# COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

DEMAND SIDE MANAGEMENT PROGRAMS AND COST RECOVERY FILING FOR DEMAND SIDE MANAGEMENT PROGRAMS BY THE UNION LIGHT, HEAT AND POWER COMPANY

CASE NO. 99-414

)

### <u>order</u>

On December 2, 1999, The Union Light, Heat and Power Company ("ULH&P") filed its petition for Commission approval of the continuation, through 2001, of four existing Demand Side Management ("DSM") programs and revised DSM tariff riders. The programs that ULH&P proposed to continue are: (1) Residential Conservation and Energy Education; (2) Residential Home Energy House Call; (3) Residential Comprehensive Energy Education; and (4) Residential New Construction & Renovation. ULH&P also proposed to implement a DSM research and development program called Program Development Funds. ULH&P also proposed to discontinue the residential decoupling mechanism that had been approved for the initial three-year DSM pilot program.

The Commission initially approved DSM programs and DSM tariff riders for ULH&P on a pilot basis, to run through calendar year 1999, in Case No. 95-312.<sup>1</sup> The instant filing was due on October 1, 1999, for the purpose of reviewing and evaluating

<sup>&</sup>lt;sup>1</sup> Case No. 95-312, The Cost Recovery Filing for Demand Side Management by The Union Light, Heat and Power Company, Order dated December 1, 1995.

ULH&P's DSM pilot and determining what, if any, DSM programs should be continued beyond the end of calendar year 1999. On October 1, 1999, ULH&P filed a request for an extension of time, until December 1, 1999, in which to make its filing, which request was granted by the Commission.<sup>2</sup>

Through its application, responses to data requests, and an informal conference, ULH&P provided the following information: a review of the overall effectiveness of each program proposed to be continued; an explanation of how that effectiveness was determined; and a discussion of why each program should be continued, modified, or terminated. ULH&P also provided the calculation of the four traditional DSM costbenefit tests<sup>3</sup> for each program that was in effect at the end of the pilot period unless, due to the nature of the program, there was justification for not performing one or more of the four tests.

ULH&P proposed revisions to the existing rates contained in its gas and electric DSM tariff riders to reflect the budgeted DSM levels for calendar year 2000 as well as the true-up of prior period DSM revenues and costs. ULH&P proposed to discontinue its residential decoupling mechanism stating that the mechanism was not accurate and was not cost-effective in light of the relatively small size of its DSM programs and the resulting lost revenues. By Orders issued December 20, 1999, and May 26, 2000, the

<sup>&</sup>lt;sup>2</sup> Case No. 99-414, Demand Side Management Programs and Cost Recovery Filing for Demand Side Management Programs by The Union Light, Heat and Power Company, Order dated October 25, 1999.

<sup>&</sup>lt;sup>3</sup> Those tests, also referred to as the "California Tests" are: The Participant Test; The Total Resource Cost Test; The Utility Cost Test; and The Ratepayer Impact Measure Test.

Commission had approved the continuation of the existing programs and tariff riders until the completion of this proceeding, up to and including June 29, 2000.

## Status and Evaluation of Programs

ULH&P provided evaluations of each of the four DSM programs it proposed to continue. Those evaluations show that only one of the four programs, The Residential Home Energy House Call, can be judged to be cost-effective based on any of the four traditional DSM cost-benefit tests. The Residential Conservation and Energy Education program did not pass any of the cost-benefit tests and ULH&P indicated that, due to their educational and informational nature, quantitative cost-benefit analyses were not appropriate for either the Residential Comprehensive Energy Education program or the Residential New Construction & Renovation program.

In support of its request to continue the Residential Conservation and Energy Education program, ULH&P provided the results of a third-party evaluation of the program. The evaluation showed that through 1999, the 680 participants in the program were saving approximately 1 million Kwh and 8,000 Mcf annually. ULH&P also indicated that it was working with the Kentucky Cabinet for Families and Children to obtain additional state funding in order to leverage ratepayer funds and increase the cost-effectiveness of the program.

For the Residential Home Energy House Call program, ULH&P emphasized that the program passed the Utility Cost Test. It also pointed to the annual energy savings attributable to the program – nearly 2 million Kwh by the 1,800 customers served by the program through 1999. ULH&P also stated that the program provides information and

-3-

education to participants that should persist and influence decisions regarding energy efficiency and energy use well into the future.

ULH&P stated that although the benefits, particularly energy savings, of the Residential Comprehensive Energy Education program were difficult to determine due to its educational nature, the program was very successful in terms of participation, numbers of customers affected and the expected persistence of the program. The program targets school-age children and their teachers by offering workshops on energy conservation and training students and teachers to coach, or train, other students and teachers. By targeting elementary, middle school and high school students, the program offers a potential for a long-term persistence, or duration, of an effective conservation philosophy among many participants, and hopefully, their families and communities.

For the Residential New Construction & Renovation program, ULH&P notes that the program promotes energy efficiency in both new home construction and renovation of existing homes through its direct work with the building community, particularly the Northern Kentucky Homebuilders Association. By targeting construction and renovation activities, the program encourages long-term energy conservation with the impacts of energy efficiency measures installed in the homes often persisting for the life of the home. The program is conducted in five categories based on home size and type, providing an opportunity for participation among a range of homeowners at various income levels.

-4-

#### **Discussion of Issues**

ULH&P states that with increased state funding for the Residential Conservation and Energy Education program and program modifications it anticipates realizing improvements in the program's cost-effectiveness. It also notes that because conservation programs reduce billing units, such programs generally do not pass the traditional cost-benefit tests. For the Residential Comprehensive Energy Education program and the Residential New Construction & Renovation program, ULH&P indicates that their educational and informational natures make it difficult to measure savings because of the inability to track the implementation of energy savings measures as a result of the programs.

The Commission has previously expressed concerns about continuing DSM programs either in the absence of any measure of cost-effectiveness or that are not shown to be cost-effective. We strongly encourage ULH&P to seek out ways to improve the cost-effectiveness of the Residential Conservation and Energy Education program including, but not limited to, obtaining increased levels of state funding to compliment the ratepayer funding built into the program. We just as strongly encourage ULH&P to make an attempt to measure the cost-effectiveness of the Residential Comprehensive Energy Education program and the Residential New Construction & Renovation program. One means to this end could be to survey customers and builders about changes in energy use or installation of energy efficient equipment as a result of the programs. It could be that an estimate of benefits might need to be performed in a different manner than what is typically done in evaluating DSM programs.

-5-

Having expressed these concerns, the Commission will approve the continuation of the four existing programs as well as the implementation of the Program Development Funds for DSM research and development. The approval is based on the benefits cited by ULH&P for its existing programs and the relatively minimal level of ratepayer funding for ULH&P's DSM budget. This approval is only for a two-year extension, through the end of 2001. For any DSM program to continue beyond 2001, ULH&P must file separate cost-benefit evaluations. These evaluations must reflect the results for the 18-month period ended June 30, 2001, and must be filed with Commission no later than September 1, 2001. The Commission will then commence a review of each DSM program to determine whether it is eligible to continue, either in its present form or with some modification, based on its cost-effectiveness or other demonstrable benefits to ULH&P and its ratepayers pursuant to KRS 278.285.

#### Tariff Proposals

ULH&P proposed changes to its existing DSM tariff riders for both gas and electric service. The proposed DSM rates are based on the same methodology ULH&P used in its initial DSM application and in subsequent annual filings. The proposed rates are reasonable and reflect the expected cost levels for 2000 and the true-up of prior period DSM costs and revenues. ULH&P also proposed to discontinue its residential decoupling mechanism that was originally established to capture lost revenues resulting from the implementation of its DSM programs. Considering the problems ULH&P has experienced with its decoupling mechanism and the relatively minimal lost revenues, discontinuing the mechanism is reasonable.

-6-

#### SUMMARY

IT IS THEREFORE ORDERED that:

1. ULH&P's continuing and proposed DSM programs, as identified herein, are approved, on a pilot basis, for an additional two years through the year 2001.

2. ULH&P shall continue to file annual status reports with the Commission in the same manner as was done in the initial pilot phase for its DSM programs.

3. ULH&P shall file by September 1, 2001, separate cost-benefit evaluations for the 18-month period ended June 30, 2001, for each of the DSM programs being continued.

4. ULH&P's proposed revisions to its DSM tariff riders are approved effective for bills rendered on and after June 29, 2000.

5. ULH&P shall discontinue the residential decoupling mechanism as proposed in its application.

6. This docket is closed. Future DSM filings shall be assigned new case numbers at the time they are received by the Commission.

Done at Frankfort, Kentucky, this 29<sup>th</sup> day of June, 2000.

By the Commission

ATTEST:

Hecke -

Executive Director