



OLR RESEARCH REPORT

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ELECTRIC VARIABLE PEAK PRICING PROGRAM

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You asked for a discussion of why the Public Utilities Regulatory Authority (PURA), formerly the Department of Public Utility Control (DPUC) changed how prices are set under Connecticut Light & Power's (CL&P) variable peak pricing program (docket 03-07-02 RE11).

SUMMARY

The variable peak pricing (VPP) program was established pursuant to PA 07-242. It allows customers who buy power from CL&P, rather than from competitive suppliers, to pay rates that vary depending on when they use power. Participating customers generally pay higher rates during periods of peak demand and lower rates during other periods. Currently 17 residential customers participate in the program, which has been operating since 2008.

In reviewing the program, PURA found that the way that CL&P set rates for customers who participate in it was not based on actual costs and required customers who do not participate in the program to subsidize those who do. In addition, at times the rates charged to program participants during peak demand periods were lower than off-peak rates.

At PURA's request, CL&P submitted an alternative method for calculating VPP rates that would not require a subsidy from customers who do not participate in the program. The new methods will increase rates for program participants during some periods but lower rates in other periods.

PURA approved CL&P's proposal, finding that it significantly reduced the subsidy and better reflected the costs of providing power to customers. PURA ordered CL&P to contact customers currently participating in the program on how the changes will affect their rates and to give these customers an opportunity to take service under other rate programs.

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Historically, electric rates did not vary to reflect changes in overall system demand, i.e., rates were the same during nights in the spring, when overall demand is low, as on summer afternoons, when overall demand is high. However, the cost to supply this power varies significantly during the year, as the generating plants that are most expensive to operate are only used during periods of peak demand. All customers have to pay the costs of operating these plants.

A time-of-use (TOU) rate is one where the rate depends on when a customer uses power, with higher rates during periods of peak demand and low rates during off-peak periods. Real time rates are a type of TOU rate where the rate varies over short intervals of time, typically one hour or less, to better reflect variations in the costs of generating power. Proponents of TOU rates believe that encouraging customers to shift when they use electricity can reduce rates not only for customers who participate in TOU programs but also customers in general, since they allow the most expensive plants to run less frequently.

PA 05-1, June 2005 Special Session, required electric companies to implement (1) mandatory daily TOU rates for large commercial and industrial customers and (2) voluntary TOU rates for other customers. PA 07-242 required electric companies and competitive suppliers to provide TOU rate options, including hourly and other real-time options, to all customer classes.

In 2008, DPUC (now PURA) approved VPP tariffs for CL&P customers to comply with the real-time pricing requirements of PA 07-242 (a tariff specifies who is eligible for a rate and how it is set). Under these tariffs, the variable peak rate applies to the generation part of a customer's bill

and only applies to peak demand hours. During other times, standard rates apply. At present, 17 residential customers and no business customers are participating in this program.

As directed by DPUC, CL&P relied on the prices set in the wholesale day-ahead market to set the VPP rates. CL&P adjusted these prices to calculate its total price for electric supply. The resulting rates have consistently been lower than CL&P's otherwise applicable peak and off-peak TOU rates for power that customers buy from the company.

In 2010, DPUC determined it was appropriate to examine how the VPP program has been working. In the decision, PURA, which succeeded DPUC, found that the VPP rates are not based on actual costs and as a result other electric customers subsidize customers who participate in the VPP program, in violation of utility rate-setting principles. In addition, PURA found that the way the program works results in counter-intuitive results. For example, the peak price was less at times than the off-peak price.

At PURA's request, CL&P submitted an alternative method for calculating rates that would not require a subsidy from customers who do not participate in the program. It wanted to find a way this could be done without requiring significant billing system or process changes. CL&P's alternative method changes peak and off-peak energy prices each month based on what it pays for the power it buys to serve customers who have not chosen competitive suppliers. CL&P anticipates that the new pricing mechanism will increase summer peak rates for participating customers but lower rates during shoulder periods (times when demand is neither high nor low).

PURA approved CL&P's proposal on September 21, 2011. PURA found that the new method would significantly reduce the subsidy paid by customers who do not participate in the program while still giving participating customers appropriate market signals to change when they use power. PURA ordered CL&P to contact customers currently participating in the program to inform them of changes that will affect their rates and give these customers an opportunity to take service under other rate programs. The decision is available in the docket info part of PURA's website, <http://www.ct.gov/dpuc/site/default.asp>.

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