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

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Energy Parks Initiative: Philosophy

- 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"

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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)**

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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)

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Our Process

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)**

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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 a many uses, and protection of critical infrastructure)

✓**Applied Tools** (technology, loan guarantees, purchasing power)

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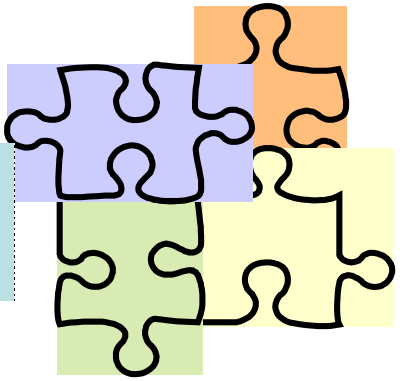
A Solid Historical Foundation

Federal Energy Management Program

Transformational Energy Action Management



Energy Saving Performance Contracts

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

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)

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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**

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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

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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

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