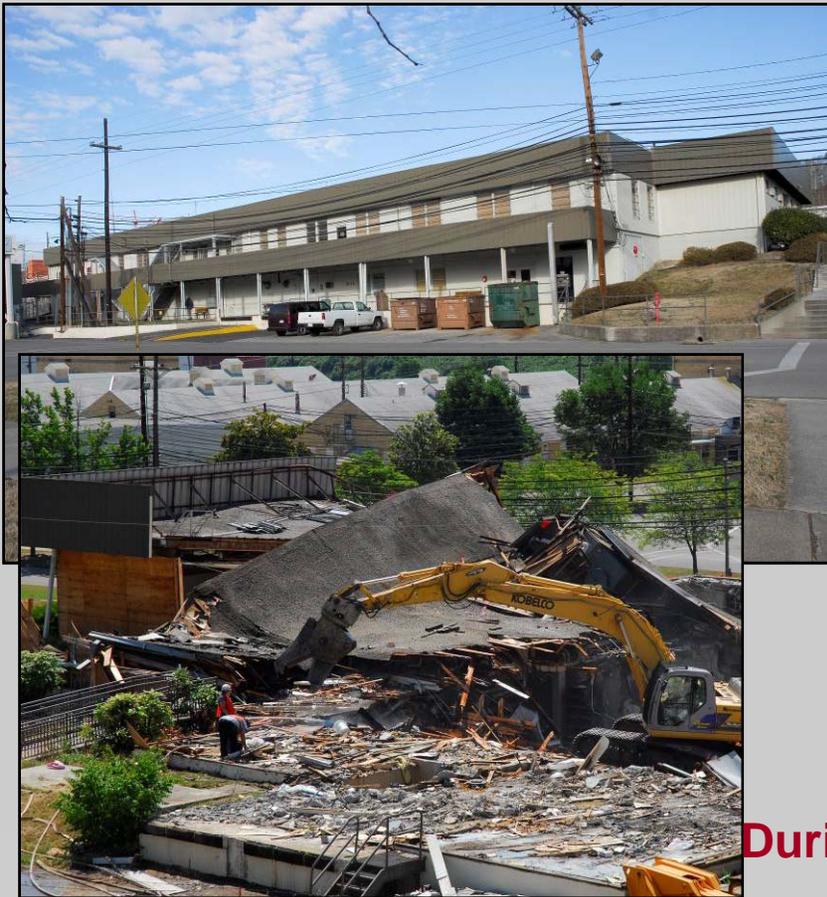




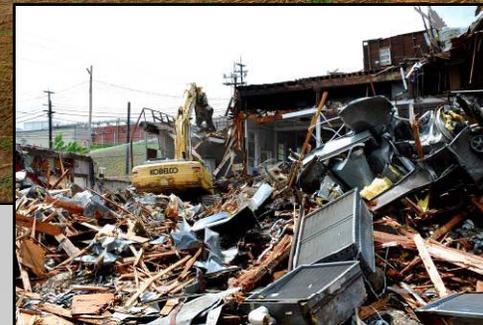
Demolition of Cafeteria

Before

After



During





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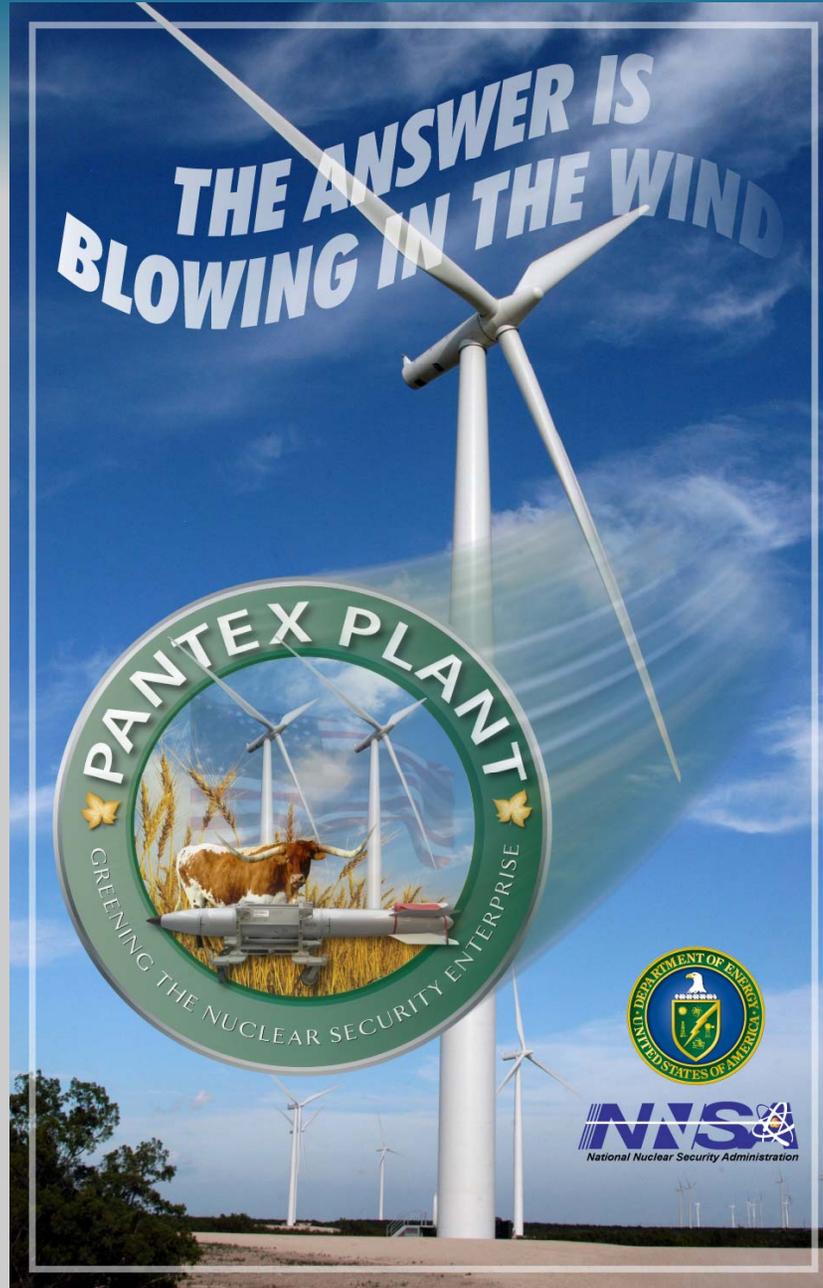
Current Initiatives

- Assure Supply / Alternative Sources
 - Transmission and Substations Upgrades
 - Wind Energy Project
 - Savannah River Bio-Mass Project
 - Concentrating Solar Project Nevada
 - Hydro Electric
 - Geo-thermal Possibilities



Power Grid Infrastructure Upgrade







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Energy Modernization and Investment Plan

- Management & Budgeting Process
- Project / ECM Selection & Funding
- Engineering & Design
- Construction & Project Management
- Initial Measurement & Verification



Prospice - Future Looking

NNSA will meet current requirements and the expected changes resulting from the revision to the Environment Executive Order.

(caveat)



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