COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION  

In the Matter of:  
ELECTRONIC INVESTIGATION OF THE  
REASONABLENESS OF THE DEMAND SIDE  
MANAGEMENT PROGRAMS AND RATES OF  
KENTUCKY POWER COMPANY  

ORDER  

Pursuant to an Order issued on February 23, 2017, the Commission initiated this matter to review the reasonableness of Kentucky Power Company’s (“Kentucky Power”) demand-side management (“DSM”) programs and the rates associated with those DSM programs. As noted in the February 23, 2017 Order, this investigation was initiated due to a significant increase in Kentucky Power’s DSM rate occurring over a one-year period.¹ At the time this investigation began, Kentucky Power’s residential customers had seen their average monthly DSM charge increase from $0.51 in 2016 to $10.61.² The Commission also expressed concerns about the scope of Kentucky Power’s DSM portfolio in light of its declining load growth, both current and projected, which has caused Kentucky Power to have significant excess capacity, as well as the poor economic conditions in the eastern Kentucky region served by Kentucky Power. Given the changed circumstances since Kentucky Power acquired the Mitchell Generating Station in 2013 and concurrently committed to increase its DSM spending to $6 million annually by 2016

¹ February 23, 2017 Order at 1.

² Id. Kentucky Power’s DSM rate was $0.000383 per kilowatt-hour (“kWh”) in early 2016. By early 2017, it had increased to $0.008013 per kWh. The average Kentucky Power residential customer consumes approximately 1,324 kWh per month.
as part of a non-unanimous settlement agreement in Case No. 2012-0578, the Commission opened this docket to examine the benefits and overall cost-effectiveness of Kentucky Power's DSM programs. The February 23, 2017 Order also established a procedural schedule for the processing of this matter, which provided for a deadline to request intervention and discovery upon Kentucky Power.

The Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("Attorney General"), Kentucky Industrial Utility Customers, Inc. ("KIUC"), and Beverly May, Jim Webb and Sierra Club (collectively "Sierra Club") were granted intervention in this matter.

The Commission issued two Orders in this matter clarifying Kentucky Power's DSM spending obligations during the pendency of this matter. The first was an Order issued on May 4, 2017, in which the Commission clarified Kentucky Power's obligation to spend $6 million on DSM programs during the pendency of this investigation. Specifically, the Commission determined that Kentucky Power has an ongoing obligation to administer its DSM programs in the ordinary course of business during the pendency of this proceeding, but that Kentucky Power should not expand or increase expenditures for any existing DSM program. The May 4, 2017 Order also relieved Kentucky Power of its obligation of achieving the existing $6 million DSM expenditure level in 2017 during the

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3 Case No. 2012-00578, Application of Kentucky Power Company for (1) A Certificate of Public Convenience and Necessity Authorizing the Transfer to the Company of an Undivided Fifty Percent Interest in the Mitchell Generating Station and Associated Assets; (2) Approval of the Assumption by Kentucky Power Company of Certain Liabilities in Connection with the Transfer of the Mitchell Generating Station; (3) Declaratory Rulings; (4) Deferral of Costs Incurred in Connection with the Company's Efforts to Meet Federal Clean Air Act and Related Requirements; and (5) All Other Required Approvals and Relief (Ky. PSC Oct. 7, 2013).

4 May 4, 2017 Order at 3.
pendency of this proceeding. The second Order, issued on November 2, 2017, further clarified Kentucky Power's DSM spending obligation. In particular, the Commission found that once existing third-party residential DSM contracts expire, Kentucky Power was relieved of any obligation to renew, extend, or replace third-party residential DSM contracts, to enter into other DSM contracts, or to maintain or develop internal programs, in an effort to achieve or maintain an annual DSM spending level of $6 million, not only in 2017, but throughout the pendency of this investigation. The November 2, 2017 Order also established an additional procedural schedule, providing for an opportunity for intervenor testimony and an opportunity for Kentucky Power to file rebuttal testimony.

Pursuant to the November 2, 2017 Order, Kentucky Power filed, on November 15, 2017, an evaluation of its DSM programs, revised DSM tariff, and proposed DSM factors. The November 15, 2017 status report details actions taken by Kentucky Power in response to the November 2, 2017 Order, including the suspension of all new DSM program activity and measurement and evaluation services, details of current and projected DSM spending and revenue levels, and existing third-party DSM vendor agreements and their expiration dates. The status report also presents two alternatives for Kentucky Power's DSM engagement in 2018. The first alternative is based on resuming DSM expenditures at a $6 million annual level, plus recovery of lost revenues and incentives, at a residential DSM factor that is substantially less as compared to 2017.

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5 *Id.*

6 November 2, 2017 Order at 6.

The second alternative is based on terminating all DSM activity, with Kentucky Power recovering only those costs associated with winding down DSM programs.\textsuperscript{9} Kentucky Power recommends implementation of the first alternative.\textsuperscript{10}

By Order dated November 30, 2017, the Commission found that there was insufficient evidence to approve DSM programs for 2018 at a spending level of $6 million, plus lost revenues and incentives.\textsuperscript{11} The November 30, 2017 Order therefore directed Kentucky Power to file revised tariff sheets effective January 1, 2018, reflecting the continuation of only the Targeted Energy Efficiency Program, which the Commission found to provide a high level of benefits to qualified low-income customers.\textsuperscript{12}


**PARTIES’ COMMENTS**

**Sierra Club**

The Sierra Club states that Kentucky Power’s current DSM portfolio includes a variety of programs aimed at both residential and commercial customers, which programs have exceeded its savings targets in each of the last two years.\textsuperscript{13} The Sierra Club points

\textsuperscript{9} Id. at 10–11.  
\textsuperscript{9} Id. at 11–12.  
\textsuperscript{10} Rebuttal Testimony of Ranie K. Wohnhas ("Wohnhas Rebuttal") at 6.  
\textsuperscript{11} November 30, 2017 Order at 3.  
\textsuperscript{12} Id. at 4.  
\textsuperscript{13} Direct Testimony of Jim Grevatt ("Grevatt Testimony") at 3, 5.
out that Kentucky Power's DSM programs are cost-effective, with planned total resource cost-benefit ratios increasing from 1.24 in 2016 to 1.72 in 2025.\textsuperscript{14} In light of their cost-effectiveness, the Sierra Club asserts that Kentucky Power’s DSM programs assist customers to reduce their electric bills, which is especially important for lower-income customers, given the adverse economic conditions in Kentucky Power’s service territory.\textsuperscript{15}

Regarding the recent significant increases in Kentucky Power's DSM rates, the Sierra Club contends that such increases were driven by prior under-collections of DSM expenses and were not related to any changes in Kentucky Power's DSM expenditures.\textsuperscript{16} The Sierra Club argues that there should be a linear relationship between DSM spending and DSM rates.\textsuperscript{17} That is, an increase in DSM spending will cause DSM rates to increase. However, according to the Sierra Club, the record of Kentucky Power's DSM spending and its DSM rates does not reflect this relationship.\textsuperscript{18} Had it not been for the issue associated with the timing of collection, the Sierra Club argues that Kentucky Power’s DSM rates would have increased modestly during the period of increasing DSM investments until it reached the level that is necessary for an ongoing $6 million annual DSM expenditure, at which level Kentucky Power's DSM rates would have been $0.002071 per kWh, or approximately two percent of the total kWh charge for a residential

\textsuperscript{14} Grevatt Testimony at 6.
\textsuperscript{15} \textit{id}.
\textsuperscript{16} Grevatt Testimony at 12.
\textsuperscript{17} Grevatt Testimony at 9.
\textsuperscript{18} \textit{id}.\textsuperscript{19}
Given that Kentucky Power’s under-recovery issue will be resolved through changes made to the DSM rate calculation and that the past under-recovery amounts have been fully recovered since the September 2017 billing cycle, the Sierra Club asserts that Kentucky Power’s proposed DSM rates for 2018 represent a significant reduction for the same level of DSM investments as was made in 2017. The Sierra Club argues that reducing Kentucky Power’s cost-effective DSM programs will deprive customers of important benefits, including the opportunity to lower their electric bills and potentially lower overall system costs.

The Sierra Club maintains that scaling back the level of DSM expenditures would only reduce the amount that customers pay by that portion of the DSM rate that represents program costs and incentives. However, the Sierra Club contends that the lost revenue portion of the DSM rate represents costs that Kentucky Power customers will incur, either through DSM rates or through the fixed cost portion of the energy charge, regardless of the level of DSM program investment.

The Sierra Club contends that requiring Kentucky Power to eliminate its DSM spending for 2018 will effectively rescind a key term of a Commission-approved settlement agreement and would harm Kentucky Power’s ratepayers and the Sierra Club because it relied upon that provision in reaching a settlement in Case No. 2012-00578.

19 Grevatt Testimony at 12–13.
20 Grevatt Testimony at 3, 17–18.
21 Grevatt Testimony at 21.
22 Grevatt Testimony at 13.
23 Grevatt Testimony at 13 – 14.
The Sierra Club further argues that such a move would discourage parties from engaging in future settlements because it would cast doubt on parties’ ability to rely on Commission decisions approving settlement agreements.\textsuperscript{25}

The Sierra Club recommends the Commission allow Kentucky Power to continue funding all existing DSM programs at current levels and to maintain the company’s obligation to invest at least $6 million annually in cost-effective DSM programs for its customers.\textsuperscript{26} The Sierra Club also recommends that the Commission direct Kentucky Power to explore opportunities to increase savings for participants in its existing low-income program, the Targeted Energy Efficiency Program; increase opportunities for low-income customers in other existing or new programs; and streamline existing programs to lower administrative costs and enhance benefits for all customers.\textsuperscript{27} Lastly, the Sierra Club recommends that the Commission should clarify that lost revenues can be collected for up to three years, absent an intervening base rate case, but not to exceed the claimed savings life of the specific DSM measure.\textsuperscript{28}

\textsuperscript{24} Post-Hearing Brief of Beverly May, Jim Webb, and Sierra Club at 4.

\textsuperscript{25} \textit{Id.}

\textsuperscript{26} Grevatt Testimony at 4.

\textsuperscript{27} \textit{Id.}

\textsuperscript{28} Grevatt Testimony at 4, 16 – 17.
The Attorney General states that utility-offered DSM programs should reflect the unique economic characteristics of a utility’s service territory and its customers.\textsuperscript{29} The Attorney General notes that DSM costs expended and recovered by a utility should take into account the programs needed for that service territory and an affordable level of rates to be recovered from customers.\textsuperscript{30} The Attorney General further states that the record in this matter establishes the importance and need of DSM programs that target low-income residential customers and those commercial programs that target small businesses, schools, and local governmental entities.\textsuperscript{31} Finally, the Attorney General expresses his concerns that economically challenged residential and commercial customers should have the opportunity to participate in programs in which they bear the costs and that the Commission should ensure that any DSM-related expenses are for targeted purposes, which would provide all customers an ability to participate without significant up-front investments acting as a barrier to participation.\textsuperscript{32}

Kentucky Power

With respect to the direct testimony filed by the Sierra Club, Kentucky Power states that it agrees with much of what the Sierra Club proposes.\textsuperscript{33} Kentucky Power agrees with the Sierra Club that its DSM programs have and can provide important

\textsuperscript{29} Attorney General’s Post-Hearing Brief at unnumbered page 2.

\textsuperscript{30} Id.

\textsuperscript{31} Attorney General’s Post-Hearing Brief at unnumbered pages 1–2.

\textsuperscript{32} Attorney General’s Post-Hearing Brief at unnumbered page 3.

\textsuperscript{33} Wohnhas Rebuttal at 11.
benefits to Kentucky Power’s residential and commercial customers and that the significant recent increase in its DSM rates stemmed from the need to recover prior under-recoveries.\textsuperscript{34} Kentucky Power also agrees with the Sierra Club’s position on revising the calculation of its DSM rates to mitigate the types of under-recoveries that it has experienced in the past and to provide for more transparency.\textsuperscript{35} Towards that end, Kentucky Power indicates that beginning with the November 15, 2017 filing it is employing a simpler and more transparent method. First, Kentucky Power notes that the formula to be used breaks out each cost component separately to provide more transparency, rather than combining program costs, lost revenues, and incentives in a single value, as was done in the past.\textsuperscript{36} Second, Kentucky Power also states that it will begin using a single calendar year to calculate its DSM rates for its filing rather than using the second half of the preceding year and the first half of the current year in calculating its DSM rates.\textsuperscript{37} Finally, Kentucky Power states that it is eliminating its method of using a midpoint between a floor rate, consisting of the carryover from the prior program year, and the ceiling rate, consisting of full program costs, as its proposed DSM rate.\textsuperscript{38} Kentucky Power will now calculate its DSM rate by adding any under-recovery or over-recovery from the prior program year to the estimated expenses for the upcoming program year and dividing that sum by forecasted sales for the upcoming program year.\textsuperscript{39}

\textsuperscript{34} \textit{Id.}

\textsuperscript{35} Wohnhas Rebuttal at 11–12.

\textsuperscript{36} Wohnhas Rebuttal at 11.

\textsuperscript{37} Wohnhas Rebuttal at 11–12.

\textsuperscript{38} Wohnhas Rebuttal at 12.
Kentucky Power agrees with the Sierra Club's recommendation that absent an intervening base rate case, the maximum period for recovery of lost revenues should be three years.\(^40\) In addition, in the event of an intervening base rate case, in which the lost revenues are reset to zero as of the effective date of the base rate order, Kentucky Power also confirms that lost revenue recoveries in the future should be limited to the savings life of the DSM measure.\(^41\)

In its supplemental testimony, Kentucky Power explains the need for Commission guidance concerning future DSM programs in its service territory.\(^42\) Kentucky Power states that if the Commission wants to focus on energy efficiency and DSM programs for the social good or to avoid future generation additions, then it must support the recovery of lost revenues and program costs associated with offering DSM programs.\(^43\) However, Kentucky Power states that if costs are too high or the Commission no longer sees the value in the effort, it is appropriate for the Commission to make that policy declaration and direct Kentucky Power to cease offering such programs.\(^44\) It is Kentucky Power's desire that the Commission support such programs and to allow recovery of costs related to developing and implementing DSM programs along with recovery of lost revenues and incentives.\(^45\)

\(^{39}\) Id.

\(^{40}\) Id.

\(^{41}\) Id.

\(^{42}\) Supplemental Testimony of Ranie K. Wohnhas ("Wohnhas Supplemental") at 4.

\(^{43}\) Id.

\(^{44}\) Id.

\(^{45}\) Wohnhas Supplemental at 4–5.
With respect to the conclusion of the 2017 DSM programs and the Targeted Energy Efficiency Program that was authorized to be offered in 2018, Kentucky Power requests guidance on allowing Applied Energy Group ("AEG") to perform and complete the Impact Evaluation of Kentucky Power's DSM programs.\textsuperscript{46} Kentucky Power states that Impact Evaluation will be needed to establish that the DSM programs are cost-beneficial and to calculate the incentives and lost revenues that Kentucky Power would recover under its tariffs.\textsuperscript{47} Kentucky Power further states that the Impact Evaluation will provide cost-benefit analyses necessary for a determination as to which DSM program should continue.\textsuperscript{48} Kentucky Power estimates that it will cost approximately $165,000 for AEG to conduct the Impact Evaluation. In addition, Kentucky Power states that it also has the option of retaining AEG to assist it in developing cost-effective DSM programs for implementation in 2019–2021 at an estimated cost of $62,000.\textsuperscript{49} Kentucky Power notes that these costs have not been included in its current DSM factors.\textsuperscript{50}

With respect to those projects under the Commercial New Construction Program and the Commercial Incentive Prescriptive Custom Program that were already in progress or accepted prior to Kentucky Power suspending all new DSM program activity,\textsuperscript{51} Kentucky Power states that the Commission's December 21, 2017 Order authorized

\textsuperscript{46} Wohnhas Supplemental at 5 - 11.
\textsuperscript{47} Wohnhas Supplemental at 5.
\textsuperscript{48} Wohnhas Supplemental at 6.
\textsuperscript{49} Wohnhas Supplemental at 8.
\textsuperscript{50} Wohnhas Supplemental at 10.

\textsuperscript{51} These projects were identified in Kentucky Power's response to Commission Staff Second Data Request, Item 2.
Kentucky Power to continue DSM spending on those projects accepted or approved prior to November 3, 2017, and not listed as being on a “waitlist”\textsuperscript{52}. Thus, Kentucky Power was authorized to pay incentives to those commercial customers who were identified as either on the “Pending Kentucky Power Final Approval”\textsuperscript{53} category or “Review Status” category.\textsuperscript{54} Kentucky Power states that its current DSM factor includes recovery for these incentives, which total $829,074.\textsuperscript{55} Kentucky Power requests that the Commission, upon completion of each project in the two “Waitlist” categories and upon the submission and verification of all required paperwork, authorize Kentucky Power to pay the associated incentive and allow Kentucky Power to recover such costs through its commercial DSM factor.

**DISCUSSION**

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that pursuant to KRS 278.040(2), it has exclusive jurisdiction over the rates and service of a jurisdictional utility. Further, under KRS 278.260(1), the Commission can initiate an investigation on its own motion to determine whether the rates of a jurisdictional utility are unreasonable. Here, we find that the circumstances have

\textsuperscript{52} Wohnhas Supplemental at 16. The “Waitlist” category includes those customers who had not completed the project or had not completed the final paperwork and were told that although the customer may proceed with the project, incentives would be paid only upon availability of additional funds and Kentucky Power’s approval for the distribution of those funds.

\textsuperscript{53} The “Pending Kentucky Power Final Approval” category represents those customers who had completed the project, the required final paperwork, and awaiting verification of that the project conforms with program requirements. See, Wohnhas Supplemental at 13.

\textsuperscript{54} The “Review Status” category includes those customers that had applications approved prior to the program budget being fully committed. These projects are still in progress and the final paperwork has not been received and verified. See, Wohnhas Supplemental at 14–15.

\textsuperscript{55} Wohnhas Supplemental at 17.
changed sufficiently since our approval of the settlement agreement reached by Kentucky Power, the Sierra Club, and others in Case No. 2012-00578 to warrant a re-examination of the provision requiring Kentucky Power to increase its DSM spending to a minimum of $6 million through 2018 and beyond, subject to the Commission’s prior approval to decrease that amount of spending.

The Commission further finds that Kentucky Power’s current significant excess capacity position, coupled with the lack of current cost-benefit analysis reflecting avoided costs that takes into account Kentucky Power’s lack of an immediate and near-term need for capacity and energy, dictates that Kentucky Power be relieved of its commitment to spend $6 million on DSM programs. Kentucky Power should eliminate offering any DSM programs, other than those programs that target income-eligible residential customers, until there is a change in Kentucky Power’s capacity position that indicates a need for additional generation to serve its load. We note that as a member of PJM Interconnection LLC ("PJM") and operating in PJM’s capacity market as a Fixed Resource Requirement ("FRR") construct, Kentucky Power is required to meet certain load obligations with unit-specific capacity each PJM planning year. The record indicates that for the 2013/2014 PJM Planning Year, Kentucky Power had total capacity margin of 26.86 percent,\(^\text{56}\) representing 117 MWs of excess capacity above PJM requirements.\(^\text{57}\) Kentucky Power’s excess capacity increased significantly by Planning Year 2017/2018 to 33.58 percent total capacity margin, equating to 163 MWs above PJM requirements.\(^\text{58}\)

\(^{56}\) For Planning Year 2013/2014, PJM required an Installed Reserve Margin of 15.90 percent.

\(^{57}\) Commission Hearing Exhibit 1.

\(^{58}\) Id.
excess capacity is forecasted to increase in the near future with a total capacity margin of 48.06 percent for the 2021/2022 Planning Year, or 281 MWs of excess capacity above PJM requirements.\textsuperscript{59} The evidence shows that while Kentucky Power had excess capacity in 2013/2014, its capacity length has increased significantly in the last few years and is expected to increase even more for the next several years. The evidence also shows that Kentucky Power's most recent cost benefit analysis for its DSM programs was conducted in 2015 during a period in which Kentucky Power had total capacity margin of 25.94 percent, or 107 MWs of excess capacity above PJM requirements, which is substantially less than Kentucky Power's current capacity margin of 33.58 percent.

In addition to the lack of need for generation, the Commission is also concerned that the amount of annual DSM spending is predicated upon an arbitrary level negotiated as part of a settlement, rather than based upon rational and justifiable grounds supporting a need for such expenditures. Our concern is highlighted by the fact that over 30 percent of the population in the counties served by Kentucky Power's service territory lives below the federal poverty level, and over 40 percent of the personal income in the counties served by Kentucky Power come from governmental benefit programs. Thus, a substantial portion of Kentucky Power's residential customers are least able to afford to implement the energy efficiency measures offered by Kentucky Power through its various DSM programs. These customers are, therefore, not receiving any direct benefits from the DSM programs but are subsidizing other residential customers' participating in the programs. We note that with the elimination of all of Kentucky Power's DSM programs, except the Targeted Energy Efficiency Program, Kentucky Power's residential customers

\textsuperscript{59} \textit{Id.}
will receive an average monthly credit of approximately $1.79 based on Kentucky Power's current DSM factor.

In light of our decision to reduce Kentucky Power's DSM offerings, we find that Kentucky Power's request to authorize it to engage AEG in conducting the Impact Evaluation and consulting services to identify future DSM programs to be unreasonable and should be denied.

With respect to Kentucky Power's request to allow it to pay the incentives to those projects identified in its response to Staff's Second Data Request, Item 2, the Commission finds that Kentucky Power should be authorized to submit incentive payments to all customers identified in that discovery response, including those in the "Waitlist" categories, and that Kentucky Power should be allowed to include those incentive payments in the calculation of its DSM factor for recovery through the DSM surcharge mechanism.

In the event Kentucky Power seeks in the future to expand its DSM offerings, any future application should be supported by detailed and robust cost-benefit analyses along with information concerning the company's capacity position and the need for the proposed DSM programs. Future DSM programs should include robust targeted programs that assist participation by low-income customers and designed to be capable of tracking when program funds are expected to be fully subscribed, when program funds are actually fully subscribed, and when a customer participating in a DSM program is contacted and notified as to the availability of program funds.
IT IS THEREFORE ORDERED that:

1. Kentucky Power is relieved of its obligation to spend a minimum of $6 million on DSM programs.

2. Kentucky Power’s request to retain AEG to conduct an Impact Evaluation and perform consulting services to develop a suite of DSM programs for the 2019–2021 time period is denied.

3. Kentucky Power’s request to remit incentives to all customers participating in the Commercial New Construction Program and the Commercial Incentive Prescription Custom Program as identified in Kentucky Power’s response to Commission Staff’s Second Data Request, Item 2 is granted.

4. Any future DSM applications filed by Kentucky Power shall include the information as described herein.

5. Any over-recovery or under-recovery resulting from Kentucky Power’s 2018 commercial or residential DSM factors is to be recovered using its simplified November 2017 methodology for calculating its DSM factors.

6. Kentucky Power shall be allowed to recover any lost revenues and incentives associated with any Commission-approved DSM program consistent with KRS 278.285. Recovery of lost revenues shall be limited to no more than three years, absent an intervening base rate case, and shall not exceed claimed savings life of the specific DSM measure.
By the Commission

ENTERED
JAN 18 2018
KENTUCKY PUBLIC SERVICE COMMISSION

ATTEST:

[Signature]
Executive Director

Case No. 2017-00097