THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

Before Commissioners: Thomas E. Wright, Chairman

Michael C. Moffet Joseph F. Harkins

| In the Matter of a General Investigation |) | Docket No. 08-GIMX- <u>식니</u> GIV |
|--|---|-----------------------------------|
| Regarding Cost Recovery and Incentives |) | |
| for Energy Efficiency Programs |) | |

ORDER INITIATING INVESTIGATION AND ASSESSING COSTS

The above captioned matter comes before the State Corporation Commission of the State of Kansas (Commission) for consideration and decision. Having examined its files and records, and being duly advised in the premises, the Commission makes the following findings:

BACKGROUND

1. In the Final Order closing the general investigation into energy efficiency programs in docket number 07-GIMX-247-GIV, *In the Matter of a General Investigation Regarding Energy Efficiency Programs*, the Commission cited with approval the efforts of utilities and Kansas agencies to develop energy efficiency measures and programs. The Commission noted its desire to work collaboratively with utilities and other entities to encourage, facilitate and guide current and future energy efficiency programs.

- 2. The Commission observed the Legislature has directed the Commission to develop a comprehensive state energy conservation plan and procedures for implementing such a plan. K.S.A. 74-616(b). In light of the various programs being initiated by utilities, state and local governments, and the private sector, such as residential, commercial, and industrial customers, the Commission decided a policy framework through which Energy Efficiency programs may be reviewed and evaluated on a uniform and consistent basis would be useful.
- 3. The Commission found it has broad authority to provide incentives to promote efficiency and conservation of energy in addition to increases in rates of return. The Commission determined it has wide discretion to consider and apply methodologies for approving energy efficiency programs, including different cost-benefit tests, and that the Commission is not limited to any particular approach. The Commission found there is a need to develop Commission policy for key elements of a comprehensive energy efficiency/conservation program and ordered the opening of two concurrent investigations to facilitate development and subsequent action on these key elements.
- 4. This investigation will address methods of cost recovery for energy efficiency programs, including the issue of "decoupling." A second concurrent investigation will address methods of evaluating costs and benefits of energy efficiency programs and the capacity to monitor and evaluate approved programs to determine if they have produced expected benefits, should be modified or should be discontinued. Real-time pricing may also be examined. Both these investigations will include solicitation of comments and an

informal workshop (with participation by the Commissioners) designed to foster a candid and productive discussion of the issues.

FINDINGS AND CONCLUSIONS

- 5. The Commission intends to use this docket, in conjunction with the investigation addressing methods of cost-benefit analysis, to develop rules and policy and create a regulatory framework. This docket will examine what, if any, departures from traditional regulation are necessary or desirable to encourage energy efficiency programs in light of the financial, operational or other consequences of the implementation of such programs. There has been much discussion within the utility and regulatory community in recent years of the potential issues that should be addressed in connection with energy efficiency programs and the various options for addressing those issues. In the Final Order in 07-GIMX-247-GIV, the Commission noted numerous dockets where the Commission has addressed energy efficiency initiatives and issues with Kansas utilities.
- 6. Earlier this year, the U.S. Department of Energy concluded State energy policies should take advantage of the opportunities to use energy efficiency, in light of its low cost, as a means to meet the growing demand for energy. The Department made several recommendations for state regulators of utility companies, including: (1) regulators should make a commitment to cost-effective energy efficiency as a resource; (2) regulators should implement programs through a combination of infrastructure planning that includes programs as a part of utility resource planning and rate cases, ensuring

¹ State and Regional Policies that Promote Energy Efficiency Programs Carried Out by Electric and Gas Utilities: A Report to the United States Congress Pursuant to Section 139 of the Energy Policy Act of 2005, U.S. Department of Energy 4-5 (March 2007).

utilities receive appropriate compensation for programs, energy efficiency performance requirements for utilities, and reporting results and performance indicators that lead to program improvements; and (3) regulators should consider establishing a formal evaluation framework for utility energy efficiency programs.²

7. The Department of Energy also suggested regulators consider changing policies to align the incentives of utilities with cost-effective energy efficiency by removing regulatory and management disincentives to energy efficiency and providing incentives for the successful management of energy efficiency programs.³ Standard ratemaking may provide an incentive for utilities to promote sales of energy, as opposed to encouraging energy efficiency, because sales growth results in greater revenue.⁴ "Decoupling" is one mechanism that regulators are considering to address this issue.⁵ Decoupling refers generically to rate adjustment mechanisms that separate an electric or gas utility's fixed cost recovery⁶, such as costs of investment, maintenance, infrastructure, and employee payroll, from the amount of electricity or gas the utility sells.⁷ Theoretically, this should remove the disincentive for utilities to aggressively

-

² *Id.* at 8-17.

 $^{^3}$ Id

⁴ Decoupling for Electric and Gas Utilities: Frequently Asked Questions, National Association of Regulatory Utility Commissioners, 2 (September 2007) (hereinafter Decoupling FAQ, NARUC); Ken Costello, Revenue Decoupling for Natural Gas Utilities, National Regulatory Research Institute Briefing Paper 2 (April 2006).

See Decoupling FAQ, NARUC, supra. See also testimony of KCC Staff member Dorothy Myrick filed July 25, 2006, 15-21, In the Matter of the Application of Midwest Energy, Inc. for Approval to Make Certain Changes in Its Charges for Gas Service, Docket No. 06-MDWG-1027-RTS. The concept of decoupling has been around since the 1980's, however, only ten states have adopted this scheme. California has the most experience with this approach. Decoupling FAQ, NARUC, supra, 5. Decoupling does not alter the traditional use of rate-setting cases to set rate base and a rate of return, but affects revenue between rate cases. Id., 6.

⁶ The National Association of Regulatory Utility Commissioners notes that in States with vertically integrated utilities, separation of fixed costs from variable costs, and application of decoupling only to the former, must be undertaken with care. *Decoupling FAQ*, NARUC, 9.

⁷ Decoupling FAQ, NARUC. Various methods of decoupling include adjusting utility revenues for any change between expected and actual sales regardless of the reason, (Full Adjustment Revenue Decoupling), setting a per-

promote energy efficiency programs that may arise from potential decreases in energy sales.

Other approaches include mechanisms that adjust net changes in revenues only for variations in sales that can be proven to have arisen from energy efficiency programs, and mechanisms that eliminate all variable distribution charges and recover costs through a fixed delivery services charge or customer charge alone.

Most recently, as noted in the Final Order closing the 07-GIMX-247-GIV docket, the Commission noted its approval of a settlement implementing, on an interim basis, an Energy Efficiency Rider to recovery energy efficiency program costs. All these approaches, of course, have potential advantages and disadvantages.

8. In order to facilitate the clarity of the discussion, the Commission notes some definitions for energy efficiency programs that are reasonable and useful. By Demand Side Management (DSM) programs, the Commission refers to measures that change the amount or timing of electricity consumption in order to utilize scarce electric supply

_

customer revenue target and adjusting permitted revenues for increases or decreases in customer numbers (Per-Customer Adjustment Revenue Decoupling), or setting a margin-per-customer goal and separating margin recovery from sales (Sales-Margin Decoupling). *Id.* at 4.

⁸ Decoupling FAQ, NARUC, 2-3. Note that decoupling does not provide an incentive for utilities to promote energy efficiency; it merely may remove a disincentive. *Id.* at 3. In the case of gas utilities, decoupling has also been motivated by historical and anticipated future declines in gas usage per household resulting in a concern the utility would not have a reasonable opportunity to earn its authorized rates of return unless a decoupling mechanism was applied. Costello, *supra*, 4.

⁹ Such a mechanism may be called Net Lost Revenue Recovery, Lost Revenue Adjustments, or Conservation and Load Management Adjustment Clauses, for example. *Decoupling FAQ*, NARUC, 4.

This type of approach may be referred to as a Straight-Fixed Variable Rate Design. Decoupling FAQ, NARUC,

See Myrick, at 18-19 describing advantages and disadvantages of revenue decoupling. See generally *Decoupling FAQ*, NARUC, *supra*. A major reason regulators have been hesitant to adopt decoupling is a fear that utility revenues may remain level even if business, economic, or weather factors caused customer rates to increase or to incur large balances in deferral accounts. *Id.* at 7. Possible corrective mechanisms to lessen the risk that decoupling would result in negative unintended consequences could include the use of balancing accounts, rate banding, revenue banding/shared earnings, and course corrections for single significant events or special circumstances. *Id.* at 9.

resources most efficiently.¹² These DSM measures, or "conservation programs,"¹³ increase energy efficiency by focusing on reducing utility customers' overall energy requirements, during all or significant portions of the year, not only customers' peak demands. These programs replace non-energy efficient lighting, heating, cooling, drive power, or building shell equipment or materials with energy efficient substitutions, while maintaining a comparable level of service or utility, and should result in lower customer bills.¹⁴

- 9. By Demand Response (DR) programs, the Commission refers to measures that reduce or shift demand for power during system emergencies, energy or capacity shortages, and periods of high wholesale market prices so as to make the best use of generation, transmission and distribution assets.¹⁵ This definition includes "load management" or "peak-load management," which involve reduction of demand during peak generation periods or shifting demand from peak to non-peak periods.¹⁶
- 10. DR programs may be categorized into two groups: (1) rate structures that provide a price signal to customers reflecting the marginal costs of electricity production; and (2) payments to customers for reducing their energy load when requested.¹⁷ DR

¹² This definition is adopted from a presentation by Tim Scanlon, Commercial & Federal Lead for Energy Efficiency, Bonneville Power Administration, on "Regulatory Treatment of Demand-Side Management & Demand Response Programs," at NMSU Basics Conference, October 17, 2007, Albuquerque, New Mexico.

California Standard Practice Manual: Economic Analysis of Demand Side Programs and Projects, Governor's Office of Planning and Research 2 (July 2002) (hereinafter CA Manual).

CA Manual, supra, 2.

Scanlon, supra. See Benefits of Demand Response in Electricity Markets and Recommendations for Achieving Them: A Report to the United States Congress Pursuant to Section 1252 of the Energy Policy Act of 2005, U.S. Department of Energy, ix-x (February 2006) (hereinafter DOE Demand Response).

CA Manual, supra, 2.

Demand Bidding or Buyback programs are another type of DR program that involve providing consumers an opportunity to curtail their energy demand in return for a certain price. DOE *Demand Response*, *supra*, xii. These programs view reducing load as equivalent to generating more power.

programs may include interruptible load tariffs, time-of-use rates ¹⁸, real-time pricing ¹⁹, and direct load control. ²⁰ These programs may target peak periods for load reduction or shape and control load during non-peak periods to respond to variations in power availability or cost. Other types of DR programs include interruptible and curtailable rates that provide discounts in the tariff for customers willing to decrease load, and energy management computer-based systems that control a customer's lighting, heating, cooling and ventilation systems to manage peak loads. These systems may be controlled by the customer or from a central location.

- 11. The Commission finds the following questions at issue with regards to both DSM and DR programs and requests comments addressing these issues. Comments should clearly indicate whether they are intended to apply to both DSM and DR programs and explain any differences in considerations between DSM and DR programs.
 - A. How should costs of approved DSM and DR programs be recovered or funded? Should there be only one mechanism for cost recovery? Basic options could include:
 - Traditional recovery through rates in rate cases. (Capital costs included in rate base with return of and on; expenses "normalized" in some fashion. The "rate design" issues of cost

Time-of-use customer rates track the variance in rates paid by utilities during peak periods and off-peak periods, reflecting the average cost of generating and delivering power during those time periods. DOE *Demand Response*, *supra*, xii. Time-of-use rates are incorporated into a tariff and may be voluntary or mandatory.

7

¹⁹ Real-time pricing involves hour-to-hour variation in price levels that reflect wholesale energy prices. DOE *Demand Response*, *supra*, xii. Real-time pricing for consumers may involve installation of meters that provide real-time pricing information.

Direct load control programs focus on equipment that may be turned off remotely by the utility for short periods of time, such as central air conditioners and water heaters. DOE *Demand Response*, *supra*, xii. These programs require that communication systems be installed on the customer equipment involved so that signals may be received from the utility. Generally, participation is voluntary, and a participating customer does not pay for the equipment and receives incentives such as credits on their bill. Scanlon, *supra*.

recovery are being addressed primarily in the other docket but may also be addressed here.)

- Revenue requirements of both capital and expenses flowed through on periodic basis through a rider. (This would be similar to a property tax rider and was the mechanism agreed to on an interim basis by the parties in docket number 07-KCPE-905-RTS. One issue is whether all internal labor expenses for the program should be allowed or only new added labor expenses ("incremental expenses")).
- Allow rate base treatment of program costs and expenses. (Return "of" provides for recovery while return "on" provides incentive so this option addresses two issues.)
- Program tariff like other utility-provided services and "resources," participants in the programs would pay for services rendered in accordance with approved tariffs.
- Net positive cash flow programs, such as Pay-As-You-Save (PAYS a trademark of PAYS America).²¹
- B. Should there be a separation of margin (fixed cost) recovery from usage and, if so, what should the mechanism be? Basic options could include:
 - A lost revenue adjustment mechanism that periodically adjusts rates to compensate for lower usage due to programs.
 - A decoupling mechanism that adjusts rates to compensate for lower (or higher) actual revenues (either total or per customer) than anticipated in rate case.
 - Use of a "straight fixed-variable" rate structure so that all fixed costs are recovered through a flat rate (such as a monthly customer charge)
- C. Should there be financial incentives for utilities to implement DSM and DR programs and, if so, what should they be? Who should pay for those incentives? Basic options could include:

The Commission recently approved such a program in 07-MDWG-784-TAR, In the Matter of Midwest Energy Seeking Commission Approval to Implement a Pay-As-You-Save Program for its Natural Gas Service (Petition for Reconsideration Pending) and its sister docket regarding implementation of the program for Midwest's electric service, 07-MDWG-788-TAR (Petition for Reconsideration Pending).

- Financial rewards for achieving program performance goals.
- Sharing of benefits (avoided costs) between utility and ratepayers.
- Allow rate base treatment of programs costs and expenses. (Return "of" provides for recovery while return "on" provides incentive so this option addresses two issues.)
- The additional $\frac{1}{2}$ % to 2% rate of return on investment allowed by K.S.A. 66-117(e).
- Allow rate base treatment for a percentage of capacity and energy costs avoided by programs in lieu of separate program cost recovery, margin recovery and incentives as per the Duke Energy proposal in North Carolina.
- 12. In addition to the general questions posed in the preceding paragraph, the Commission solicits comments on some specific questions. Again, comments should address DSM and DR programs separately where any considerations may differ:
 - A. Assertions are that utilities have disincentives to implement DR and DSM energy efficiency programs because of reduction in revenues and margins and, even absent that disincentive, do not have affirmative incentives to fully embrace these programs. What real evidence supports such assertions?
 - B. How does the attention being given to climate change and other environmental issues, including current and potential government mandates and the tide of public opinion, affect the incentives of utilities to implement DR and DSM programs?
 - C. Instead of providing energy efficiency program incentives to utilities, would it be more efficient to directly provide incentives to ratepayers? If so, how might those incentives be provided?

- D. What are the pros and cons associated with each of the options discussed above? Are there different considerations for electric versus natural gas utilities,(e.g. gas usage per household has declined where electric usage is increasing); Investor Owned Utilities versus cooperatives; large versus small; or other characteristics?
- E. Is there a specific option or combination of options that is preferable or necessary and why? Include a discussion of when each option should be considered and implemented; e.g. if a significant impact on usage and revenues from programs is not expected for several years, may the Commission use that time to consider the best decoupling mechanism?
- F. Most of the various options could each be implemented in different ways. Are there any specific mechanisms that are preferable at this time? Explain how the specific mechanism would work. What are the advantages?
- G. With regard to compensation for lost revenues as a result of DSM and DR programs, on what would compensation be based? How would lost revenue be measured?
- H. Rate design issues may need to be addressed in both this docket and the concurrent investigation addressing cost-benefit tests. What are the implications for how various DR and DSM program costs, such as program costs, lost revenues, and incentives, should be recovered in rates? If a program fails the RIM test but is implemented based on other cost-benefit

analysis, should there be an attempt through rate design or otherwise to compensate non-program participants for their lack of benefit? Should there be an attempt to recover costs from non-participants who may benefit from such programs?

- I. Are there any other significant considerations for the Commission?
- 13. The timelines for a decision in this docket and in the companion docket exploring cost recovery for energy efficiency programs are intended as goals, and subject to change as these investigations develop to enhance the productiveness of these dockets. The investigations are meant to be concurrent and complementary. The respective timelines were not meant to have any effect on the parties' substantive comments or stances, but were set forth based on the considerations that the Commission wished to pursue these investigations vigorously and the belief that decisions about benefit-cost testing might be somewhat less involved and controversial as opposed to decisions about program cost recovery. Should circumstances develop through the course of these investigations that would suggest alternative timelines or other changes would result in a more useful and productive dialogue and outcome, the Commission will consider such changes.
- 14. Initial comments and proposals should be filed by January 25, 2008. Reply comments should be filed by February 15, 2008. The Commission will seek, if possible, to complete this investigation and issue an order within 9 months.
- 15. The Commission concludes that all jurisdictional electric and natural gas utilities should be made parties to this docket and will be served with a copy of this Order. In addition, a copy of this Order should be delivered to the Sierra Club due to its

participation in 07-GIMX-247-GIV. This docket involves matters that may lead to issues important to residential and small commercial utility customers so the Commission invites the Citizens' Utility Ratepayer Board (CURB) to file a petition for intervention to join this docket. This Order will also be served on municipal and cooperative utilities not subject to our jurisdiction, the Kansas Energy Council, and all parties in 07-GIMX-247-GIV.

- 16. The Commission will accept written comments from the public while this docket is pending. Comments should reference Docket Number 08-GIMX- HI -GIV, In the Matter of a General Investigation Regarding Cost Recovery and Incentives for Energy Efficiency Programs, and be sent to the Kansas Corporation Commission, Office of Public Affairs and Consumer Protection, 1500 SW Arrowhead Road, Topeka, Kansas 66604, or to public affairs@kcc.state.ks.us. Comments may also be made by calling 1-800-662-0027.
- 17. Any interested person may petition the Commission to participate in this docket as a party. Petitions for intervention should be filed by November 26, 2007, but petitions filed after that date will be considered and a motion to file out of time will not be necessary. All parties that wish to participate actively in this docket and address the Commission on the issues noted above must file an entry of appearance to be included on a restricted service list, which will assure receipt of copies of comments and other pleadings. To assure being on the initial restricted service list, an entry of appearance shall be filed no later than November 26, 2007.

18. Pursuant to K.S.A. 66-1502, the Commission finds that expenses reasonably attributable to this investigation will exceed \$100 and hereby assesses the expenses against all jurisdictional electric and natural gas utilities. These expenses shall be assessed beginning three business days after the Commission gives the utilities notice of the assessment through service of this Order by United States Mail. These public utilities are hereby notified that they have an opportunity to request a hearing on this assessment in accordance with the provisions of the Kansas Administrative Procedure Act, K.S.A. 77-501 *et. seq.*

IT IS, THEREFORE, BY THE COMMISSION ORDERED THAT:

- A. All jurisdictional electric and natural gas public utilities are hereby made a party to this docket, assessed the costs of this investigation, and will be served with a copy of this Order.
- B. Petitions for intervention should be filed no later than November 26, 2007, but petitions filed after that date will be considered and no motion to file out of time will be necessary. Entries of appearance should be filed no later than November 26, 2007.
- C. Comments or other responses to the questions set forth above shall be submitted by January 25, 2008. Replies shall be submitted by February 15, 2008.
- D. The Commission directs that this order be served as set forth in paragraph 15.
- E. A party may file a petition for reconsideration of this order within 15 days of the service of this order. If this order is mailed, service is complete upon mailing and 3 days may be added to the above time frame.

F. The Commission retains jurisdiction over the subject matter and parties for the purpose of entering such further orders as it may deem necessary.

BY THE COMMISSION IT IS SO ORDERED.

| Wright. | Chmn: | Moffet. | Com.: | Harkins, | Com. |
|---|-------|-----------|-------|----------|---------|
| * | ~~~~, | 11101100, | ~~~, | | O 1111. |

Dated: ____NOV_0 6 2007

ORDER MAILED

NOV 0 7 2007

Sum Lay Executive Director

Susan K. Duffy Executive Director

crr