Fiscal Note & Local Impact Statement

127 th General Assembly of Ohio

Ohio Legislative Service Commission
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BILL: **H.B. 357** DATE: **November 7, 2007**

STATUS: **As Introduced** SPONSOR: **Rep. J. McGregor**

LOCAL IMPACT STATEMENT REQUIRED: **Yes**

CONTENTS: **Modifies and expands the laws governing energy development and supply in Ohio**

State Fiscal Highlights

STATE FUND	FY 2008	FY 2009	FUTURE YEARS
General Revenue Fund – Department of Natural Resources			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	Potential increase for overseeing right-of-way transferred from DOT	Potential increase for overseeing right-of-way transferred from DOT	Potential increase for overseeing right-of-way transferred from DOT
General Revenue Fund – DAS, DMH, MRDD, DRC			
Revenues	Loss in oil and gas lease revenue	Loss in oil and gas lease revenue	Loss in oil and gas lease revenue
Expenditures	- 0 -	- 0 -	- 0 -
Oil and Gas Leasing Board Administration Fund (New Fund)			
Revenues	Gain from a percentage of landowner royalties	Gain from a percentage of landowner royalties	Gain from a percentage of landowner royalties
Expenditures	Increase in administrative costs of reviewing and approving leases	Increase in administrative costs of reviewing and approving leases	Increase in administrative costs of reviewing and approving leases
State Land Royalty Fund (New Fund)			
Revenues	Gain from lease payments from oil and gas drilling	Gain from lease payments from oil and gas drilling	Gain from lease payments for oil and gas drilling
Expenditures	Increase for capital and operating expenses as appropriated by the General Assembly	Increase for capital and operating expenses as appropriated by the General Assembly	Increase for capital and operating expenses as appropriated by the General Assembly

STATE FUND	FY 2008	FY 2009	FUTURE YEARS
Carbon Dioxide Storage Facilities Trust Fund (New Fund)			
Revenues	Gain from CO_2 storage fees	Gain from CO_2 storage fees	Gain from CO_2 storage fees
Expenditures	Increase in administrative and monitoring costs	Increase in administrative and monitoring costs	Increase in administrative and monitoring costs; increase for maintaining closed sites under state ownership
Advanced Energy Fund (Fund 5M5)			
Revenues	Gain from leases of the Lake Erie lakebed for wind energy development and electric utility forfeitures	Gain from leases of the Lake Erie lakebed for wind energy development and electric utility forfeitures	Gain from leases of the Lake Erie lakebed for wind energy development and electric utility forfeitures
Expenditures	Potential increase in loans and grants for advanced energy projects	Potential increase in loans and grants for advanced energy projects	Potential increase in loans and grants for advanced energy projects
Submerged Lands Fund (Fund 697)			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	Potential increase for administering wind energy leases	Potential increase for administering wind energy leases	Potential increase for administering wind energy leases
General Revenue Fund – expenditures for electricity			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	- 0 -	- 0 -	Potential increase up to \$2.5 million or more
Highway Operating Fund (Fund 002) – expenditures for electricity			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	- 0 -	- 0 -	Potential increase up to \$0.7 million or more
Other State Funds – expenditures for electricity			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	- 0 -	- 0 -	Potential increase up to between \$1 million and \$2 million
Public Utilities Fund (Fund 5F6)			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	Increase in the hundreds of thousands	Increase of at least several hundred thousands	Increase of at least several hundred thousands
Universal Service Fund			
Revenues	Potential gain	Potential gain	Potential gain
Expenditures	- 0 -	- 0 -	- 0 -
General Revenue Fund – Department of Transportation			
Revenues	Potential gain from pipeline leases	Potential gain from pipeline leases	Potential gain from pipeline leases

STATE FUND	FY 2008	FY 2009	FUTURE YEARS
Expenditures	- 0 -	- 0 -	- 0 -
State Intersection Traffic Flow Improvement Fund (New Fund) – Public Works Commission			
Revenues	- 0 -	Gain of approximately $45.5 million from motor vehicle registration tax	Gain of approximately $60.6 million from motor vehicle registration tax
Expenditures	- 0 -	Increase for traffic signal grants, up to available revenues	Increase for traffic signal grants, up to available revenues
Highway Operating Fund (Fund 002) – Department of Transportation			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	Potential increase to administer pipeline lease program	Potential increase to review grant paperwork and administer pipeline lease program; potential increase or decrease from transfer of right-of-way to DNR	Potential increase to review grant paperwork and administer pipeline lease program; potential increase or decrease from transfer of right-of-way to DNR
Natural Areas and Preserves Fund (Fund 522)			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	Potential increase for administering right-of-way transferred from DOT	Potential increase for administering right-of-way transferred from DOT	Potential increase for administering right-of-way transferred from DOT

Note: The state fiscal year is July 1 through June 30. For example, FY 2007 is July 1, 2006 – June 30, 2007.

- ***Oil and gas lease revenue.*** The Department of Administrative Services, Department of Mental Health, Department of Mental Retardation and Developmental Disabilities, and Department of Rehabilitation and Correction would all experience minimal to moderate losses in GRF revenue from oil and gas leases. These would be offset by each agency's share of revenues into the newly created State Land Royalty Fund for oil and gas leases overseen by the Oil and Gas Leasing Board.

- ***Oil and Gas Leasing Board.*** The newly created Oil and Gas Leasing Board Administration Fund will receive revenue from a percentage of landowner royalties paid into the fund from lessees of land on which oil and gas wells are located. These revenues will be used to pay the administrative costs of the Board to review and approve leases.

- ***Wind energy development.*** The Advanced Energy Fund (Fund 5M5) would receive new sources of revenue from rental payments for the lease of submerged Lake Erie lands for wind energy development. These revenues could be used to provide additional loans and grants for advanced energy projects, or possibly to support the Ohio Advanced Energy Manufacturing Center. This could also result in additional costs to the Submerged Lands Fund (Fund 697) to administer these leases.

- ***Carbon Dioxide Storage Facilities Trust Fund.*** The newly created Carbon Dioxide Storage Facilities Trust Fund will receive revenue from storage fees paid per ton of carbon dioxide stored by operators of CO_2 storage facilities. These funds will be used to support a long-term monitoring program for carbon storage sites and may be needed to support state ownership of these sites when the facilities reach capacity in the future.

- ***Renewable energy portfolio.*** The bill would require electric utilities subject to regulation by the Public Utilities Commission (PUCO) to meet a renewable energy portfolio requirement. This may increase prices the state pays for electricity. The increase is expected to be minimal in the first few years, while the requirement is being phased in, but is expected to be significant by 2020, when the phase-in is complete.

- ***Public Utilities Commission.*** The bill imposes several new duties on PUCO. PUCO officials are still analyzing the fiscal impact on the agency, but indicate that it will likely require hiring new staff, and that the cost would likely be at least several hundred thousand dollars per year. Any such cost increase would be paid from Fund 5F6.

- ***Electric utility forfeitures.***

  - The bill requires that electric utilities that do not file their three-year plans for energy efficiency with PUCO on time pay forfeitures. Forfeiture amounts are $100,000 per day until the plan is filed, with the amounts deposited into the Advanced Energy Fund. The bill also authorizes PUCO to assess a forfeiture on an electric utility that fails to meet the minimum renewable energy requirements of the bill in any year. If assessed, the amount of the forfeiture would be 200% of the average price of a renewable energy credit during the period of noncompliance for each percentage point below the required level. The amount of revenue received by the fund would depend upon compliance of electric utilities with filing deadlines and with the renewable energy requirements.

  - The bill requires that electric utilities that fail to meet the energy efficiency requirements in their approved plans (by specified deadlines) pay forfeitures. Forfeiture amounts are up to $665,000 for utilities with more than two million Ohio customers, or up to $335,000 for utilities with more than 100,000 (but no more than two million) Ohio customers. Forfeiture amounts are to be deposited into the Universal Service Fund. The amount of revenue received by the fund would depend upon compliance of electric utilities with energy efficiency requirements in their plans.

- ***Motor vehicle registration tax.*** A new $5 tax on motor vehicle registrations would generate approximately $60.6 million annually to the new State Intersection Traffic Flow Improvement Fund, to be used to distribute grants to local governments for costs associated with improving and maintaining traffic control signals to reduce traffic congestion and wasted fuel. The gain in FY 2009 would be approximately $45.5 million due to the October 1, 2008 date in which the tax would begin to be collected.

- ***DOT administrative expenses.*** The Ohio Department of Transportation (DOT) may experience an increase in administrative and personnel expenses, potentially in the hundreds of thousands of dollars, out of the Highway Operating Fund (Fund 002) in order to evaluate the traffic signal grant paperwork submitted by political subdivisions. The exact cost would depend on the way the grant program rules are developed.

- ***CO_2 sequestration pipeline leases.*** The bill requires DOT to implement a lease or permit program for the use of lands owned by the state and used for the state highway system by persons operating pipelines necessary for the operation of the carbon dioxide storage facilities. DOT would likely be able to handle the permit or lease program with existing personnel, although there may be some additional administrative burden to review the plans and specifications of carbon dioxide storage facility pipelines. Since the bill does not specify where any lease payment revenue would be deposited, it is assumed the revenue will be deposited into the GRF by default.

- ***Right-of-way transfer.*** The bill requires DOT to transfer to the Ohio Department of Natural Resources (DNR) the control and management of at least 30,000 acres of right-of-way located along state and interstate freeways.

Upon the transfer, DNR assumes responsibility for the control and management of such acreage. By having to oversee the maintenance of fewer acres, the Department of Transportation may experience a decrease in expenses from the Highway Operating Fund (Fund 002). Although other factors arising from DOT's ownership of the right-of-way via easement and DOT's usage of federal funds to purchase right-of-way may act to increase DOT's costs. DNR may experience increased GRF expenditures in the Division of Natural Areas and Preserves for overseeing these lands.

Local Fiscal Highlights

LOCAL GOVERNMENT	FY 2008	FY 2009	FUTURE YEARS
Counties			
Revenues	Increase in recordation fees for carbon storage facilities	Increase in recordation fees for carbon storage facilities	Increase in recordation fees for carbon storage facilities
Expenditures	- 0 -	- 0 -	- 0 -
Counties, municipalities, townships, school districts			
Revenues	- 0 -	- 0 -	- 0 -
Expenditures	- 0 -	- 0 -	Potential increase up to $42.3 million or more
Counties, municipalities, townships			
Revenues	Potential gain from traffic signal grants	Potential gain from traffic signal grants	Potential gain from traffic signal grants
Expenditures	Potential increase in administrative costs to comply with grant requirements	Potential increase in administrative costs to comply with grant requirements	Potential increase in administrative costs to comply with grant requirements

Note: For most local governments, the fiscal year is the calendar year. The school district fiscal year is July 1 through June 30.

- Counties may experience an increase in recordation fees from permits and statements of property rights filed for parcels of property to be used for underground carbon dioxide storage facilities.

- The bill would require electric utilities subject to PUCO regulation to meet a renewable energy portfolio requirement. This may increase prices local governments pay for electricity. The increase is expected to be minimal in the first few years, while the requirement is being phased in, but is expected to be significant by 2020, when the phase-in is complete.

- Municipal corporations, counties, and townships would be eligible for grants to improve and maintain traffic control signals so that the signals are better coordinated to reduce traffic congestion and prevent the waste of fuel by cars sitting idle at stop lights. There may be an increase in administrative costs for political subdivisions to comply with the requirements for grant eligibility.

Detailed Fiscal Analysis

Natural Resources and Development

Oil and gas development

The bill repeals all existing authority for state agencies to enter into leases for the development of oil and natural gas resources. Currently, the Department of Administrative Services (DAS), Department of Rehabilitation and Correction (DRC), Department of Mental Retardation and Developmental Disabilities (MRDD), and Department of Mental Health (DMH) have authority to enter into leases for the extraction of oil and gas from lands owned by those agencies. In addition, the Department of Natural Resources (DNR) has authority to enter into leases to remove oil and gas from the Lake Erie lakebed and on lands owned by the Division of Wildlife.

Currently, those agencies with authority to enter into oil and gas leases on their state-owned lands deposit the proceeds from those leases into the General Revenue Fund (GRF). While the bill would cause these agencies to incur a loss in revenue from these leases due to the rescission of that authority, it is not likely that the foregone GRF revenues would be more than minimal. In at least one case, the authority is no longer being exercised; MRDD has closed the facility where their oil and gas wells were located and no longer receives revenue from them.

Oil and Gas Leasing Board

Instead of each of the above agencies entering into leases individually, the bill creates the Oil and Gas Leasing Board as a central authority to oversee the leasing of state lands for oil and gas development. The Board consists of DNR's Chief of the Division of Mineral Resources Management as the chairperson and the Chief of the Division of Geological Survey as the vice-chairperson, with three members appointed by the Governor. One member must be a registered professional engineer in Ohio, one must be an independent oil and gas producer in Ohio, and one must represent the public. The Board's members serve without compensation beyond that which they already receive from the state. However, they may be reimbursed for expenses incurred in the performance of their duties with funds from the newly created Oil and Gas Leasing Board Administration Fund.

Under the bill, the Oil and Gas Leasing Board has the exclusive authority to lease any portion of developed land for the exploration, development, and production of oil or natural gas.[1] Leases are subject to a nomination and competitive bid process and are required not to interfere with the primary use of the developed land. The Board must also consider the economic and environmental impact of a lease and has the discretion to adopt rules establishing other factors to consider when reviewing leases.

[1] The bill defines "developed land" as land for which a state agency owns the mineral rights and that is covered by concrete, asphalt, gravel, turf, crops, or fields that have plants or trees not exceeding ten years of growth.

The bill creates the Oil and Gas Leasing Board Administration Fund in the state treasury in order to pay the administrative expenses of the Board and to reimburse Board members as described above. Administrative expenses are likely to include the costs of developing forms and procedures for reviewing nominations and lease bids, considering the economic and environmental impacts of leases, and providing the required written notices to applicants and lessees. Revenues to the fund are to consist of a percentage of the landowner royalty paid by lessees, which is to be one-eighth of the total lease payments. The bill requires the percentage of royalties credited to the Oil and Gas Leasing Board Administration Fund to be determined in rules.

State Land Royalty Fund

The bill establishes the State Land Royalty Fund in the state treasury, consisting of lease payments and royalties paid to the Oil and Gas Leasing Board made by state agencies that own or control the land on which the oil or gas extraction activities are taking place. The fund is to be used to pay the capital and operating costs of those state agencies on whose behalf money is credited to the fund. A state agency is entitled to that share of the fund that is equivalent to the amounts credited to the fund on behalf of that agency as well as a proportionate share of the fund's investment earnings. It is likely that income from leases deposited into this fund would offset or possibly exceed (due to investment earnings) any GRF revenues previously received by agencies under the previous leasing system.

The bill requires the General Assembly to appropriate amounts from this fund for agencies' capital and operating expenses. Presumably, these expenditures would also be in proportion to agencies' respective revenues from leases under this fund. The bill does not specify what capital and operating costs would be covered by this fund, whether that would be left to agencies' discretion, or determined by rule.

Indirect fiscal effects

The bill limits the Oil and Gas Leasing Board's authority only to entering into leases for drilling for oil or gas on land that is owned or controlled by state agencies, so it is assumed DNR's role in regulating the permitting, location, and spacing of oil and gas wells within the state would remain the same as under current law. However, it is likely that under the bill, the Board would approve additional leases, potentially increasing the permitting and inspection responsibilities of DNR. If so, these increased costs would be offset by gains in permit fee revenue, which is currently deposited into the Oil and Gas Permit Fees Fund (Fund 518).

With increased permitting activity, the state may see an increase in severance tax revenue; however, based on an LSC analysis of S.B. 193 of the 125th General Assembly, which established a similar centralized authority for oil and gas leases, a significant gain is not expected. Severance tax revenue is deposited into several DNR funds:

- Geological Mapping Fund (Fund 511);
- Oil and Gas Well Fund (Fund 518);

- Coal Mining Administration and Reclamation Reserve Fund (Fund 526);
- Surface Mining Administrative Fund (Fund 527),
- Unreclaimed Lands Fund (Fund 529); and
- Reclamation Supplemental Forfeiture Fund (Fund 531).

The actual amount of new oil and gas wells that may be permitted is unknown, resulting in an unknown amount of additional severance tax revenue.

Geologic carbon sequestration

The bill grants DNR's Division of Mineral Resources Management the exclusive authority to regulate the storage of anthropogenic (human-produced) carbon dioxide (CO_2) in subterranean reservoirs formed out of geologic formations. Such "carbon sequestration" techniques are used to reduce the concentrations of the greenhouse gas CO_2 that are being released into the atmosphere.

The bill allows the Chief of the Division of Mineral Resources Management to issue permits to qualified entities seeking to operate CO_2 storage facilities if they meet certain requirements. Applicants must demonstrate that the facility is suitable and feasible for the purpose of storing carbon dioxide, that they have the consent of a majority of property interests affected by the facility, that the facility will not contaminate existing resources, and that the facility will not endanger human health and the environment, along with any other terms and conditions the Chief deems appropriate.

Permits for carbon storage facilities issued under the bill are subject to rules adopted by the Chief for establishing application procedures, appropriating property interests, establishing financial assurance requirements for the maintenance and proper disposal of a storage site, penalties and procedures, and fees to be charged to storage operators. The Chief must also adopt rules regarding closure requirements for facilities that have reached their storage capacity, requires such sites to fall under state control after a period of ten years has passed since CO_2 was last injected into a facility, and requires rules for the creation and administration of a long-term monitoring program and for allowing enhanced oil or natural gas recovery operations to be converted into a carbon storage facility. The bill also allows the Director of Natural Resources to enter into cooperative agreements with the federal government and other states if the Division of Mineral Resources Management believes such agreements to be necessary.

Carbon Dioxide Storage Facility Trust Fund

The bill creates the Carbon Dioxide Storage Facility Trust Fund in the state treasury, funded by the storage permit fees paid by CO_2 storage operators. The bill specifies that the fee is to be set by rules and calculated as an amount paid per ton of carbon dioxide stored by a facility. The fund is to be used to administer all aspects of the carbon sequestration program, including funding for long-term monitoring.

The fund would pay the administrative costs of the carbon sequestration program outlined above, including issuing permits, adopting rules, and performing other work associated with operating the program. The largest portion of the costs is likely to be for the:

- long-term monitoring program for overseeing the operation of CO_2 storage facilities;
- remediation of mechanical problems at storage facilities and surface infrastructure;
- repairing mechanical leaks at storage facilities; and
- plugging and abandoning wells associated with storage facilities.

The long-term monitoring program will likely require DNR to hire a number of additional staff to carry out the tasks just mentioned.

In addition, the bill requires ownership of a storage facility to pass to the state no later than ten years, or another time frame to be specified in rules, after the last injection of CO_2. The transfer of ownership is contingent upon a site's operator proving that the facility is reasonably expected to maintain its mechanical integrity and remain emplaced, and previous certification by the Division of Mineral Resource Management that the site is no longer accepting injected carbon dioxide. Presumably, the costs of maintaining these closed sites would be incurred by DNR and paid out of the Carbon Dioxide Storage Facility Trust Fund once ownership has been transferred. Depending on the time frame for state takeover of facilities established in rules, it could be less than ten years after the completion of carbon injections when DNR assumes ownership of a closed facility.

County recordation fees

The bill requires the Chief of the Division of Mineral Resources Management to file a copy of the permit issued by the Division for carbon sequestration with the recorder's office of the county in which the facility is located. In addition, prior to the injection of any CO_2 into a storage facility, facility operators must file statements with the county recorder that they are legally entitled to all property rights with respect to the storage facility. These provisions would result in an increase in fees collected by county recorders for processing and filing these documents.

Wind energy development

The bill requires DNR to make a portion of the Lake Erie lakebed available for leasing for wind energy development. The bill requires the Director to establish, by rule, a system for the lease of areas in the northeastern part of the lakebed for this purpose, including the amounts to be paid by a lessee.

Under the bill, lessees would pay rent to DNR, which would deposit the payments into the Advanced Energy Fund (Fund 5M5) in the Department of Development (DOD). These moneys would supplement the existing source of revenue for that fund, which consist primarily of the temporary rider on electric distribution rates, along with interest earnings and funds from loan repayments under the Advanced Energy Loan Program. DOD uses the Advanced Energy Fund to provide loans for advanced energy projects by businesses, local governments, nonprofit organizations and other entities. Under current law, the revenue target for the portion of the fund supported by the electric distribution rider after the year 2005 is $5 million. The appropriation authority for the fund as passed in Am. Sub. H.B. 119 of the 127th General Assembly, the operating budget bill for FYs 2008-2009, is $17 million in each fiscal year. The gain from lease payments under the bill would likely allow for a greater number of loans to be issued from the fund for advanced energy projects. Alternatively, the additional revenue could be used to support the Ohio Advanced Energy Manufacturing Center established in this bill (see below for a detailed discussion of these provisions).

The expenses incurred by DNR for administering the Lake Erie wind energy lease program would likely be paid out of the Office of Coastal Management's Submerged Lands Fund (Fund 697). These dollars are used in part to support current leases of submerged lands in Lake Erie. Currently, lease revenues support this fund. However, since the wind energy leases under the bill are paid into the Advanced Energy Fund, it is unknown at this time if the costs of administering the wind energy leases could be supported entirely out of Fund 697.

Advanced Energy Manufacturing Center

The bill requires the Director of Development to establish the Ohio Advanced Energy Manufacturing Center to facilitate the design and development of advanced energy projects, advanced energy workforce training programs, and investment in advanced energy manufacturing technologies. Under the bill, the Center will be overseen by the Advanced Energy Manufacturing Center Board, to consist of the Director of Development (or a designee), one member each of the House of Representatives and the Senate, and six members appointed by the Governor with the advice and consent of the Senate. The bill specifies that the Governor-appointed members should have knowledge and experience in the field of advanced energy or translational research, business, higher education, and federal research and development programs with an emphasis on manufacturing and knowledge of current business and academic resources.[2] Board members are uncompensated, but may be reimbursed for necessary and actual expenses related to the performance of their duties.

The Board has the power to hire an executive director, who in turn will hire a staff for the Center. The Board is also required to establish a budget for the Center, maintain an office within the state, develop administrative policies, establish cooperative partnerships with the Department of Development (DOD) and the Department of Job and Family Services (JFS) and higher education institutions, establish a system for identifying promising advanced energy projects, establish a research protocol, approve contracts, and develop a plan for the Center to become self-sustaining within ten years.

The Center would not, itself, be a state entity, however presumably state funding would be needed for DOD to undertake the work necessary for its establishment. The bill does not identify a funding source for the Center; however, it is possible that the Advanced Energy Fund (Fund 5M5) could be used to cover these costs, as well as any additional operating expenditures necessary to support the Center within the first ten years of its lifetime. The bill does require the Center to become self-sustaining within this timeframe, so it is possible that any state support would decline over time.

Support of the Ohio Advanced Energy Manufacturing Center represents one possible use of the additional revenue that would be generated for the Advanced Energy Fund through the wind energy lease program established by this bill. The mission of the Center seems to fall within the parameters of

[2] The bill defines "translational research" as conducting scientific or technological inquiry and experimentation in advanced energy with the goal of developing practical tools, techniques, and applications for use in marketable advanced energy products.

"financial, technical, and related assistance" for advanced energy projects for the purposes of the Advanced Energy Program outlined in section 4928.62 of the Revised Code. If so, then DOD could issue grants or loans to the Center from the Advanced Energy Fund for qualifying activities.

Energy Regulation

Bill description

Energy efficiency measures

The bill requires electric utilities to implement energy efficiency measures that save specified amounts of electricity relative to each utility's sales for the 12 month period ending May 31, 2008. The required savings is 0.2% in the first year following the baseline year, increasing gradually to a required savings of 2% in every year following June 1, 2015. The bill also imposes requirements on electric utilities regarding shifting demand from peak to off-peak hours. The bill subjects both requirements to limitations, based on the cost of achieving the requirements—in the first year following May 31, 2008, for example, the measures adopted must not increase the average cost per kilowatt hour of electricity purchased by more than 0.5% of the rate in effect for the preceding year, or else the measures may be implemented on a more limited basis to meet the cost limitation. PUCO must report to the General Assembly not later than June 30, 2011, whether the bill's limitation on the cost to customers of energy efficiency measures "unduly constrains the procurement of energy-efficiency and peak-demand reduction measures."

Electric utilities are required to file with PUCO three-year plans for implementing energy efficiency measures. The initial plan is due not later than January 15, 2008, with subsequent plans due each three years. The plans must meet requirements specified in Section 4928.705 of the bill, and the utility must consult with the Director of Development regarding ways to meet the required goals. The utility is to implement approximately 75% of the energy efficiency measures laid out in the plan and the Department of Development (DOD) is to implement the remaining approximately 25%. If the utility and the Director are unable to agree on a plan, each must submit their version of a plan for the utility to PUCO. After notice and a hearing, PUCO must approve or disapprove the plan within 60 days. If it disapproves the plan, PUCO must provide written reasons for its disapproval, including remedies that would lead to approval; the utility then has 30 days to refile a modified plan.

The bill requires that an electric utility that fails to file (or refile) a plan on time is assessed a forfeiture in the amount of $100,000 per day until the plan is filed (or refiled). Forfeiture amounts are deposited into the Advanced Energy Fund. A utility is not subject to forfeiture if its failure to file is attributable to lack of agreement with the Director on the provisions of its plan. Actions to recover any such forfeitures are to be commenced by the Attorney General, at the direction of PUCO, in a court of common pleas in a county in Ohio in which the utility operates.

The bill also assesses forfeitures on a utility for failure to meet the terms of its approved plan by the end of the second year the plan is in force. The forfeiture amounts are up to $665,000 for an electric utility with more than two million Ohio customers, and up to $335,000 for an electric utility with more than 100,000 (but no more than two million) Ohio customers. Another forfeiture is assessed if the utility fails to meet the terms of its approved plan by the end of the third year, with the amount of the forfeiture subject to the same limits. Any forfeiture amounts collected for failure to meet the term of a plan are to be deposited into the Universal Service Fund. Actions to recover any such forfeitures are to be commenced by the Attorney General, at the direction of PUCO, in a court of common pleas in a county in Ohio in which the utility operates.

PUCO is required to annually review the tariff that is imposed as part of an energy-efficiency/peak demand reduction plan. PUCO is to adjust the tariff upward or downward as needed to reconcile amounts spent under the plan with revenue collected under the tariff. Utilities are required to pay tariff amounts attributable to energy efficiency measures implemented by DOD to PUCO, to be deposited into the Energy-Efficiency Fund, which the bill establishes in the State Treasury. The fund is to be used to finance implementation of energy-efficiency measures undertaken by DOD.

Renewable energy requirements

The bill would require generation suppliers to derive a percentage of the electricity that they sell from renewable sources[3] beginning in calendar year 2010. The required percentage is 2% in 2010, and increases in increments until it reaches 22% by calendar year 2020. Generation suppliers are required to submit a report to the PUCO annually by April 15 presenting specified information about their production and sales of electricity during the previous calendar year.

The renewable energy requirement may be fulfilled (in whole or in part) by using renewable energy credits. The credits are to be issued by PUCO to generators to the extent that their generation exceeds the minimum requirement in a given year, and PUCO is required to review the sales of each generator annually to determine the number of credits for which it qualifies. A credit may be sold from one generator to another, but must be used only once to satisfy the minimum requirement, and must be used in one of the two calendar years following its issuance. PUCO is to develop and maintain a registry for tracking specified information about all credits available.

The Commission may assess a forfeiture on any generation supplier that fails to meet the minimum requirements for renewable energy generation. The amount of the forfeiture is to be 200% of the average price of a renewable energy credit during the applicable period for each percentage by which the supplier fell short of the minimum requirement. Receipts from forfeitures are to be deposited into the Advanced Energy Fund.

The bill also authorizes PUCO to impose a just and reasonable surcharge on the bills of customers that receive electricity from a generation supplier that derives some of its generation from a fuel cell facility that has a generating capacity of 30 kilowatts or less. The amount of the surcharge as determined by the Commission is to be the amount necessary to pay the costs of designing and constructing the facility.

[3] "Renewable energy" and a number of related terms are defined in Section 4933.51 of the bill.

Background

Reputable studies find that renewable portfolio standard (RPS) requirements would increase the price of electricity to consumers (including governments). For example, the U.S. Energy Information Administration (EIA) published a study in August 2007 titled *Energy and Economic Impacts of Implementing Both a 25-Percent Renewable Portfolio Standard and a 25-Percent Renewable Fuel Standard by 2025*.[4] As implied by the title, the specific policy proposal that that study examined differed from the current bill: it required a 25% renewable portfolio standard rather than a 22% RPS, and it required a 25% renewable fuel standard in addition to the RPS requirement. The study projected that average retail electricity prices would increase by about 3.3% due to the proposal by 2025, and by 6.2% by 2030. It also projected that about one-half of the renewable generation required by the proposal would be met by biomass electricity generation, and that wind generation would account for slightly over one-third. For purposes of comparison, another EIA study, released in June,[5] analyzed the effect of a 15% RPS proposal, finding that that proposal would increase electricity prices by about 2.0% by 2030.

The more recent study included many caveats, which are appropriate given the long-term nature of the projections. It was based on federal laws and regulations as they were on September 1, 2006; in particular any tax incentives that were scheduled to expire under the law on that date were assumed to expire. It made projections about the cost, performance, and commercial feasibility of types of generation, such as advanced biomass generation, for which no commercial generation currently exists. Any of those assumptions may prove to be overly optimistic (in which case the price increases could be greater than projected) or overly pessimistic (in which case they could be smaller than projected). And, of course, it projected the prices of commodities like oil, coal, natural gas, and uranium that are very hard to predict. Given the differences between the proposal analyzed in this study and the RPS requirement of H.B. 357, as well as the uncertainties highlighted in the study itself, the projected effects on electricity prices would differ from the effects that H.B. 357 is likely to have. Nevertheless, the RPS requirement of H.B. 357 is likely to affect electricity prices. This point is elaborated below.

Both the state and local governments are consumers of electricity. OBM reports that state agencies spent slightly over $52.1 million on electricity in FY 2007. The agencies that spent the largest amounts were the Department of Rehabilitation and Correction (DRC, $14.2 million), the Department of Transportation (DOT, $11.4 million), the Adjutant General (ADJ, $3.6 million), the Department of Mental Health (DMH, $3.5 million), the Department of Administrative Services (DAS, $3.4 million), and the Department of Natural Resources (DNR, $3.3 million). No other agency spent more than $3 million that year, though one spent over $2 million and four spent over $1 million. In addition to direct spending on electricity, some agencies pay for electricity indirectly, as part of the amount they pay for leased office space. The U.S. Census Bureau estimates that local governments in Ohio collectively spent approximately $682.7 million on electricity during the fiscal year that ended between July 1, 2004, and June 30, 2005. The definition of local governments appears to include counties, municipalities, townships, special districts, and school districts.

[4] The study can be found at the EIA web site, www.eia.doe.gov/fuelrenewable.html. Click on "more renewable reports" to find it.
[5] This study is titled *Impacts of a 15-Percent Renewable Portfolio Standard*.

Fiscal Effects

Public Utilities Commission

The bill imposes several new duties on PUCO, including accepting three-year energy efficiency plans from electric utilities, monitoring compliance with their energy efficiency plans and with renewable energy requirements in the bill, implementing a system of renewable energy credits, and issuing a report to the General Assembly on whether the cost limitation in the bill "unduly constrains the procurement of energy-efficiency and peak-demand reduction measures."

A PUCO official indicates that their staff is still analyzing the fiscal impact of the bill. Their preliminary assessment is that the bill would require hiring new full-time staff members and that the cost would likely be at least several hundred thousand dollars per year. Any such cost would be paid from the Public Utilities Fund (Fund 5F6). Fund 5F6 receives funding primarily from assessments on utilities regulated by PUCO. The amount of the assessments is based on the amount appropriated to line item 870-622, Utility & Railroad Regulation, in the PUCO budget. Since there are no appropriations in the bill, the increase in expenditures would have to be absorbed in the Commission's existing budget, at least through FY 2009.

Effects on electricity bills paid by state and local governments

The bill imposes a renewable energy requirement on electric utilities. Based on EIA studies of similar renewable portfolio standards being imposed nationwide, it seems likely that this requirement would increase electric generation rates. While EIA studies cited above projected increases in electricity prices of 2.0% to 6.2% by 2030 from somewhat similar provisions, there are a number of differences between the proposals that were analyzed in generating those projections and the requirement in H.B. 357. The principal differences are that H.B. 357:

(1) would impose a 22% RPS when fully phased in, compared to a 25% RPS analyzed in one of the studies and a 15% RPS analyzed in the other; and

(2) would apply only to Ohio, as compared with nationwide application.

While LSC staff are unable to determine the magnitude of the impacts of these differences on EIA projections, economic theory does suggest the direction of the impacts. In the case of the first difference, since the H.B. 357 requirement is between the requirements analyzed in the two EIA studies, it is likely that the effect on electricity prices would be between those projected by the two studies (i.e., between a 2.0% increase and a 6.2% increase). In the case of the second difference, EIA has found in past studies that reduced prices for fossil fuels roughly offset the fact that renewable energy sources are generally costlier than fossil fuels, so that offsetting savings prevented the average cost of producing electricity from rising much. Since the markets for fossil fuels are generally national (if not international), meaning Ohio generators are a small part of the overall market, then the offsetting savings would be smaller—on average electricity prices would rise more.

There are substantial uncertainties involved in long-range forecasting, especially when technological change may change some of the cost variables significantly at some point during the next

13 years. Many of those uncertainties are highlighted in the EIA study cited above, making their projections themselves subject to significant uncertainty. Given that the first difference described above would suggest that electricity prices would increase by between the 2.0% and 6.2% by 2030 found in the two studies, and that the second difference would tend to increase the effect on electricity prices compared with EIA studies, it seems likely that Ohio electricity prices would rise by more than 2.0%, and may rise by more than 6%.

LSC staff project that electricity prices in Ohio may increase by up to 6.2% or more due to the RPS provision of the bill. That implies that electricity bills for the state could increase by up to $3.2 million or more per year by FY 2030. For local governments, they could increase by up to $42.3 million or more per year by FY 2030. The costs would increase gradually over the course of the intervening period for both state and local governments.

The state pays for electricity from a variety of different funds in the budget. The GRF is certainly the largest single source of funding, providing the source of funding for purchases by DRC ($14.2 million in FY 2007), DAS ($3.4 million), and at least a portion of the funding for two other large users (ADJ and DMH). The second largest user, DOT ($11.4 million in FY 2007), pays for electricity out of the Highway Operating Fund (Fund 002).

Transportation

Traffic flow improvement grants

The bill creates a new $5 tax on initial motor vehicle registrations and registration renewals that would go into effect October 1, 2008, the revenue from which would flow into the newly created State Intersection Traffic Flow Improvement Fund. In CY 2006, there were 12,127,645 vehicles registered in Ohio. Assuming that, in the future, the number of registered vehicles stays at around 12 million per year, then $5 added to the vehicle registration fee would generate approximately $60.6 million annually (12,127,645 registrations x $5). Assuming that the Department of Public Safety's Bureau of Motor Vehicles processes motor vehicle registrations in roughly similar amounts quarterly, revenue from the tax would be approximately $45.5 million in FY 2009 due to the October 2008 effective date for the new tax.

The revenue derived from the tax is only to be used by the Public Works Commission to distribute grants to municipal corporations, counties, and townships. Those political subdivisions must use the grants to pay costs associated with improving and maintaining traffic control signals as well as the equipment controlling the traffic control signals, the goal of which would be to allow political subdivisions to coordinate the timing of traffic control signals so that commute times are reduced and wasted fuel from cars idling at stop lights is minimized.

In order to receive a grant, the political subdivision must provide satisfactory evidence to the Department of Transportation showing that their traffic control signals are in compliance with the Ohio Manual of Uniform Traffic Control Devices and that the political subdivision is working with other political subdivisions that control and maintain traffic signals on the same street or highway to coordinate the signals to reduce fuel consumption and reduce commuting time. There may be some additional administrative work on the part of the local governments applying for the grants to submit the appropriate paperwork.

Likewise, the Ohio Department of Transportation (DOT) may experience an increase in administrative expenses and personnel costs out of the Highway Operating Fund (Fund 002) in order to evaluate the grant paperwork. Actual costs will depend on how the grant program's rules are developed. According to rough estimates DOT provided, if the employees handling the grant responsibilities are distributed evenly in each of DOT's 12 districts (with grant review being about 25% of one person's job duties) at least three additional full-time equivalent employees may be needed. Alternatively, DOT noted that if the review function could be handled through its central office, up to four employees could be needed. Therefore, it is possible that DOT's personnel costs would increase in the hundreds of thousands of dollars as a result of this provision.

Department of Transportation

CO_2 sequestration pipeline leases

The bill requires DOT to implement a lease or permit program allowing the use of lands owned by the state and acquired or used for the state highway system by persons operating pipelines that are necessary for the operation of the carbon dioxide storage facilities that would be regulated under the bill.

The bill requires the program to conform to requirements found in current law (section 5501.45 of the Revised Code, unchanged by the bill) setting out the conveyance of lands not needed for highway or recreational purposes. R.C. 5501.45 requires the Director of Transportation to approve the plans and specifications for all such buildings or structures and their intended uses as not interfering with the use of the state highway system and not unduly endangering the public and allows the Director to require an indemnity agreement as is lawful and deemed necessary, which would enable DOT to recover any losses incurred as a result of damage to leased or permitted lands. DOT would still be required to maintain the grounds over the pipelines. DOT would likely be able to handle the permit or lease program with existing personnel, although there may be some additional administrative burden to review the plans and specifications of carbon dioxide storage facility pipelines and carry out any other administrative functions necessary for operation of the lease or permit program.

DOT permits public utilities to occupy right-of-way at no charge via permit. However, DOT does receive lease payments. The bill does not specify where any lease payment revenue received by the Department would be deposited, meaning that it would be placed in the GRF by default. The magnitude of any revenue gain is uncertain, but for a similar installation of a relatively short Ashland Oil gasoline pipeline, DOT receives approximately $85,000 in lease payments annually.

Transfer of right-of-way to DNR

The bill requires DOT to transfer to DNR at least 30,000 acres of right-of-way located along state and interstate freeways. Upon the transfer, DNR assumes responsibility for the control and management of such acreage. DOT currently oversees roadside maintenance work such as vegetation obstruction, drainage ditch obstruction, and litter removal. The Department also ensures the grass is cut, herbicide application is performed to control vegetation growth, and flowers and trees are planted to control erosion. DOT employees do much of this work while the rest is contracted out. With fewer acres to maintain, it may be that the Department of Transportation's roadside maintenance expenses decrease. However, DOT noted that an agreement could be reached where DNR would receive funding from DOT for the maintenance of the transferred right-of-way, offsetting the decrease in expenses. DOT's Highway Maintenance program funding comes from motor fuel tax revenue in the Highway Operating Fund (Fund 002).

Another factor to consider may be that DOT only holds easements on their right-of-way, which are narrowly defined and pertain only to the construction, operation, and maintenance of roadways. Consequently, the right to lease the property or otherwise allow a third-party to gain revenue from the lands (such as through the sale of vegetation that can be processed into cellulosic ethanol) is maintained by the fee owners (those who hold the property outright). As a result, DOT indicated that it would be subject to paying the underlying fee owners for any additional burdens placed on their land while any revenue generated by such crops could be required to be shared with fee owners.

Something also to consider is the fact that DOT purchased the majority of its right-of-way with federal funds. DOT indicated that it would need to seek Federal Highway Administration (FHWA) approval to transfer its rights to DNR, which may result in DOT incurring a liability to FHWA for the funds used to purchase rights-of-way. The above factors may act to increase DOT's costs.

The bill requires DNR to replace the grass currently growing on the right-of-way land with vegetation that can be processed into cellulosic ethanol or that contributes to highway beautification. Although it is not specified in the bill, LSC believes that the Division of Natural Areas and Preserves is the most likely division to assume control of these rights-of-way. In this case, the costs of maintaining the land to the standards required by the bill would be paid out of GRF funds and possibly the Natural Areas and Preserves Fund, which is funded by voluntary income tax refund contributions and donations from the general public. It is also possible that, if DOT enters into an agreement with DNR to fund the management of the transferred land, then DOT could transfer the required amounts to DNR.

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