

Stimulating Energy Efficiency in Kentucky

The logo features the text "Stimulating Energy Efficiency in Kentucky" in blue. To the right, there is a stylized graphic consisting of a blue swoosh that curves upwards and then downwards, with a central orange and yellow starburst or spark-like shape.

Kentucky's Energy Efficiency Regulatory Context

Overview: This document provides the basic regulatory context for Kentucky's energy efficiency efforts. This document is not an exhaustive review of Kentucky's Demand Side Management (DSM) and energy efficiency policies and statutes, but is intended as an education tool to be used in the Kentucky Department for Energy Development and Independence's (DEDI) collaborative stakeholder process. To that end, below we set out in brief terms Kentucky's utility profile, the central DSM and energy efficiency program approval requirements, and other statutes and policies relating to energy efficiency in Kentucky. This document was prepared to the best of DEDI's knowledge, using currently-available reference information. We welcome any comments, additions, or edits to improve the contents, and will do our best to reasonably incorporate requested edits into this document.

I. Kentucky's Electric and Gas Utility Profile

The energy needs of Kentucky's consumers are served primarily by investor-owned utilities (IOUs), non-profit electric cooperatives (referred to generally as "Co-ops"), the Tennessee Valley Authority (TVA), and Municipal electric utilities (referred to generally as "Munis"). Of these different types of energy suppliers, only IOUs and a portion of Co-ops are regulated by the Kentucky Public Service Commission (PSC). The PSC does not regulate TVA or Munis. Maps depicting the geographic distribution of Kentucky's regulated electric and gas utilities are available at <http://psc.ky.gov/Home/Maps>.

There are three electric IOUs in Kentucky: Louisville Gas & Electric/Kentucky Utilities, Kentucky Power (American Electric Power), and Duke Energy Kentucky. Each of these companies is vertically integrated, i.e. they each generate and transmit power and distribute that power to meet their respective customers' needs. TVA, a non-regulated utility, also generates power for five Co-ops and ten Munis in Kentucky. These Co-ops and Munis then resell and distribute electricity to customers within their service territories. In addition to the IOUs, the PSC regulates all of Kentucky's electric Co-ops, except for those served by TVA. The regulated Co-ops consist of two generation and transmission utilities: East Kentucky Power Cooperative and Big Rivers Electric Corporation. Three distribution Co-ops in Western Kentucky jointly own and purchase power from Big Rivers Electric Corporation, and 16 distribution Co-ops jointly own and purchase power from East Kentucky Power Cooperative, primarily in East Kentucky. The PSC also regulates five large natural gas distribution corporations: Duke Energy Kentucky, LG&E, Atmos Energy, Delta Natural Gas, and Columbia Gas, as well as 28 small rural natural gas distribution companies. Finally, there are forty-five Munis in Kentucky that either self-

generate or purchase power from various sources. Because the PSC does not regulate Munis, only a portion of those utilities are depicted on the maps referenced above.

II. Kentucky's DSM Statute

In 1994, Kentucky passed what is known as its "DSM Statute" (KRS 278.285).¹ The DSM Statute allows utilities to propose, and the PSC to review, DSM programs aimed at reducing their customer's energy use through efficiency and load-management. The main features of the DSM statute consist of the following: a stand-alone application and review process, cost-recovery through a surcharge mechanism, and industrial opt-out.

A. Program Development, Filing and Review Process

The kinds of DSM programs that utilities may seek approval for under the DSM Statute include those relating to energy conservation, energy efficiency, peak shaving, load shifting, and incentive programs. In developing these programs, IOUs in Kentucky have organized customer collaboratives/advisory groups to facilitate dialogue and the development of DSM programs that would receive the general support of stakeholders and customers. The membership in these collaboratives varies depending on the utility, but the interests of all classes of customers are usually represented via organizations and bodies such as the Office of Attorney General, industry associations, various local non-governmental organizations, community organizations, and government agencies.

Once a utility develops its set of DSM programs, it files a stand-alone application that provides detailed analyses of the costs of implementing the proposed programs, net revenues lost due to implementation of the programs, and proposed incentives structures. While there is no specific schedule as to when and how often the DSM filings need to be submitted to the PSC, the typical frequency has been every one to two years, with annual or semi-annual progress updates. Long-term plans for DSM programs are also typically included within utility Integrated Resource Plan submissions.²

During the PSC review, the main criteria for evaluating a utility's proposed programs is the "reasonableness" of those programs. *See* KRS 278.285(1)(a)-(g). In determining reasonableness, the PSC may consider the following factors:

- The targeted changes in consumer patterns which the utility is attempting to influence through the proposed programs;

¹ The full text of the DSM Statute is attached to this document as Appendix 1.

² Pursuant to 807 KAR 5:058, Kentucky requires regulated utilities to submit Integrated Resource Plans every three years that lay out the utility's resource assessment and acquisition plan for providing an adequate and reliable supply of electricity to meet forecasted electricity requirements at the lowest possible cost. Amongst other requirements, a utility's IRP must include an assessment of potentially cost-effective resources, including: efficiency improvements at existing facilities, and new DSM, conservation, and load management programs.

- The cost-effectiveness of the programs;
- The proposed cost recovery of DSM programs in the rates, including net revenues lost, and incentives for utilities to encourage implementation of cost effective programs;
- Whether the proposed programs are consistent with the utility's long-term Integrated Resource Plans;
- Whether the proposed programs would result in equitable treatment of all customer classes;
- The involvement of customer representatives and the Office of Attorney General in the development of the proposed plans; and
- The availability and affordability of proposed plans.

DSM programs filed under the DSM Statute can be reviewed by the PSC as a dedicated proceeding, or incorporated with a rate filing. *See* KRS 278.285(2). Customer representatives and the Attorney General's office may participate as parties in proceedings involving review of and decision-making on DSM programs and related cost recovery mechanisms.

B. Cost Recovery Mechanism and Industrial Opt-Out

If the PSC approves a new DSM program or extends an existing program, the program costs will be incorporated into a DSM surcharge that appears on the customer bill. *See* KRS 278.285(3). The amount of the surcharge is determined based on five elements: DSM program costs, projected lost revenues as a result of the programs, an incentive bonus, capital recovery, and true-up from the previous filing. The DSM Statute requires that only the customer class (i.e., residential, commercial, industrial) that benefits from a given program should incur the associated costs of that program. Thus, the costs of programs designed for residential customers, for example, are recovered through a surcharge that appears only on residential customer bills. The same is true for programs costs associated with commercial programs.

Finally, the DSM Statute allows industrial customers with energy intensive processes to opt-out entirely from participating in DSM programs. *See* KRS 278.285(3). Consequently, industrial customers who opt out are not assigned the cost of a utility's DSM programs, and do not pay a DSM surcharge on their energy bills.

It is important to note that while PSC authorization is required for a utility to move forward with a DSM program and to recover its costs through a surcharge on the customer bill, the DSM Statute's language does not expressly authorize the Commission to direct utilities to implement particular programs on its own initiative or direction. In addition, the DSM Statute does not expressly require utilities to use a particular methodology for evaluating, measuring and verifying energy savings as a result of their DSM programs, nor does it require reporting of any particular program metrics.

Currently, the three IOUs file their DSM programs and recover all their associated costs via the mechanism set out in the DSM Statute. To date, the Co-ops do not participate in the DSM Statute and

its cost recovery mechanism; rather, their programs are filed through the PSC's tariff procedure, and any associated costs are incorporated into their base electric rates rather than through a surcharge.³

III. Notable Kentucky Legislation and Policies, 1994-Present

Since the DSM Statute was passed in 1994, a number of additional statutes and policies have arisen that set out requirements or targets for achieving Kentucky's energy efficiency goals. These include House Bills 1 and 2, and Governor Beshear's 2008 strategy document.

A. House Bills 1 and 2

In 2007, the Kentucky Legislature passed the 2007 Energy Act, otherwise known as House Bill 1. Amongst other things, the bill provided for cash and state tax credits to certain companies who propose to build and operate facilities intended to produce alternative energy. The bill also created a sales tax credit for equipment purchased that result in a 15% reduction in energy usage in certain circumstances. In addition, the bill authorized the borrowing of \$100 million to create an Energy Projects Economic Development Bond Pool.

Notably, Section 50 of the 2007 Energy Act directed the PSC to give further consideration to several issues related to the DSM Statute, including "eliminating impediments to the consideration and adoption by utilities of cost-effective demand-management strategies" and "modifying rate structures and cost recovery to better align the financial interests of the utility with the goals of achieving energy efficiency." *See* 2007 2d Extra. Sess. Ky. Acts ch. 1, sec. 50. In response, the PSC conducted proceedings that considered a number of possible modifications to how the DSM Statute was being administered.

The PSC's resulting report to the General Assembly identified several issues as high priorities for future proceedings, including:

- Stakeholder input in follow-up DSM activities;
- Development of standards for evaluating the benefits of DSM programs;
- Development of standards for evaluation and verification in the implementation of DSM programs;
- Clarification of the DSM Statute's opt-out process by large industrial users, with the procedure to include a self-certification element;
- Increased customer education on energy efficiency and DSM programs;
- Increasing utility rebates and financing programs to support customer investment in energy efficiency;
- Acceleration of DSM Statute application and review process for programs below a defined funding level, and for standard review of modifications to current programs;
- Consideration of alternative rate structures to align utility incentives with greater investments in energy efficiency.

³ KRS 278.190 provides for recovery of DSM program costs through general rates.

In 2008, the Kentucky Legislature passed House Bill 2, which created an array of tax credits for investments in energy efficiency and renewable energy. Among other things, the bill offered tax credits for energy efficiency investments in residential and commercial property, credits for taxpayers who build and/or sell Energy Star homes in Kentucky, and provided low interest loans for energy-efficient upgrades.

B. Governor Beshear's Energy Strategy

In 2008, Governor Steven Beshear released his strategy document entitled, "Intelligent Energy Choices for Kentucky's Future – Kentucky's 7-Point Strategy for Energy Independence," available at <http://energy.ky.gov/resources/Pages/EnergyPlan.aspx>. The document sets out 7 key strategies for ensuring Kentucky's energy security and to maintain low-cost, reliable energy into the future. Greater energy efficiency was identified as the leading strategy to accomplish this objective, and in the near-term was described as the fastest, cleanest, most cost-effective, and most secure method to mitigate Kentucky's growing demand for energy. In the long-term, the Governor set out a goal to offset 18% of projected 2025 energy demand via efficiency.

278.285 Demand-side management plans -- Review and approval of proposed plans and mechanisms -- Assignment of costs -- Home energy assistance programs.

- (1) The commission may determine the reasonableness of demand-side management plans proposed by any utility under its jurisdiction. Factors to be considered in this determination include, but are not limited to, the following:
 - (a) The specific changes in customers' consumption patterns which a utility is attempting to influence;
 - (b) The cost and benefit analysis and other justification for specific demand-side management programs and measures included in a utility's proposed plan;
 - (c) A utility's proposal to recover in rates the full costs of demand-side management programs, any net revenues lost due to reduced sales resulting from demand-side management programs, and incentives designed to provide positive financial rewards to a utility to encourage implementation of cost-effective demand-side management programs;
 - (d) Whether a utility's proposed demand-side management programs are consistent with its most recent long-range integrated resource plan;
 - (e) Whether the plan results in any unreasonable prejudice or disadvantage to any class of customers;
 - (f) The extent to which customer representatives and the Office of the Attorney General have been involved in developing the plan, including program design, cost recovery mechanisms, and financial incentives, and if involved, the amount of support for the plan by each participant, provided however, that unanimity among the participants developing the plan shall not be required for the commission to approve the plan;
 - (g) The extent to which the plan provides programs which are available, affordable, and useful to all customers; and
 - (h) Next-generation residential utility meters that can provide residents with amount of current utility usage, its cost, and can be capable of being read by the utility either remotely or from the exterior of the home.
- (2) A proposed demand-side management mechanism including:
 - (a) Recover the full costs of commission-approved demand-side management programs and revenues lost by implementing these programs;
 - (b) Obtain incentives designed to provide financial rewards to the utility for implementing cost-effective demand-side management programs; or
 - (c) Both of the actions specifiedmay be reviewed and approved by the commission as part of a proceeding for approval of new rate schedules initiated pursuant to KRS 278.190 or in a separate proceeding initiated pursuant to this section which shall be limited to a review of demand-side management issues and related rate-recovery issues as set forth in subsection (1) of this section and in this subsection.
- (3) The commission shall assign the cost of demand-side management programs only to the class or classes of customers which benefit from the programs. The commission

shall allow individual industrial customers with energy intensive processes to implement cost-effective energy efficiency measures in lieu of measures approved as part of the utility's demand-side management programs if the alternative measures by these customers are not subsidized by other customer classes. Such individual industrial customers shall not be assigned the cost of demand-side management programs.

- (4) Home energy assistance programs may be part of a demand-side management program. In considering a home energy assistance program, the commission shall only utilize the criteria set forth in subsections (1)(f) and (3) of this section.

Effective: February 25, 2010

History: Repealed and reenacted 2010 Ky. Acts ch. 5, sec. 18, effective February 25, 2010. -- Amended 2008 Ky. Acts ch. 139, sec. 19, effective July 15, 2008. -- Amended 2001 Ky. Acts ch. 11, sec. 2, effective June 21, 2001. -- Created 1994 Ky. Acts ch. 238, sec. 2, effective July 15, 1994.

Legislative Research Commission Note (2/25/2010). 2010 Ky. Acts ch. 5, sec. 28, provides that the repeal and reenactment of this section in that Act "shall apply retroactively to July 15, 2008."