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ENERGY EFFICIENCY FUNDING

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You asked for a summary of the Department of Energy and Environmental Protection's (DEEP) draft decision on the electric and natural gas companies' 2013-2015 energy efficiency plan. You also wanted to know Connecticut energy efficiency charges compare to those in other states.

SUMMARY

On August 23, 2013, DEEP issued a draft decision to approve the 2013-2015 efficiency plan and associated budgets submitted by the electric and natural gas companies, as revised by DEEP. Under the draft decision, authorized spending would increase from $140 million in 2012 to $227 million, $231 million, and $235 million in 2013, 2014, and 2015, respectively.

The draft decision modifies the budgets submitted by the companies. For example, in their 2013 expanded budget, the electric companies proposed funding the Home Energy Services (HES) program, which provides audits and efficiency measures such as building sealing, at $26.6 million. In light of concerns about the program's cost-effectiveness, the draft decision approves a $14 million budget, although it also approves a potential addition of $8.9 million for this program in 2013 and smaller potential additions in 2014 and 2015. In contrast, the gas companies proposed funding the HES program at $11.3 million but the draft increases this amount by $5 million to encourage customers

switching to gas to select “deeper” efficiency measures, such as high efficiency furnaces, insulation, and appliances.

The authorized budgets will be funded, directly and indirectly, by ratepayers. DEEP anticipates that the budgets will not exceed the available existing revenues plus the additional revenues authorized by PA 13-298.

The draft decision recommends, and in some cases requires, changes to the efficiency programs. Among other things, it requires that before HES program funding is approved above the base level in 2014 and 2015, the program should be evaluated, its design changed, or both. The draft decision recommends that the Energy Efficiency Board reconsider whether the current participant co-pay for HES (1) is appropriate or (2) should be increased to reduce the ratepayer subsidy for the program while not decreasing participation levels.

The draft decision modifies the incentives electric companies receive for meeting energy efficiency goals and creates a similar incentive mechanism for gas companies.

There will be a 30-day comment period and DEEP will hold a public meeting on the draft decision on September 10, 2013 at its New Britain offices, when people can submit oral comments. DEEP anticipates issuing a final decision this fall.

We have not found data on utility efficiency charges across states and some ratepayer funding for efficiency programs in Connecticut and other states is not itemized in rates. However, in 2011, Connecticut’s funding for electric efficiency programs, measured by dividing efficiency spending by total electric utility revenues, was tied for the 10th highest in the country according to the American Council for an Energy-Efficient Economy. Using a similar measure, Connecticut’s gas efficiency spending was the fifth highest in the country. If the final DEEP decision maintains the level of funding contained in the draft decision, Connecticut’s efficiency spending (and by implication, the ratepayer charges that support it) will be at or near the top of the states.

ENERGY EFFICIENCY PLAN

Introduction

CGS § 16-245m, as amended by PA 13-298, requires the gas and electric companies to develop a joint plan to implement efficiency programs. The plan must include a detailed budget sufficient to fund all energy efficiency measures that are cost-effective or lower cost than acquiring equivalent supply. Prior to the passage of PA 13-298, the law required the companies to file separate plans, although in practice they filed a joint plan in 2012.

Funding for gas efficiency programs comes from a conservation adjustment mechanism (CAM) on gas bills. PA 13-298 requires that the gas CAM be set at a level to fully fund the gas efficiency programs in the approved gas efficiency budget, with a cap of 4.6 cents per each hundred cubic feet of gas sold (approximately double the current gas CAM).

Historically, funding for electric efficiency programs primarily has come from the 3 mill per kilowatt hour (kWh) charge on electric bills required by CGS § 16-245m(a). In July 2012, DEEP issued a final decision on the 2012 electric efficiency plan, approving an expanded budget and recommending that the Public Utilities Regulatory Authority (PURA) establish an electric CAM to collect the revenues needed to fund the expanded electric efficiency budget beyond existing revenues.

PA 13-298 requires PURA to ensure that additional revenues required to fund the DEEP-approved electric efficiency budget are provided through a CAM for each electric company of not more than 3 mills per kWh during the three years of any plan (in addition to the existing 3 mill per kWh charge).

Under prior law, the Energy Efficiency Board accepted, modified, or rejected the individual programs in gas plans before submitting them to PURA, which then approved each company's plan. In the case of the electric company plans, the board approved or rejected the individual programs before submitting the plans to DEEP for its approval. PA 13-298 instead requires the board to accept, modify, or reject the programs in the combined plan and approve the plan as a whole (in addition to its programs) before submitting it to the DEEP commissioner for his approval.

CGS § 16-245ee requires DEEP to determine that an equitable share of efficiency programs funds are spent on residential and small business customers in census tracts where the median income is no more than 60% of the state median. These data are not available by census tract, so DEEP uses funding and expenditures in distressed municipalities as a proxy. As part of the 2013-2015 plan, DEEP found that efficiency program spending in these municipalities more than matched contributions from ratepayers there in 2011 and virtually matched their contributions in 2012.

Companies' Proposals

The electric and gas companies filed the 2013-2015 combined plan and base budgets in November 2012. The Energy Efficiency Board indicated it was dissatisfied with the level of energy savings reflected in the plan and budgets as submitted and directed the companies to revise them to increase energy savings. The companies submitted expanded budgets as well as revised base budgets on February 25, 2013 with DEEP and PURA.

The revised base budgets proposed by the electric companies were slightly below the 2012 authorized budget of $105.6 million, totaling $101.5 million, $102.3 million, and $102.8 million for 2013, 2014, and 2015, respectively. The companies also proposed expanded budgets, totaling $195.4 million, $246.1 million, and $301.7 million for 2013, 2014 and 2015, respectively.

The gas companies proposed base budgets of $24.1 million, $23.5 million, and $24.1 million for 2013, 2014 and 2015, respectively. They also proposed expanded budgets of $37.4 million, $42.0 million, and $45.0 million for 2013, 2014, and 2015, respectively. The authorized 2012 budget was $34.2 million.

Approved Budgets

Table 1 presents the expanded budgets submitted by the electric and gas companies for 2013 and the spending authorized by DEEP in the draft decision (taken from Table 1a in the draft decision). Tables 1b and 1c in the draft decision have parallel information for 2014 and 2015. The total amount approved increases from $227.2 million in 2013 ($183.6 million electric and $43.6 million gas) to $230.9 million in 2014 ($182.4 million electric and $48.5 million gas), and $235.0 million in 2015 ($183.6 million electric and $51.4 million gas).

Table 1: 2013 Expanded Budgets ($ millions)

Program/Area	Electric company		Gas company	
	proposed	approved	proposed	approved
Residential				
• Residential products	15.3	19.0	0	0
• Appliance rebates • (new program)	0.6	0	0	0
• Residential new construction	2.1	1.8	2.3	2.3
• HES	26.4	14.0 (plus possibly 8.9)	11.3	16.3
• HES – income eligible	23.4	22.0	8.0	8.0
• Residential behavior	1.1	1.0	0	0
Commercial and Industrial				
• Energy conscious blueprint	13.2	12.3	5.0	5.0
• Energy opportunities	43.0	38.5	3.3	3.3
• Operations and maintenance	6.6	6.5	1.3	1.3
• PRIME (manufacturers)	1.0	0.8	0	0
• Small Business	27.4	22.5	0.4	0.4
Other Programs				
• Education	6.3	3.6	0.6	0.9
• Load management	3.5	3.5		
• Renewables/ RD&D	0.7	0.5	0.2	0.2
• Other programs	4.8	8.5	0.8	0.9
Administration	19.8	20.1	4.2	4.9
Total	**195.4**	**183.6**	**37.4**	**43.6**

Electric Companies. In many cases, DEEP approved budgets below the levels the electric companies proposed in their expanded budgets. For example, the companies sought to double funding in 2013 and 2014 for

HES, which provides audits and efficiency measures such as building sealing, and nearly triple the budget in 2015. However, DEEP's review of the program found that actual electric savings were less than the savings the electric companies projected. A significant percentage of customers actually increased their electricity use after receiving a HES audit.

In light of these issues, DEEP did not approve increasing HES budgets at this time. It did authorize $8.9 million in potential additional funding, $3.2 million, and $4 million in 2013, 2014, and 2015, respectively. This additional funding is contingent on the results of an evaluation being conducted by the Energy Efficiency Board and a DEEP process to solicit ideas and recommendations for design changes to improve the program's performance and cost-effectiveness. The draft decision also rejects CL&P's proposal to implement an appliance rebate program that would seek to retire and replace older units, finding it to be insufficiently cost-effective.

The largest differences in the amount the electric companies sought under their expanded budgets and the amounts DEEP approved in the draft decision are in programs serving commercial and industrial (C&I) customers. For example, the companies sought $43 million in 2013 for the Energy Opportunities program, which provides financial incentives to C&I customers for retrofits to lighting; heating, ventilation, and air conditioning; refrigeration; and other systems. The draft decision authorizes $38.5 million for this program in 2013. Similarly, the companies sought nearly $50 million for their Small Business program in 2013 but DEEP authorized $22.5 million. DEEP's rationale for this change is not specified, although the draft decision anticipates that the benefit/cost ratio for the Energy Opportunities program will decline over time.

On the other hand, the draft decision authorizes funding for the residential product program above the level sought by the electric companies. This program is designed to increase consumer awareness, acceptance, and the market share of energy efficient lighting, appliances, and consumer electronics. About 90% of the program budget has been, and continues to be, dedicated to residential lighting. Incentives are offered through payments to manufacturers of energy-efficient goods to reduce the retail price of their products, instant coupons, and mail-in rebates to customers.

In addition, although not requested by the electric companies, the draft decision authorizes $5 million in each year of the plan on measures C&I customers choose themselves. According to the draft decision, this self-directed program will more directly utilize the expertise of large C&I

customers to implement comprehensive projects and process improvements that are tailored to their facilities. The draft decision requires the board's C&I Committee and the companies to develop a program that contains best practices. Among these best practices are (1) companies and participating customers collaborating to set project-based energy savings goals (expressed as energy load) over a specific time period for each customer and (2) data tracking, cost-effectiveness, measurement and verification, and program evaluation standards that meet or exceed those of the C&I programs.

While there are additional cost-effective electric savings that could be procured through the 2013-2015 plan, DEEP considers it appropriate to approve a budget expansion that is lower than the "all cost-effective" level required by statute for several reasons. When evaluated individually, certain residential programs, such as HES and New Construction, are not cost-effective and need to be further evaluated before their budgets are increased to the expanded level the companies proposed. Even for programs that are cost-effective, DEEP believes that budgets should be increased gradually, in order to maintain the quality of the programs while expanding their scope.

Gas Companies. The draft decision generally approves funding for gas efficiency at the levels proposed by the gas companies in their expanded budgets. The one noteworthy exception is the HES program, where the draft decision authorizes a budget in each year that is $5 million above the amount the gas companies sought in their expanded budgets. In the draft decision, DEEP argues that it is imperative that the companies target customers while they switch to gas before they lose the financial motivation to improve their home's efficiency through such measures as high efficiency furnaces, insulation, and appliances. The draft decision also requires that the costs of programs that do not directly result in energy savings, such as education programs, be split 80% for the electric companies and 20% for the gas companies.

Programmatic Changes

Table 2 describes some of the other programmatic changes DEEP makes in the draft decision. Several of these address HES, which DEEP believes is not currently cost-effective.

Table 2: Programmatic Changes

Program	***DEEP Requirement***
Residential Retail Products	For 2014 and 2015, the electric companies must demonstrate that the program has been modified to address changing market conditions. They and the Energy Efficiency Board must address the findings and recommendations in the evaluation of lighting programs (described in the draft decision) as well as the directives in the draft decision itself.
Residential Retail Products	The electric companies should discontinue providing incentives for dimmable compact fluorescent lamps (CFLs) and instead use these funds and the funds available by reducing CFL incentives to support expansion of the light emitting diode (LED) market.
Residential New Construction	The gas companies and the board must propose design changes to improve the program's cost effectiveness and submit recommendations to DEEP.
HES	Before funding beyond the base level is approved for 2014 and 2015, the program evaluation must be completed, the program's design must be changed through the on-going HES Innovation proceeding, or both.
HES	The board should reconsider whether the current co-pay for HES is appropriate, and whether co-pay amounts should be increased to reduce the ratepayer subsidy for the program while not negatively impacting participation levels.
HES	The companies and the board must develop market analyses and marketing campaigns targeted to specific residential segments to increase participation in HES and encourage installation of deeper efficiency measures, use of financing, and understanding of the concept and value of home energy performance.
HES	The companies and the board should establish standards for home energy performance professionals through licensing or registrations, requiring third-party certification, or an alternative mechanism. The companies must provide a progress report in the 2015 Annual Update.

In addition, the draft decision calls upon the companies to:

1. propose an update to the plan that allocates 100% of the cost for gas heating measures to gas customers,

2. more evenly distributes the funding for measures for oil-heated customers between gas and electric customers, and

3. submit specific recommendations for these reallocations.

The draft decision requires the companies to work with the board to establish specific, readily measurable performance goals for 2014 and 2015 for installing energy efficiency measures, such as insulation, high efficiency equipment, and appliances, to provide incentives to the companies to aggressively target investment in deeper savings measures needed to achieve the state's long-term energy savings goals.

In order to address the law's requirements regarding the equity of efficiency spending, the draft decision requires the electric companies to submit data annually to DEEP and the board that:

1. provides, by census tract (or town if this data is unavailable), the amount of efficiency funding assessed and spent on small and large customers in the residential and C&I customer classes and

2. further disaggregates the data for small residential customers participating in the HES and HES-Income Eligible programs by type of residential building (i.e., single family, two- to four-unit buildings, and more than four unit buildings).

Performance Incentives

Electric Companies. Pursuant to CGS § 16a-49, PURA has authorized electric companies to receive incentives tied to the performance of their efficiency programs. The companies begin earning the minimum incentives when they achieve at least 70% of the program's savings goals. If they achieve 130% or more of a goal, they receive the maximum incentive approved by the board and DEEP. In the proceedings on the 2013-2015 plan, the Office of Consumer Counsel (OCC) argued that the performance incentives should start when the companies meet a minimum of 80% of the annual goal. Additionally, it recommended that a penalty be adopted for poor performance.

DEEP agrees with OCC on the threshold for the incentive, but believes that CGS § 16a-49 does not authorize a penalty for poor performance. It also requires that performance incentives be calculated based upon the actual expenditures (rather than budgets) and the savings achieved.

Gas Companies. In the 2013-2015 plan, the gas companies proposed to implement a performance incentive mechanism for achieving savings goals that mirrors the one that applies to electric companies. Specifically, they proposed a maximum incentive of 5% of the gas budget, excluding certain administrative costs, if a company achieved 100% of its goals, with higher and lower incentives for better and worse performance.

DEEP's draft decision approves creating such a mechanism, but requires that the performance incentives proposed in the plan be adjusted to focus on installing deeper measures. It directs the companies to work with the board to establish specific, readily measurable performance goals for 2014 and 2015 to incent the companies to aggressively target investment in measures needed to achieve the state's long-term energy savings goals. An example of such a goal is requiring that at least 50% of the residential customers whose HES audit demonstrates a need for additional attic insulation actually install the insulation.

EFFICIENCY FUNDING IN CONNECTICUT AND OTHER STATES

We have not found data on utility efficiency charges across states. Moreover, some ratepayer funding for efficiency programs is not itemized in rates. In Connecticut, for example, approximately 20% of electric efficiency funding initially comes from electric generators. This funding comes from proceeds from the sale of CO_2 emission allowances under the Regional Greenhouse Gas Initiative, among other things. It is likely that most if not all of these costs are passed on to ratepayers.

In recent years, electric efficiency funding in Connecticut has totaled approximately $100 million annually. The American Council for an Energy-Efficient Economy's (ACEEE) 2012 state scorecard compares states by, among other things, ranking the share of statewide electric utility revenues that go to support electric efficiency programs. Using this metric, Connecticut ranked tenth at 2.83% in 2011 (the latest available data). The states with high spending levels are (in descending order) Massachusetts, Vermont, Rhode Island, New York, Oregon, Washington, California, Minnesota, and Utah. In the median state (Ohio) the electric efficiency budget is 0.96% of electric utility revenues. According to ACEEE, Connecticut ranks third in the annual savings produced by these programs.

According ACEEE, Connecticut ranks fifth in funding for gas efficiency programs, behind Massachusetts, New Hampshire, Vermont, and Iowa. The annual gas efficiency program expenditures per residential gas customer in Connecticut were $40.77 in 2011 ($20 million in total). In the median state (New Mexico), the figure was $7.36 per residential gas customer. ACEEE used this metric because residential natural gas revenue data are sparse and using efficiency spending per capita would penalize those states where only a fraction of customers use gas. The ACEEE report does not rank states on the amount of gas their efficiency programs save.

If the electric and gas CAMs contemplated in the budgets in the 2013-2015 efficiency plan go into effect, they would nearly double efficiency funding in Connecticut. Unless other states substantially expand their efficiency funding above their 2011 levels, this would mean that Connecticut's funding would be at or near the highest in the country.

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