



OLR RESEARCH REPORT

March 11, 2013

2013-R-0180

PURA'S COMMENTS ON THE COMPREHENSIVE ENERGY STRATEGY

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You asked for a summary of the Public Utilities Regulatory Authority's (PURA) comments on the comprehensive energy strategy prepared by the Department of Energy and Environmental Protection (DEEP). OLR Report [2013-R-0163](#) summarizes the strategy and OLR Reports [2013-R-0147](#) and [2013-R-0169](#) analyze bills to implement several of the strategy's proposals.

SUMMARY

PURA's principal comments include concerns that (1) the strategy could increase utility ratepayers' cost, (2) many of the strategy's proposals rely on assumptions that require close review to avoid uneconomic outcomes, (3) many costs were not considered when evaluating the appropriateness of investment, and (4) the strategy does not provide details to support several of its conclusions. The body of the report is 32 pages, of which 23 address natural gas issues.

COMPREHENSIVE ENERGY STRATEGY

DEEP developed the strategy in compliance with PA 11-80 and issued it in February 2013. The strategy presents a series of policy proposals intended to expand energy choices, lower utility bills, improve environmental conditions, and create clean energy jobs. It focuses on five sectors: energy efficiency, natural gas, electricity, industry, and transportation.

For energy efficiency, the strategy recommends improving funding for efficiency programs and expanding the programs to include more potential customers.

In discussing the natural gas sector, the strategy concludes that natural gas is a cheaper, cleaner, and more reliable fuel for heating, power generation, and possibly transportation. It recommends a variety of proposals intended to encourage (1) people to convert their homes and businesses to natural gas and (2) gas companies to expand their infrastructure.

The recommendations for the electricity sector similarly stress the importance of efficiency measures, but also propose measures to reduce electricity use, promote and expand renewable energy systems, and increase system reliability. Recommendations for the industry sector generally focus on adapting the gas, efficiency, and electricity proposals to the specifics of industrial needs, but also include suggestions to encourage water conservation and create an Advanced Energy Innovation Hub.

The strategy's recommendations for the transportation sector focus on reducing the amount of gasoline and diesel fuel consumed in the state while encouraging the availability of a diverse refueling infrastructure.

PURA COMMENTS

Energy Efficiency

The comments note that the strategy contemplates substantial increases in energy efficiency spending for all customer sectors. While additional conservation, if successfully implemented, could lower bills, PURA's recent experience indicates that this has not occurred. PURA also agrees with the Office of Consumer Counsel (OCC) that there will be upward pressure on electric bills during the next three years from factors outside of the strategy, such as hardening distribution systems to make them less vulnerable to storms. According to OCC, these initiatives will increase overall electric rates in Connecticut by p \$1 billion through 2015, but they do not appear to be factored into the strategy's analysis of efficiency.

The strategy concludes that the major barrier to customers implementing "deeper" efficiency measures such as replacing inefficient furnaces is their upfront capital costs. It recommends several measures to address these costs, including loans that are repaid on the

participating customer's bill. PURA believes that such on-bill financing may increase uncollectible accounts and increase general ratepayer rates. The strategy argues that customers who do not repay their loans should be subject to service termination. In contrast, PURA believes that service termination, as a part of these programs, should be limited to what current statutes allow for non-payment of utility bills.

The strategy suggests that landlords may be reluctant to participate in energy efficiency programs if their properties have health and safety related code violations that must be remedied before an energy audit could be performed. PURA is concerned that ratepayer funds could be used to remedy these code violations.

Electric Sector

While PURA agrees with the strategy's goals to increase the electric sector's flexibility, diversity of generating resources, and use of renewables, it does not believe that they will likely reduce electricity costs, which anticipates will increase for unrelated reasons.

The strategy recommends that the state allow "submetering" of electricity produced on site by a landlord in a multi-tenant building. PURA argues that without safeguards, submetering could set up a monopoly arrangement, allowing landlords to charge tenants excessive rates for electricity, subject to minimal protection or intervention from a regulatory authority. The tenants cannot opt out of such an arrangement, choose an alternate electric supplier, or participate in utility-sponsored conservation programs, since they are not utility customers.

Natural Gas Sector

Proposal. The strategy proposes adding (1) approximately 900 miles of new gas mains to the gas companies' distribution systems and (2) 305,000 new firm customers, of which 216,000 would be on or near existing mains (Segment A) and 89,000 away from these mains (Segment B). The proposed expansion would be a 53% increase in customers since the end of 2011. In contrast, the companies added 57 miles of main in 2012 and the average growth rate over the past seven years was approximately 1.1% per year.

Potential Impact on Existing Ratepayers. PURA asserts that, given its size, the proposed expansion could significantly affect all gas ratepayers, depending on how much of it needs to be subsidized by existing ratepayers. Existing ratepayers could be responsible for the cost

of incremental capacity (gas supply) before new customers are connected to the system. The cost of the incremental capacity is currently unknown. Adequate gas pipeline capacity is both a short- and long-term issue and may not be available to support the scope of the proposed expansion.

According to PURA, the impact of the expansion plan on existing customers will be a function of (1) the total capital and operating costs of serving the new customers, (2) the level of customer participation, (3) contributions from new customers to pay for main expansions, and (4) rate design changes affecting participating and non-participating customers to help fund the necessary investments.

The strategy estimates the total proposed capital cost for Segments A and B customers as \$2.26 billion (\$815 million for Segment A and \$1.44 billion for segment B). PURA notes that this amount does not include any (1) system expansion costs upstream of the new customers or (2) peak supply facilities that may be necessary to support the addition of the new customers. The comments also note that while the gas companies have not provided detailed analyses of the indirect costs associated with the expansion, such as property taxes, depreciation, and operations and maintenance, they estimate that such costs are typically 20% of capital costs of an expansion project. PURA cites the companies as saying that they indicated that the substantial expansion of the natural gas system envisioned in the strategy may not occur without some funding from all gas ratepayers and potentially all state residents through taxes and bonding.

The strategy calls for the expansion to be built over seven years. According to PURA, existing customers are likely to pay for a significant portion of the expansion during its early years. Moreover, when the gas companies estimated the expansion's potential ratepayer impact, they assumed that (1) all of the new customers were added by the end of the expansion period and (2) these customers, on average, used as much gas as the existing average customer. PURA notes that any changes to the number of potential customers and estimated average consumption will drastically change the amounts contributed by existing customers. PURA concludes that expansion could result in a \$2.26 billion rate base (the companies' total infrastructure) increase and may not occur without funding from all gas ratepayers and potentially all state residents.

Distribution Charge. PURA also compares today's average distribution charge for all three companies to the average bill that would exist for all existing and new customers in year seven of the expansion. The average distribution-only bill would increase 37%, from \$5.63 to

\$7.73 per thousand cubic feet (mcf). The future bill does not include gas costs, which all parties expect to increase within the seven-year time horizon. Additionally, it does not include any normal rate increases, on-going costs of replacing obsolescent mains, or the “myriad” of other subsidies gas customers would be required to contribute to through their gas bill for the programs discussed in the strategy.

System Expansion. According to PURA, the 305,000 new customers would require a large increase in system capacity to meet peak day demand. The strategy acknowledges that interstate pipeline systems are constrained and there is not enough interstate pipeline, storage, or peaking capacity to serve a large-scale addition of new customers.

PURA believes that the increased demand for the new Segments A and B customers, will require the companies to procure additional peak day capacity of approximately 250,000 mcf for which all ratepayers would be responsible. The only known potential capacity expansion project into Connecticut is the Algonquin Incremental Market project, which has a targeted in-service date of November 1, 2016. It is currently unknown if this project will be built, how much capacity the gas companies ultimately will purchase, and the cost of this incremental capacity.

Use of Gas Company Revenues. Under current practice, certain gas company revenues (interruptible on-systems margins and off-system sales and capacity release margins) are used to reduce rates for non-interruptible residential and business customers. In response to the strategy, the gas companies proposed that most of this revenue instead be used for a gas conversion financing program to fund customer equipment, , and labor costs for items such as furnaces. According to PURA, had this proposal been in effect in February 2013, it would have increased the average residential customer’s bill for that month by \$5.86 to \$15.30, depending on the company.

Return on Equity. Utility infrastructure is funded by a mix of debt and equity. PURA asserts that gas company investors may view an aggressive expansion program as a greater risk and, all else being equal, demand an increase in the return on equity to account for this increased risk. A larger return on equity would translate to higher rates for the companies’ customers.

Conclusion. Based on the above, PURA concludes that the expansion plan may generate uneconomic investments that would ultimately cost ratepayers, causing them to pay more for service. The expansion plan relies on assumptions that must be carefully analyzed to avoid uneconomic investments. In some instances, PURA has concerns that

not all costs are being considered when evaluating the appropriateness of investment, and that details are not provided to support the strategy's conclusions.

According to PURA, among the issues that need to be addressed are:

1. whether there will be a shortfall between the revenue the expansion will require and the amount the companies collect;
2. whether existing ratepayers should subsidize the addition of the new customers through increased rates;
3. how much of an upfront rate increase may be necessary to complete the expansion;
4. the costs associated with the additional capacity on the interstate pipeline systems and when capacity would become available;
5. whether credits currently used to reduce firm customer rates should be used to offset the conversion cost for new customers and the corresponding impact on all other ratepayers bills;
6. how to quantify additional costs, such as those associated with the facilities' expansion to meet the increased peak day demand; and
7. whether it would be necessary to expand the existing system through reliability projects to meet the new demand increase along with the cost of such expansions.

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