



BALLARD SPAHR ANDREWS & INGERSOLL, LLP

# ***The Energy Policy Act of 2005: Some Help, No Policy***

**C. Baird Brown**

**Ballard Spahr Andrews & Ingersoll, LLP**

**Presentation to Sixth Goddard Forum –**

**The Opportunities and Challenges of the Pennsylvania  
Renewable Portfolio Standard: Emerging Technologies,  
Regulations, and Institutions**

**State College, PA**

**January 30, 2006**



BALLARD SPAHR ANDREWS & INGERSOLL, LLP

***Electricity Regulation  
and  
Transmission***

# Electricity and Transmission

- PUHCA Repeal Facilitates Investment and Mergers
  - PUHCA regulation of holding company structures by the SEC discouraged acquisition of utilities and electric facilities
  - Repeal of PUHCA means that many more types of buyers can freely invest in the electric industry and that holding companies can invest more broadly
  - More utility mergers can occur in absence of PUHCA's "integration" requirement
  - PUHCA replaced with access by FERC and state commissions to books and records of holding companies (EWG and FUCO determinations will still be of value)

# Electricity and Transmission

- FERC's Merger Review Authority Modified
  - FERC will review transactions valued above \$10 million, including: sales and leases of transmission and generation facilities; purchases of portions of utilities; purchases or leases of existing generation facilities; merger of holding company with another utility
  - Standard of review: transaction must be consistent with the public interest and not cross-subsidize non-utility activities



BALLARD SPAHR ANDREWS & INGERSOLL, LLP

# *Clean Coal and Alternative Technologies*

# Coal and Alternative Technologies

- DOE Grants for Clean Coal Projects  
Authorizes \$200 million per year, for fiscal years 2006 - 2014, to commercial scale demonstration projects
  - At least 70% earmarked to coal-based gasification technology projects
  - Projects must be likely to generate overall cost reductions and improve coal competitiveness. Methods and equipment must be applicable to 25% of current coal-fired generators
  - Federal assistance capped at 50% of project cost

# Coal and Alternative Technologies

- Clean Air Coal Program

Authorizes grants, loans, cooperative agreements.  
Similar cost sharing provisions as for Clean Coal projects.

Two types of commercial application projects:

- Equipment and processes that improve energy efficiency or cut emissions. Total of \$2.5 billion authorized for fiscal years 2007 through 2013.
  - Between 25% and 75% of projects must be for sole purpose of generating electricity, priority given to demonstrated processes and equipment that are not yet cost-effective
- Upgrades to existing coal-fired plants to deploy advanced pollution control equipment and processes. Total of \$500 million authorized for fiscal years 2007 through 2011.
  - Priority on projects with significant air quality improvement, collection of more than one pollutant, or that use waste byproducts

# Coal and Alternative Technologies

- Commercial Technology Loan Guarantee Program
  - DOE to provide commercial loan guarantees for “innovative energy technologies” that: (1) avoid, reduce or sequester air pollutants or greenhouse gases; and (2) employ improved technologies.
    - Eligible projects include renewable energy systems; advanced fossil energy technologies including coal gasification; advanced nuclear energy facilities; carbon capture; electric generation, transmission and distribution technology; production facilities for fuel efficient vehicles; refineries
    - IGCC electric projects that meet specific emissions limits and have an assured revenue stream are also eligible. Includes pet coke gasification, industrial gasification, coal-to-oil liquefaction projects.

# Coal and Alternative Technologies

- DOE Loan Guarantee Guidelines
  - Applicable to all DOE loan guarantees. No cap on number of loan guarantees.
  - May not exceed 80% of estimated project cost at time guarantee is issued. Interest rate on the guaranteed loan subject to DOE approval, taking prevailing rates into account. Loan term: lesser of 30 years or 90% of projected useful life of the project. The federally guaranteed loan may not be subordinated to other financings. DOE may ask for collateral assignment of technology, step-in rights, etc. DOE will charge fees “sufficient to cover applicable administrative expenses.”

# Coal and Alternative Technologies

- Tax Incentives for Coal and Other Alternative Fuel Facilities
  - Three new investment tax credits
    - Advanced coal credit projects credits
      - 20% credit for IGCC projects  
(maximum credit: \$800 million)
      - 15% credit for advanced coal-based generation projects  
(maximum credit: \$500 million)
    - Qualifying gasification credit
      - 20% credit for qualified projects (maximum credit: \$350 million)
      - Maximum qualified cost per project: \$650 million
      - Covers gasification of coal, petroleum residue, biomass, etc.



BALLARD SPAHR ANDREWS & INGERSOLL, LLP

# *Renewable Electricity*

# Renewable Electricity

## Extends and Enhances Renewable Energy Production Tax Credit and Incentive Payment Programs

- Renewable Energy Production Tax Credit (RPTC) Extension
  - RPTC is a production tax credit, indexed to inflation, for certain renewable energy generation facilities.
    - Limit 10 years (7 for Indian coal)
    - 1.9 cents per kilowatt-hour for electricity producing facilities (reduced to 0.9 cents for certain facilities – e.g., qualified hydro, open-loop biomass)
    - Specified amount per ton for qualifying fuel production facilities such as Indian coal
  - Includes technologies that formerly received tax credit (e.g., geothermal, open-loop biomass, landfill gas, refined coal)
  - Extends RPTC to other resources (e.g., incremental hydroelectric power and Indian coal production)
  - Credit reduced (up to 50%) to the extent project receives federal grants, tax-exempt financing, etc.

# Renewable Electricity

- Renewable Energy Production Incentive Extension
  - Provides for extension of incentive payments of 1.5 cents/kwh, adjusted for inflation each year, to be made to the owner or operator of any “qualified renewable energy facility”
  - Incentive payments only available to generating facilities using solar, wind, biomass, landfill gas, livestock methane, ocean (including tidal, wave, current and thermal) or geothermal energy that are publicly owned or owned by a not-for-profit electrical cooperative
  - If appropriations are not available to make all payments, 60% of appropriated funds are to be assigned to solar, wind, geothermal, and closed-loop biomass generation, with the remaining 40% to all other projects

# Renewable Electricity

- Clean Renewable Energy Bonds (CREBs)
  - Creates new category of tax credit bonds (like QZABs) for 2006, 2007
    - Bondholder receives income tax credit in lieu of payment of interest
    - Credit amount included in income, so overall effect is like payment of taxable interest
  - Qualified issuers:
    - Governmental bodies (including Indian tribal governments)
    - Mutual or cooperative electric companies
    - A “CREB Lender” (CoBank and National Rural Utilities Cooperative Finance Corporation)
  - Qualified borrowers:
    - Governmental body
    - Mutual or cooperative electric companies
  - Although Projects must be owned by a governmental entity or a coop, they can be leased to an IOU or operated by an IOU under a “non-qualified” management contract and still qualify.

# Renewable Electricity

- Must spend 95% of proceeds in 5 years on qualified renewable energy projects, including:
  - Wind, solar and geothermal energy facilities
  - Closed- and open-loop biomass facilities
  - Small irrigation power facilities
  - Landfill gas and trash combustion facilities
- Maximum amount of CREBs - \$800 million, maximum \$500 million for governmental units, remainder for cooperatives allocated to smallest projects first
- Other issues:
  - Amount of credit set by Treasury at rate that permits marketing at par
  - Level principal amortization required, maturity set by Treasury
  - Arbitrage rules apply



BALLARD SPAHR ANDREWS & INGERSOLL, LLP

# *Renewable Motor Fuels and Ethanol*

# Ethanol and Motor Fuels

- EPA to administer a new renewable fuel content requirement applicable to all motor fuel
- Fuel oxygenation requirement eliminated
- Phased prohibition of MTBE
- 2003 U.S. gasoline consumption: 139 billion gallons
- Current U.S. ethanol capacity: 3.9 billion gallons (according to Renewable Fuels Association)
- Renewable fuel requirement rises from 4.0 billion gallons in 2006 to 7.5 billion gallons in 2012

# Ethanol and Motor Fuels

- All refiners, blenders and importers of motor fuel are covered (with a 5 year exemption for small players)
- Requirement can be met by direct production or import or by obtaining credits from those who exceed the requirement (including small players who opt in)
- Credits must be used in the year generated
- Can carry forward a deficit for 1 year
- Ethanol from cellulosic biomass or waste gets 2.5 gallons credit against the requirement for each gallon through 2012

# Ethanol and Motor Fuels

- Loan guarantees
  - DOE loan guarantees for the construction of facilities producing fuel ethanol from cellulosic biomass or MSW
  - No dollar limits and program runs 10 years
  - Act improves credit quality-like standards
- Production Subsidy
  - DOE to provide production subsidy of \$1 per gallon or less for first 1 billion gallons of cellulosic biofuels produced
  - Subsidized facilities must begin production in 3 years and subsidy lasts for 6 years of production



BALLARD SPAHR ANDREWS & INGERSOLL, LLP

# *Energy Policy*

# Energy Policy

- No consistent Federal Energy Policy
  - EPACT 2005 just calls for more of everything
  - The bulk of the subsidy goes to existing industries and technologies
- Sensible Policy Would:
  - Reduce dependence on oil
  - Reduce carbon emissions
  - Encourage long term investment
    - FERC focus on spot markets
    - No long-term transmission rights

# Energy Policy

- Pennsylvania
  - Advanced Energy Portfolio Standard
  - EDGE Initiative (Energy Deployment for a Growing Economy)
    - Long Term Contracts
    - Cost Recovery
    - Deregulate Synthetic Gas
    - PEDFA Financing