

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE ANNUAL COST RECOVERY FILING FOR	)	
DEMAND SIDE MANAGEMENT BY DUKE ENERGY	)	CASE NO.
KENTUCKY, INC.	)	2007-00369

O R D E R

On November 15, 2007, Duke Energy Kentucky, Inc. (“Duke Kentucky”) filed its annual status report and annual cost recovery filing for its demand-side management (“DSM”) programs.<sup>1</sup> All members of the Duke Kentucky Residential Collaborative and Commercial and Industrial Collaborative, with the exception of the Attorney General (“AG”), are in agreement with the application. On December 10, 2007, the Commission suspended the proposed DSM Cost Recovery Riders for a period of 5 months, up to and including May 14, 2008.

Duke Kentucky proposes to offer the same 11 DSM programs to its residential, commercial, and industrial customers in 2008 as it did in 2007. Nine of the DSM programs will end in December 2009 unless an application is made to continue them. For the remaining two programs, Duke Kentucky proposed that the Power Manager

---

<sup>1</sup> On August 15, 2007, Duke Kentucky filed a motion seeking approval to change the filing deadline and effective date for its next annual DSM programs and requesting that its current DSM programs and rates remain in effect until the Commission issued an Order on the next annual DSM application. On September 18, 2007, the Commission found Duke Kentucky’s motion was reasonable and approved the change in filing deadline and effective date and continued the existing DSM programs and rates until a decision is issued on the current DSM application. The September 18, 2007 Order also moved the filing deadline for all future annual DSM applications to November 15.

program be continued until December 2012 and that the Personal Energy Report program be made a full program with lost revenues and shared savings applied.

For electric customers, Duke Kentucky's proposed factor for residential customers is \$.001416 per kWh, an increase from the current factor of \$.000449 per kWh. Duke Kentucky's proposed factor for distribution service for non-residential service customers is \$.01405 per kWh, an increase from the current factor of \$.001237 per kWh. And finally, Duke Kentucky's proposed transmission factor is \$.000154 per kWh, an increase from the current factor of \$.000150 per kWh. For gas customers, Duke Kentucky's proposed factor for residential customers is \$(-.0109294) per ccf, a decrease from its current factor of \$(-.056222) per ccf. Duke Kentucky also proposed a factor for non-residential customers of \$0 per ccf.

The AG sought and was granted intervention. A procedural schedule was established allowing for one round of discovery and the filing of comments.<sup>2</sup> Discovery is completed and the parties have filed their respective comments.<sup>3</sup> The matter now stands submitted to the Commission for decision.

---

<sup>2</sup> During the pendency of the proceeding, Duke Kentucky filed a motion to amend its application to include a Home Energy Assistance ("HEA") program. The Commission granted the motion on February 25, 2008. Duke Kentucky and the AG later requested that the case be bifurcated and, on March 25, 2008, the Commission granted the request and designated the proposed HEA program as Case No. 2008-00100, Application of Duke Energy Kentucky, Inc. to Re-institute a Home Energy Assistance Program.

<sup>3</sup> On April 9, 2008, the Northern Kentucky Community Action Commission ("NKCAC"), a member of Duke Kentucky's Residential DSM Collaborative, filed comments in support of Duke Kentucky's DSM application. On April 16, 2008, the Commission found that NKCAC was not a party to these proceedings but permitted the filed comments to be included as part of the record as comments from the general public.

## POSITION OF THE AG

While applauding the initiative of Duke Kentucky in its DSM programs, the AG expressed his reservations with the proposed programs, through both general and program-specific comments,<sup>4</sup> which he believed the Commission should address before approving the proposed DSM program.

### General Comments

The AG expressed the belief that Duke Kentucky's DSM portfolio of programs was heavily weighted toward low-income customers.<sup>5</sup> Based upon his cost analysis, the AG stated that these programs did not appear to offer an adequate return on scarce ratepayer resources and were not cost-effective. The AG contended that the DSM portfolio contained multiple variations of energy audit programs.<sup>6</sup> The AG expressed his belief that some expenses associated with the energy audit programs should be common to all three and should be examined as part of a more thorough review to guard against duplication of expenses. The AG suggested that the energy audit programs be reviewed to ensure that customers have been adequately notified of the programs. The AG took issue with Duke Kentucky's nearly exclusive use of engineering savings estimates, and argued that Duke Kentucky should be required to verify the

---

<sup>4</sup> In his comments, the AG discussed all 11 DSM programs offered by Duke Kentucky. In the discussions for 7 of the DSM programs, the AG noted that his general comments addressed the concerns he had for those particular programs. The AG offered no comments on the proposed changes to the DSM Rider charges.

<sup>5</sup> AG's Comments at 13. The AG listed the Residential Conservation and Energy Education Program, the Refrigerator Replacement Program, and the Payment Plus Program as the programs weighted toward low-income customers.

<sup>6</sup> Id. at 14. The programs referenced by the AG were the Residential House Call Program, the Energy Efficiency Website, and the Personalized Energy Report.

claimed savings against actual data. Lastly, the AG stated that the application did not adequately disclose the costs of third-party administration of the DSM programs. The AG observed that costs for third-party administration appeared to be captured and reported under the individual programs. He contended that this approach made a meaningful review of program administration costs difficult. While noting that the internal administration costs appeared to be reasonable, the AG argued there was no opportunity to examine the costs of the third-party administrators, and recommended that the Commission require Duke Kentucky to break out these costs so an examination could be accomplished.<sup>7</sup>

In its reply comments, Duke Kentucky stated:

DE-Kentucky was surprised at the nature of the remarks made in the Attorney General's comments. Members of the Attorney General have attended meetings of the DSM Collaborative for a decade and have been instrumental in developing the programs which are now criticized in the Attorney General's Comments. All of the decisions made regarding DE-Kentucky's DSM programs have come with the full input of the collaborative members, include the Attorney General's office.<sup>8</sup>

In response to the AG's general comments, Duke Kentucky stated that it offers low-income programs for the following reasons: (1) the low-income customer group has limited resources to finance improvements in energy efficiency; (2) low-income customers pay the DSM Rider and should be able to share in its benefits; and (3)

---

<sup>7</sup> Id. at 15.

<sup>8</sup> Duke Kentucky's Reply to the AG's Comments at 1. The comments filed by NKCAC generally mirrored the comments of Duke Kentucky.

government funding levels are less certain.<sup>9</sup> Duke Kentucky disagreed with the AG's use of a cost per kWh saved as the standard for reasonableness of a DSM program, arguing that such an analysis only looked at a single year of total kWh savings and ignored the fact that many programs produce multiple year savings over the life of the programs. Duke Kentucky noted that while it may utilize engineering estimates of savings in screening DSM programs for cost-effectiveness, it ultimately relied on the results from impact evaluation studies conducted or verified by outside experts to prove the estimates and verify a program's cost-effectiveness.<sup>10</sup>

The Commission is not persuaded by the AG's general comment that there is a need to modify or change the Duke Kentucky DSM programs as suggested. The AG has offered no evidence demonstrating that his various cost analyses are reasonable methodologies to evaluate DSM programs. He has offered no evidence supporting his belief about the existence of common energy audit program costs. Duke Kentucky has provided in this application adequate and sufficient program evaluations to support the determination of any savings from the DSM programs. The AG has failed to explain why it is difficult to examine third-party administrator evaluation costs when those costs have been reported as part of the individual program costs.

#### Specific Program Comments

Residential Conservation and Energy Education. This program is designed to provide income-qualified customers assistance in reducing energy consumption, thus lowering their energy costs. The program provides direct installation of weatherization

---

<sup>9</sup> Id. at 2-3.

<sup>10</sup> Id. at 4.

and energy-efficiency measures as well as education regarding energy usage and opportunities to reduce energy consumption. The program operates under a tiered system so that the homes needing the most work and having the highest energy usage per square foot receive the most funding. In 2002, Duke Kentucky expanded this program to include refrigerators as an additional measure to ensure efficiency.

The AG argued that the “extensive renovation” services offered by this program are more properly addressed through other social service agencies. He expressed the belief that the program does not appropriately distribute ratepayer contributions in an equitable manner. The AG contended that the refrigerator replacement portion of the program is not cost-efficient and challenged the independence of the evaluation firm retained by Duke Kentucky to perform the program evaluation.<sup>11</sup>

Duke Kentucky responded that the customers qualifying for this program are selected in compliance with federal income guidelines. Duke Kentucky noted that the energy saving measures installed through the program have to pass a specific cost-effectiveness level, and that the measures included in this program are accepted and used in every state as well as the U.S. Department of Energy. Concerning the refrigerator program, Duke Kentucky argued that the AG’s cost evaluation of the program failed to consider the cumulative annual savings achievable under the program. Duke Kentucky stated that it collected the field data used in evaluating the refrigerator program. In countering the AG’s claim of an apparent conflict of interest due to the fact that the program evaluator is the same entity that designed the program,

---

<sup>11</sup> AG’s Comments at 16-18.

Duke Kentucky maintained that the program evaluation was performed by a third-party evaluator that was not involved in the development of the program.<sup>12</sup>

The Commission believes the weatherization and energy-efficiency measures offered through the Residential Conservation and Energy Education program are reasonable and consistent with measures offered in other states. The Commission does not agree with the AG's conclusions concerning the distribution of program funds and notes that he has not provided any evidence as to what he believes the appropriate distribution should be. Concerning the refrigerator program, the Commission believes Duke Kentucky has adequately addressed the cost-effectiveness issue and demonstrated that the AG's claims of a lack of independence on the part of the evaluator are unfounded.

Residential Comprehensive Energy Education. This program is operated under subcontract by Kentucky National Energy Education Development ("NEED"). NEED promotes student understanding of the scientific, economic, and environmental impacts of energy and currently is available in 46 states. The Kentucky NEED program follows national guidelines for materials used in teaching as well as offering additional services such as conferences, workshops, and curricula to teachers. The efforts of the Kentucky NEED program resulted in the implementation of an Energy Smart Schools program in six northern Kentucky counties, with the successful elements of this program being marketed to other schools statewide.

---

<sup>12</sup> Duke Kentucky's Reply to the AG's Comments at 4-7. NKCAC expressed comments similar to Duke Kentucky's concerning the refrigerator replacement program.

The AG questioned the reasonableness of this program and disagreed with the assumption that schoolchildren could significantly influence the energy consumption behavior of their families. The AG contended that there are no verifiable energy reductions associated with this program and that the program was more properly characterized as a ratepayer-funded good will effort. The AG recommended that this program be discontinued.<sup>13</sup>

In reply to the AG's comments, Duke Kentucky cited the impact evaluation study prepared for this program, which was provided to the AG in data responses. Duke Kentucky noted the evaluation study described in detail the energy efficiency measures that were provided to students to take home and install as well as the analysis of load impacts under the program.<sup>14</sup>

The Commission believes Duke Kentucky has adequately demonstrated the benefits of this program. The Commission does not agree with the AG's contention that this program exists to build good will for Duke Kentucky. The Commission finds the AG's request to discontinue this program to be unreasonable and denies the request.

Payment Plus. This program was designed to impact participants' behavior and to generate energy conservation impacts. The program consists of three components: energy and budget counseling, weatherization, and bill assistance. In order to qualify for payment assistance credits, a customer is required to complete either the counseling or the weatherization component. The program is offered annually over six winter

---

<sup>13</sup> AG's Comments at 18-19.

<sup>14</sup> Duke Kentucky's Reply to the AG's Comments at 7.



months starting in October. The evaluation of the program considered both energy savings and arrearage and payment practices.

The AG disagreed with Duke Kentucky's contention that this program is cost-effective, based upon his reexamination of the evaluation results. He contended that the claimed energy savings are primarily from the weatherization portion of the program, while all other aspects of the program were efforts to improve Duke Kentucky's cash flow through the reduction of arrearages. The AG argued that a DSM program should not be focused on budget counseling and arrearage elimination and recommended that the budget counseling portion of the program be eliminated.<sup>15</sup>

Duke Kentucky responded that the AG improperly interpreted the evaluation results for this program. Duke Kentucky noted that the AG's criticisms were based on statements in the evaluation that had been taken out of context. Duke Kentucky stated that the evaluation demonstrated that energy savings were achieved not only through the weatherization component but also the energy and budget component of the program.<sup>16</sup>

The Commission is not persuaded by the AG's arguments and believes the AG has misunderstood the comments and findings of the evaluation. In addition, the AG has not offered any evidence supporting his contention that this program was designed to improve Duke Kentucky's cash flow by reducing arrearages. The Commission finds

---

<sup>15</sup> AG's Comments at 20-21.

<sup>16</sup> Duke Kentucky's Reply to the AG's Comments at 8-9. NKCAC noted in its comments that the three components of this program complement each other and stressed the significance of this program to low-income ratepayers.

the AG's request to eliminate the budget counseling component of this program is unreasonable and denies the request.

Power Manager. This program is designed to reduce demand by controlling residential air conditioning usage during peak demand conditions in the summer months. A load control device is attached to the customer's compressor, enabling Duke Kentucky to cycle the air conditioner on and off during times of peak load. A credit is applied to the bills of participating customers depending upon the cycling option selected by the customer. Duke Kentucky requested that this program be continued for five additional years, through the year 2012.

The AG contended that while this program may have some benefit to Duke Kentucky, there are no benefits to the ratepayers. He expressed the opinion that if this program were truly needed by Duke Kentucky to offset capacity increases, then the number of cycling hours would be greater than the average of 22 hours over 6 days per year. The AG argued that when compared to the program cost, this program was not cost-effective from a ratepayer standpoint. The AG recommended that this program not be continued and the current program be ended as expeditiously as possible.<sup>17</sup>

Duke Kentucky replied that the AG did not understand that Power Manager is a load control program designed to reduce energy at peak times, not save energy. Duke Kentucky cited the results of the Utility Cost Test and Ratepayer Impact Measure for this program, both of which show this program to be cost-effective. Duke Kentucky argued that the program has value in reducing the need for peaking capacity and the

---

<sup>17</sup> AG's Comments at 21-22.

use of combustion turbines during times of peak usage. Duke Kentucky stated that the program is cost-effective because the program efficiently and effectively targets and obtains the avoided costs when they are the highest.<sup>18</sup>

The Commission believes Duke Kentucky has clearly shown this program to be cost-effective and beneficial. The Commission reminds the AG that reduction in energy consumption is not the sole purpose or focus of DSM programs. The AG has submitted no evidence to support his conclusions or the reasonableness of his cost-effectiveness analysis. Based on a review of the evidence of record, the Commission finds that the Power Manager program is reasonable and should be continued through 2012.

### CONCLUSIONS

The Commission has reviewed the evaluation studies and cost-effectiveness testing results provided by Duke Kentucky in support of its DSM programs. The Commission finds that Duke Kentucky's DSM programs are reasonable and cost-effective and should be continued. Nine of the 11 DSM programs will continue until December 2009, and Duke Kentucky can submit an application to continue these programs beyond that date.

Duke Kentucky has requested that the Personal Energy Report program be made a full ongoing program with lost revenues and shared savings applied. The AG did not oppose this request in his comments. The Commission has reviewed the program and finds that Duke Kentucky's request is reasonable and should be approved. However, the Commission notes that Duke Kentucky was not clear as to when this program would end, other than saying this program would not end when the other DSM

---

<sup>18</sup> Duke Kentucky's Reply to the AG's Comments at 9-10.

programs are scheduled to end in December 2009. The Commission believes it would be reasonable from an administrative perspective to have this program scheduled to end at the same time as the other DSM programs.<sup>19</sup> Therefore, the Commission finds that the Personal Energy Report program will end in December 2009, unless an application is made to continue it.

Duke Kentucky noted that the Commission's September 18, 2007 Order in this proceeding did not address whether it could continue future DSM rates in effect beyond December 31 of each year. Duke Kentucky requested that the Order in this proceeding find that as long as it continued to file annual DSM applications by November 15 of each year, the rates approved in such applications would remain in effect until the effective date of new DSM rates approved by the Commission or until otherwise ordered by the Commission. The Commission finds that when Duke Kentucky files its annual DSM application by November 15 of each year, it should include a proposed effective date for the new DSM rates. Prior to the effective date, the Commission will issue an Order either ruling on the proposed new DSM rates or suspending the proposed DSM rates and continuing the current DSM rates until a final Order can be issued.

#### SUMMARY

Based on the evidence of record and being otherwise sufficiently advised, the Commission finds that:

1. Duke Kentucky has continued to keep the Commission properly informed of the progress and status of its DSM programs by filing the individual status reports.

---

<sup>19</sup> With the exception of the Power Manager program, which will continue through 2012.

2. Duke Kentucky's revised DSM surcharge factors are reasonable, as they reflect the expected level of DSM program costs for the remainder of calendar year 2008 and the true-up of prior period DSM costs and revenues.

3. Duke Kentucky's Power Manager program should be continued through 2012.

4. Duke Kentucky's Personal Energy Report program should be made a full program with lost revenues and shared savings applied and should be continued through 2009.

IT IS THEREFORE ORDERED that:

1. Duke Kentucky's revised DSM Tariff and the revised DSM surcharge factors are approved effective as of the date of this Order.

2. Duke Kentucky's Power Manager program shall be continued through 2012.

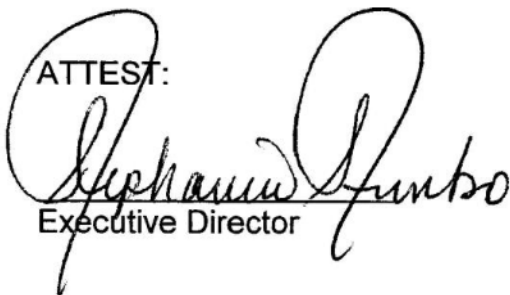
3. Duke Kentucky's Personal Energy Report program shall be made a full program with lost revenues and shared savings applied and shall be continued through 2009.

4. Within 10 days from the date of this Order, Duke Kentucky shall file a revised DSM Tariff showing the date of issue and that it was issued by authority of this Order.

Done at Frankfort, Kentucky, this 14<sup>th</sup> day of May, 2008.

By the Commission

ATTEST:



Stephanie Gumbo  
Executive Director