Concept for an EM Energy Park Initiative

“Leveraging Assets to Increase the Taxpayer’s Return on Investment”

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Our goal...

. . . to leverage assets and create opportunity to enable rapid development of large-scale energy-related facilities

. . . particularly those with significant potential of sustained progress towards energy independence, regional economy, national security, environmental sustainability, and other national concerns
Globalization amplifies and accelerates the effects of the interrelationship between energy, economy, and environment.

Global developments and increasing expectations for effective governance provide us the opportunity to “push past the tipping point” of progress towards resolving several national concerns.

EM serves various national interests, and as a key member of the “DOE Enterprise Team”
Why EM?

- Facilitates EM mission execution
  - Transition to beneficial use
  - Engages stakeholders as partners
  - Leverages liabilities into opportunity
  - Supports “industrial use” standards
  - Reduces “EM footprint”
  - Averts life-cycle costs

- Attractive assets help meet national goals

- Increases taxpayer return on investment (ROI)
Stakeholder Feedback

“ROI drives industrial interest”

- Support for “green” power generation (e.g.: solar, carbon sequestration and alternate biofuels)
- Support for Nuclear applications (e.g., hydrogen generation and spent nuclear fuel storage)
- Licensing & Permitting
- Financial risk (i.e., loan guarantees, capping risk)
The initiative involves:

- Asset Review *
- Expressions of Interest
- Optimization
- Contracting
- Execution

* (e.g., involves a case-by-case evaluation of numerous factors such as relative ROI to the taxpayer, overall feasibility, and impact of timely implementation)
What EM Brings to the Table

✓ Infrastructure  (roads, buildings, equipment, utilities, barge & rail access, transmission systems, and specialty features and capability)

✓ Natural Resources  (land, water, and renewable energy)

✓ Institutional Controls  (clear land title, physical control, security, water rights, NPDES and other permits, buffer area, environmental & seismic characterization, and security)

✓ Human and Economic Capital  (knowledge of regulatory environment, highly trained workforce, transition to succeeding missions, and return of valuable assets to the local tax base)

✓ Diversity, Size, and Remoteness  (allows consideration of many uses, and protection of critical infrastructure)

✓ Applied Tools  (technology, loan guarantees, purchasing power)
10 CFR 770 transfer of assets (at less than market value) to private sector, meeting DOE needs & promoting economic development (1998 Defense Authorization Act)

support economic diversification around sites impacted by downsizing (1994 Defense Reauthorization Act)

A Solid Historical Foundation

Federal Energy Management Program

Transformational Energy Action Management

Energy Saving Performance Contracts

(e.g., Rocky Flats, Mound, & Fernald)

Environmental Management

safety ♦ performance ♦ cleanup ♦ closure

SRS
 Technologies

Options include conventional & advanced energy technologies, such as:

✓ Nuclear: power, fuel cycle, waste management
✓ Renewable energy: solar, wind, biomass, geothermal
✓ Fossil fuels: clean coal, gas turbines
✓ Electricity generation, transmission, & distribution
✓ Hydrogen generation
✓ Emission controls, carbon sequestration
✓ Specialty manufacturing
Meeting the Needs Nationwide

... from “greening” of energy supply, to teaming with community reuse organizations & industry

• Savannah River: working on leasing 2,500 acres for electric production, large-scale demonstration of new energy technologies & manufacturing of energy generation equipment

• Oak Ridge: private-sector business and industrial park, transferred 50 acres, & much site infrastructure

• Hanford: shares infrastructure with nuclear utility, 71 acres transferred for development

• WIPP: RFI for 16 square miles of solar resources

• Mound & Fernald: ongoing site conversion
EM Will Meet Key TEAM Goals

- **Energy Reduction**: 30% Reduction by FY-2015
  The energy intensity reduction is due largely to the SRS energy efficient biomass cogeneration project and the RL ESPC project initiative

- **Renewable Energy Use**: Use 7.5% Renewable by FY-2010
  EM exceeds the goal with a current renewable energy generation/use measured at 14.1% (of RE from electrical Mw) and 77.4% (of RE from thermal pounds per year)
Path Forward

- Conduct meetings nationwide of DOE, industry, and regional stakeholders, to enable rapid development of certain large-scale facilities at specific sites
- DOE generates opportunity by designating valuable assets (including land), requesting expressions of interest, and negotiating to maximize the value and impact of opportunity
- Businesses may team to respond to opportunities