Tennessee Valley Energy Enterprise
A Sustainable Energy Park Concept

• Diversity
• Integration
• Sustainability

Energy Communities Alliance Meeting
April 23, 2009
Marketable Assets

One key to success is to turn your liabilities into assets.
The Reindustrialization Program started in 1996 as a method to accelerate cleanup of the former K-25 Gaseous Diffusion Plant. This facility has been renamed the East Tennessee Technology Park-Heritage Center.
Vision

By 2012, the Oak Ridge Reindustrialization Program will be recognized as the national leader in the beneficial reuse of Department of Energy assets.

Mission

Accelerate clean-up and promote economic development by making DOE underutilized assets (e.g., buildings, land, equipment) available to the private sector for the establishment of self sustaining business on the Oak Ridge Reservation.
The Environmental Management Accelerated Cleanup Plan offered the Reindustrialization Program the opportunity to accelerate its plans.

10CFR 770 legislation provided DOE with a tool to move the Program to the next step – transfer of ownership of real property to the private sector.

Transfer of real property allows the Reindustrialization Program to establish the East Tennessee Technology Park – Heritage Center as a private-sector business/industrial park.
How Do We Do It?

Proposal for Transfer

Meet Federal Facility Agreement Requirements

Environmental Review
- NEPA review
- Environmental Sampling
- Risk Evaluation

Prepare Legal Description

Regulatory & Public Review
CERCLA Section 120 (h)
Documentation

Develop Quitclaim Deed

Document Business Case

DOE-HQ & Congressional Review
Partnership Strategy

- One key to our success is the partnerships that have been formed.
- Each entity has a clear understanding of its role and responsibilities.
- The time devoted to establishing and maintaining these partnerships is well worth the effort.

[Logos and texts of various entities]
Six former DOE office and manufacturing buildings totaling ~ 300,000 square feet have been transferred to the Community Reuse Organization of East Tennessee. This has helped diversify the regional economy by endorsing private sector investment and creating new jobs.
Heritage Center Land Transfers

- Land parcels, totaling ~50 acres, have been transferred to the Community Reuse Organization of East Tennessee for new construction.
- Transfer of over 250 acres is currently underway.
In 2008, DOE transferred its Fire Station to the City of Oak Ridge. Fire protection and emergency services are provided by the city to the DOE site and the growing west end area of Oak Ridge.
Heritage Center Utility System Transfers

In 2008, DOE transferred its Water Treatment Plant and associated water and sewer lines to the City of Oak Ridge.

- Water treatment plant
- Network of water and sewer lines transferred
Transition of the electrical distribution system and some of the roadways to the City of Oak Ridge is underway.
Heritage Center Finish Line

- Productive reuse of former gaseous diffusion plant
- Sustainable business/industrial park
- Compatible with nearby commercial and residential development

- Jobs are being created
- Funds are being saved
- Site will be remediated sooner
Horizon Center is a 1,000-acre greenfield site, designed to provide building sites and amenities desired by high-end companies while still preserving the area’s scenic beauty.
- Purpose of the park is to support the commercialization and technology transfer efforts at the Oak Ridge National Laboratory.

- This is the first privately developed research and development park within the campus of a national laboratory.

  - When built out, the park will support 500,000 square feet of offices and laboratories.
Building on Oak Ridge Accomplishments, A New *Regional* Energy Park Concept is Proposed

- Piloted in Tennessee Valley – a diverse, 4-state, energy production, delivery, and utilization region
- Leverages regional federal assets, infrastructure, and science & technology capabilities
- Builds upon DOE Oak Ridge Reindustrialization success
- Not the traditional “energy park”
  - Not a single site or campus, but a region
  - Not just energy production, but research & development, demonstration, and manufacturing
  - Not a single technology, but a diverse collection of projects
- Model can be tailored and replicated across U.S.
The Tennessee Valley is Ideal Location to Pilot the Regional Energy Enterprise

• Major transportation sector
• Diverse TVA electrical generation system
• Highly integrated TVA electricity transmission/distribution grid
• Growing electricity demand
• Four seasons with strongly peaked summer and winter load demands
• Biofuels, coal, oil, and gas producing region
• Growing population
• Air quality challenges
• High carbon footprint
• Emerging energy/water challenges

The Tennessee Valley is a microcosm of the U.S. energy production, delivery, and utilization challenge.
Activities in Oak Ridge Offer Opportunity for Early Energy Park Success

- Oak Ridge offers a variety of locations suitable for project implementation
  - ETTP - Heritage Center
  - ETTP - Horizon Center
  - ORNL - Oak Ridge Science and Technology Park
  - Y-12 National Security Complex
- The Path Forward includes:
  - Fund and accelerate Oak Ridge cleanup projects
  - Finalize partnerships
  - Transition assets
  - Demonstrate and deploy sustainable energy technologies
Early success will demonstrate federal commitment and create momentum

Projects will require innovative, efficient teaming approaches, vehicles, mechanisms, etc.

DOE Field Offices must have authority to transfer or assign assets in a timely manner

Access to timely loan guarantees to private sector partners will enable and accelerate success
Multiple Funding Resources will be Leveraged to Enable Success

- DOE/EM funding to cleanup sites and transfer assets to public/private sector
- Other DOE Offices and Federal Agency funding for research, development, and demonstrations
- Federal loan guarantees
- State/Local funding for research & development and industrial development
- Private sector/industrial funding
Tennessee Valley Energy Enterprise will Stimulate Regional Prosperity

- Assure abundant energy supply
- Diversify and stimulate regional economy
- Create green jobs
- Foster industrial growth
- Increase tax revenues
- Improve transportation system
- Improve air and water quality for millions
- Reduce Tennessee Valley carbon footprint
- Accelerate cleanup of DOE sites
- Strengthen university and educational systems in Tennessee Valley Corridor

REINDUSTRIALIZATION