

ISSUE BRIEF

SENATE POLICY DEVELOPMENT AND RESEARCH OFFICE

PREPARED IN CONJUNCTION WITH THE SENATE REPUBLICAN POLICY COMMITTEE

An Evolving Energy Policy for Pennsylvania

The argument that Pennsylvania would benefit from a stable, secure, economic, and environmentally benign energy supply and associated technology is incontrovertible. However, the best policy to achieve such a supply and technology is the subject of much debate and deliberation in the current session of the General Assembly.

Energy Independence Strategy

Governor Rendell announced his [Energy Independence Strategy](#) (EIS), aimed at reducing consumer energy costs and expanding the alternative fuel, clean energy and energy conservation sectors of the economy on February 1, 2007. To come to fruition, the EIS would require new laws and regulations, and would create the Energy Independence Fund via an \$850 million (M) bond issue.

To reduce consumer energy costs, especially in view of the recent or imminent end of [rate caps](#), the EIS would help consumers to manage their electricity usage by (1) installing “[smart meters](#),” which track when and how much electricity is being consumed, thus providing consumers with information to make potentially cost-saving electricity usage decisions because electricity costs vary depending on the time of consumption; (2) offering rebates on purchases of more efficient household appliances; (3) defraying 50% of the cost of installing photovoltaic arrays that would generate electricity onsite; (4) empowering manufacturers and

other large electricity consumers to enter into long-term, price-stable electricity supply contracts; and (5) permitting large electricity consumers to employ “[microgrids](#),” aggregations of electrical loads and generation, to produce and harness power locally.

The EIS would compel utilities to help in reducing energy costs by requiring them to prove they invested in conservation measures, such as smart meters, before approval of new generation plants would be granted; and to show they tried to keep the cost of electricity low by buying electricity at wholesale through long- and short-term contracts, instead of on the “[spot market](#).”

The Rendell administration would also like to encourage in-state production of alternative renewable fuels, such as ethanol and biodiesel, to reduce reliance on foreign sources of gasoline and petrodiesel. Accordingly, the EIS seeks to codify the [PennSecurity Fuels Initiative](#). Ultimately, the Initiative would result in ethanol composing 10% of every gallon of gasoline sold in Pennsylvania, and in biodiesel composing 20% of every gallon of diesel sold in the Commonwealth. (In mid-September 2007, the Senate Environmental Resources and Energy Committee held hearings on this [alternative fuel mandate](#).)

The EIS would also advance Pennsylvania in the realm of [clean energy](#) technology, for example, combined heat and power (cogeneration), in which electricity and heat are derived from a single fuel source. To spur clean energy, \$100 M would be available, on at least a dollar-for-dollar basis, to grow Pennsylvania-based clean energy companies, and \$500 M for infrastructure improvements, early project development costs, and equipment purchases to attract private investment in clean energy enterprises, including solar manufacturing, advanced coal technologies, biofuels, and energy conservation, efficiency, and demand management projects.

The \$850 M, general obligation bond-based Energy Independence Fund would finance the Governor’s EIS, with \$500 M for clean energy and energy-oriented economic development projects; \$244 M for household appliance rebates and photovoltaic array installation grants; and \$106 M for expansion of clean energy companies. To service the bond debt, a [system benefits charge](#) (SBC) of \$0.0005 per kilowatt-hour of electricity used would be levied on electricity consumers. The Governor argues consumer savings would be 15 times the new fee.

Governor Rendell claims the EIS will save consumers \$10 billion in energy costs over 10 years; reduce the state's reliance on foreign fuels, increase Pennsylvania's clean energy production capacity; and expand the Commonwealth's energy production and energy technology sectors to create more jobs.

Senate Hearings on Energy Policy

The Senate committees on Consumer Protection and Professional Licensure and Environmental Resources & Energy held [joint public hearings on energy policy](#) in early June 2007. The committees heard from Rendell administration officials, the Pennsylvania Public Utility Commission (PUC), trade associations, and business. Nearly all parties pointed to the imminent impact of expiring utility rate caps.

Kim Pizzigrilli, Commissioner, PUC, offered the following representative testimony: “[The Commonwealth] need[s] to continue to evaluate and establish policies that empower consumers to conserve energy; provide them with the tools they need to better manage their energy usage and costs; and attract and enhance the availability of alternative energy sources. The impact of any energy policy has different costs and benefits associated with various classes of customers: residential, small business and large commercial and industrial customers. The needs of consumers and utilities also vary among our service territories.”

Senate Majority Outlines Plan for Special Session on Energy Policy

Senate Majority Leader Pileggi sent a memorandum to Governor Rendell on July 16, 2007 that conveyed Senator Pileggi's understanding regarding a Special Session of the General Assembly to focus on energy policy.

The first goal of the Special Session would be to take a final vote before the end of October 2007 on a plan to increase the Commonwealth's investment in clean and renewable energy and to create incentives for energy conservation. Alternatives exist to create a new energy investment program, to be funded at \$60 M annually, without a new tax and within existing revenues. Analysis indicates options under discussion will provide enough revenue to support these investments.

The second goal of the Special Session, to be pursued upon completion of the first, would be to create an Alternative Energy Portfolio Standard for gasoline and diesel.

Statutes Help Shape Energy Policy

Passed unanimously in the Senate on July 15, 2007 and signed into law by the Governor on July 17, 2007, [Act 35](#) and [Act 36](#) are two planks in the Commonwealth's evolving energy policy, in the areas of alternative energy, long-term power contracts, and microgrids.

Act 35 strengthened the [Alternative Energy Portfolio Standards](#), which went into effect in early 2005. It amended the Standards to increase the expected level of solar energy required to be sold to retail customers; to ensure that the alternative energy that counts toward compliance with the Standards is derived locally; and to authorize the PUC to determine if alternative energy resources are reasonably available, or if alternative energy credits may be required, before the PUC modifies the alternative energy obligations of electricity distributors and/or generators.

Act 36 amended Title 66 (Public Utilities) of the Pennsylvania Consolidated Statutes to permit electric distribution companies or PUC-approved alternative suppliers to offer large customers, those with a peak demand of at least 15 megawatts at one meter at a location within the provider's service territory, any negotiated rate for service at all of the customers' locations within the service territory for any duration agreed upon by the customer and the provider. The PUC would review contract rates within 90 days to make certain that costs are not borne by other customer classes.

Prior to expiration of rate caps, Act 36 also permits electric distribution companies to build or acquire an interest in a generation facility to meet the energy requirements of customers with a peak demand of at least 20 megawatts. The electric distribution company must complete construction of the new generation facility or contract to acquire the generation interest within three years of July 17, 2007. Costs associated with generating facility interests would not be permitted to be part of the company's rate base. The company could sell excess power on the wholesale market when the customer's peak demand is less than the company's generation interest.

Governor Calls Special Session on Energy Policy

Governor Rendell applied additional “heat” on July 30, 2007 by authorizing a [Special Session](#) of the General Assembly, to commence on September 17, 2007. During the Special Session, the legislature would “consider any and all legislation regarding funding for and the making of investments in clean and renewable energy, energy conservation and economic development efforts relating thereto, and the establishment of requirements regarding the renewable energy content of liquid fuels.”

Alternative Energy Investment Act

The Senate Republican Caucus previewed its plan to address Pennsylvania’s energy future on September 11, 2007. The [Alternative Energy Investment Act](#) (AEIA) would provide \$60 M annually from existing revenues – anticipated growth in revenues from the current gross receipts tax on electricity is one possibility – as follows:

\$20 M to finance a \$250 M bond issue, the proceeds of which would be distributed over five years to develop alternative/renewable energy technologies; to implement pollution control technology projects to help existing electric generating units meet state and federal emission reduction requirements; and to launch clean energy and energy conservation projects.

\$20 M in tax credits for facilities that use energy sources, such as waste coal or biomass, defined under the Alternative Energy Portfolio Standards Act, to produce or distribute energy; make products that provide renewable energy; and/or research and develop technology to provide alternative or renewable energy sources.

\$20 M for grants, rebates, and reimbursements for (1) purchases of energy efficient heating and cooling equipment, (2) residential energy conservation projects, including purchase and installation of solar and photovoltaic panels, energy efficient windows and doors, and insulation.

Energy for PA

The House Republican Caucus previewed its plan to address the Commonwealth’s energy future on September 17, 2007. The [Energy for PA](#) plan would:

- (1) reduce energy costs through measures that include exempting energy-efficient appliances and improvements such as increased insulation from the state sales tax, and offering tax credits for construction of high-performance, “green” buildings;
- (2) increase homegrown energy production by offering tax credits for in-state companies that produce alternative fuels, alternative-fueled vehicles or alternative energy power systems and for use of clean-coal technology in Pennsylvania, and by crafting a plan to encourage energy exploration and harvesting on state lands; and
- (3) invest in research on next-generation energy technology at Pennsylvania colleges and universities.

Comparison of Energy Proposals

The summary on the following page supplies salient characteristics of the three current energy proposals. The proposals vary widely in funding and scope, from \$15 million per year (Energy for PA) to \$283 million per year (EIS), and from a primarily residential consumer focus (Energy for PA) to a mainly “big box” project-oriented emphasis (EIS). Of the two proposals that involve bonds, the AEIA would cost taxpayers \$400 M, and the EIS, more than three times as much, \$1.4 billion. While AEIA and Energy for PA would be financed from existing revenues, the EIS would impose a systems benefit charge on all electricity consumers.

Pennsylvania’s final energy policy likely will be a hybrid of the three proposals, perhaps one that melds the cautious expenditure of bond proceeds detailed in the AEIA with the strong residential emphasis of Energy for PA, along with market-dictated targets for the alternative fuels promoted in the EIS.

In the absence of contrary evidence, the “middle of the road” approach embodied in the Alternative Energy Investment Act appears to be a more prudent policy than the “government knows best” clarion call of the Energy Independence Strategy.

AEIA with the strong residential emphasis of Energy for PA, along with market-dictated targets for the alternative fuels promoted in the EIS.

Comparison of Proposed Energy Policies

Characteristic	Alternative Energy Investment Act	Energy for PA	Energy Independence Strategy
<u>Overall</u>			
Specific Goals	none	<ul style="list-style-type: none"> - reduce energy consumption in state buildings by 10% by 2010 - insist buildings that receive \geq 50% of funding from state be built "green" 	<ul style="list-style-type: none"> - ensure every gallon of gasoline sold in PA contains 10% ethanol - ensure every gallon of diesel sold in PA contains 20% biodiesel
Project/Initiative Funding Forms	grants, rebates, reimbursements, tax credits, venture capital	grants, PIT deductions, SUT exemptions, tax credits	grants, loans, venture capital
Total Expenditure per Year	\$90 million in years 1-5 \$40 million in years 6-7	\$15 million for ? years	\$283 million for 3 years
Revenue Sources	existing revenues	existing revenues	systems benefits charge: \$0.0005/kWh of electricity used, capped at \$10,000/yr/customer
Qualifying Residential Measures	<ul style="list-style-type: none"> - air-sealing - doors - heating & cooling equip. & appliances - insulation - photovoltaic & thermal solar systems - windows - other 	<ul style="list-style-type: none"> - clothes- & dish-washers - doors - heating & cooling equip. & appliances - insulation - new construction - roofing 	<ul style="list-style-type: none"> - air conditioners - photovoltaic solar systems - refrigerators - smart meters
<u>Bonds</u>			
Uses of Proceeds	<ul style="list-style-type: none"> - develop alternative/renewable energy technologies - implement pollution control technology projects - launch clean energy and energy conservation projects 	not applicable	<ul style="list-style-type: none"> - effect clean energy economic development projects (\$500 M) - provide solar panel installation grants & residential appliance rebates (\$244 M) - expand clean energy cos. (\$106 M)
Annual Allocation	\$50 million		\$283 million
Years	5		3
Total Allocation	\$250 million		\$850 million
Total Interest @ 5%	\$151 million		\$514 million
Total Cost	\$401 million		\$1,364 million (\$1.4 billion)

