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Case No.	**ER-2006-0314**
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BEFORE THE PUBLIC SERVICE COMMISSION

STATE OF MISSOURI

DIRECT TESTIMONY

OF

JOSEPH A. HERZ

ON BEHALF OF
TRIGEN-KANSAS CITY ENERGY CORP.

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Introduction

Q. Please state your name, position and place of employment.

A. My name is Joseph A. Herz. I am employed by Sawvel and Associates, Inc. (Sawvel). I am the vice president of Sawvel, which is an independent consulting firm. Sawvel is located at 100 East Main Cross Street, Suite 300, Findlay, Ohio 45840.

Q. Please state your professional experience and educational background.

A. I graduated from the University of Nebraska in 1971 with a Bachelor of Science in Electrical Engineering. From 1970 to 1972, I worked for the Nebraska Public Power District, where I was assigned to the General Engineering Offices in the Distribution Department. My principal duties consisted of revising and updating the District's distribution specifications and standards and analyzing distribution work orders as prepared by the District's regional offices. In 1972, I transferred to the Lincoln Electric System where I was responsible for the design and supervision of various additions and modifications (both overhead and underground) to the electric distribution system. In 1973, I accepted a position with a national consulting engineering firm. My activities consisted primarily of planning and analytical studies related to electric power supply arrangements, feasibility studies and rate studies. On August 1, 1978, I became the sole proprietor of Sawvel, an independent consulting and engineering firm. In this capacity, I continue to provide consulting services relative to utility systems, principally in the areas of

cost of service and rate design for electric, water, gas and wastewater utilities, electric power supply and transmission arrangements, utility feasibility analyses, assistance in financing utility purchases as well as development of expert testimony before regulatory bodies.

I am registered as a Professional Engineer, and a member of a number of professional associations including the Institute of Electrical and Electronics Engineers, Inc., the National Society of Professional Engineers, the local chapter of the Ohio Society of Professional Engineers, the American Water Works Association, the American Standardization Society for Testing and Materials, and the American Public Power Association.

Q. Have you previously participated in regulatory engagements before any state or federal regulatory commissions?

A. Yes, I have sponsored testimony before the following regulatory agencies; the Federal Power Commission and its successor, the Federal Energy Regulatory Commission ("FERC"), the Colorado Public Utilities Commission, the Florida Public Service Commission, the Public Utilities Commission of Hawaii, the Public Service Commission of Indiana, the Kansas Corporation Commission, the Michigan Public Service Commission, the Missouri Public Service Commission (Commission), the Montana Public Service Commission, the New Mexico Public Regulation Commission, the Public Utilities Commission of Ohio, the Public Utilities Commission of Texas, the Utah Public Service

Commission, the Wisconsin Public Service Commission and the Public Service Commission of Wyoming.

Q. On whose behalf are you appearing in this proceeding?

A. I am appearing on behalf of Trigen-Kansas City Energy Corporation (Trigen) who is an intervenor in this proceeding.

Q. What is the nature of Trigen's business?

A. Trigen operates a district steam heating system that primarily serves commercial and industrial customers in the Kansas City, Missouri downtown area. Trigen's district steam heating system was previously owned and operated by the Kansas City Power and Light Company (KCP&L). Trigen's customers are also, without exception, electric customers of KCP&L. Unlike KCP&L in its provision of electric power and lighting services, each of Trigen's customers has an alternative to supply its heating and cooling needs from KCP&L and the gas utility. To give some perspective, Trigen's service territory in metropolitan Kansas City, which is entirely in common with KCP&L's much larger territory, occupies less than 1% of the geography of KCP&L's service territory. Trigen's total revenue, even when combined with the revenue of its Kansas City chilled water affiliate, amounts to a fraction of one percent (1%) of KCP&L's revenue. Trigen's customer base, in terms of total accounts (even when including its chilled water affiliate), amounts to approximately $1/10^{th}$ of one percent of the number of customers served by KCP&L.

Recommendations

Q. Please summarize the conclusions you have reached with respect to your review of the space heating related rate discounts in KCP&L's general service tariffs.

A. The following conclusions and findings are discussed in my testimony regarding KCP&L's discounted all electric general service tariff rates and the provisions for separately metered space heating rate discounts:

1. KCP&L's discounted rates related to space heating are unreasonable and unfairly discriminate between commercial and industrial customers, some of which may be competing with each other, by charging different amounts for identical usage under similar circumstances;
2. Such discounted rates send price signals that favor low load factor, high demand use for selective end use customers, which directly conflicts with the price signals sent other commercial and industrial customers in the same general service class;
3. If, in fact, certain sizes and types of commercial and industrial space heating equipment are desirable on KCP&L's system, there are programs already approved by which KCP&L provides technical assistance and evaluation, and even funding in the form of rebates that are targeted directly toward such equipment;
4. Discounted rates for selective, behind the meter use create additional, and unnecessary, burdens and cost to administer, monitor and police that as a practical matter are not possible to fully implement or to maintain;
5. The discounted rates seem to be a matter of simply continuing past practices, and it has not been shown that such discounted rates are beneficial or needed for

competitive reasons and indeed may have the potential to adversely impact competition; and,

6. The impact of KCP&L's proposal to broaden the all electric rate discounts to commercial and industrial customers that are not all electric users, is not known or measurable; nor does KCP&L offer any cost basis or cost support for such proposal.

Q. Based on your conclusions and findings, what are your recommendations to the Commission with respect to KCP&L's general service tariffs?

A. It is my recommendation KCP&L's all electric general service tariffs should be terminated, and that the separately metered space heating provisions should be eliminated from KCP&L's standard general service tariffs. In the event the Commission does not terminate KCP&L's all electric general service tariffs and eliminate the separately metered space heating provisions, it is my recommendation the Commission:

1. Impute revenues associated with the discounted rates in the all electric general service tariffs and separately metered space heating provisions;
2. Restrict the availability of such tariffs and provisions to those qualifying commercial and industrial customers currently being served;
3. Require KCP&L to investigate and determine whether the commercial and industrial customers currently served under the general service all electric tariffs, and the separately metered space heating provisions of the standard general service tariffs, meet the eligibility requirements for those discounted rates. The Commission should require KCP&L to remove from the rate discount those customers that the Company's investigation determines are no longer eligible for

such rate discounts. In addition the Commission should require KCP&L to monitor and police the eligibility requirements of those customers receiving the discount rates until KCP&L's next rate filing;

4. Require KCP&L, in its next rate case, to present a complete cost of service study and implement a phase out plan for the remaining commercial and industrial customers served under the all electric general service tariffs and the separately metered space heating tariffs; and,

5. Reject KCP&L's proposal to expand the general service all electric tariffs to provide rate discounts to commercial and industrial customers that are not all electric customers.

Background

Q. What is the focus of your testimony?

A. My testimony focuses on KCP&L's general service tariffs applicable to KCP&L's commercial and industrial customers that would affect Trigen and customers of Trigen. Because KCP&L's electric service area overlays all of Trigen's district steam heating service area, and because KCP&L has special programs and rate discounts described later in my testimony that promote electric space heating, Trigen has an interest and is impacted by KCP&L's general service tariff rates applicable to commercial and industrial customers affected by this proceeding.

Q. What are the KCP&L general service tariffs that affect Trigen and Trigen's customers?

A. KCP&L has three general service categories applicable to commercial and industrial customers: small, medium and large. Within each of these three general service categories, KCP&L has two general service tariffs – one which I'll refer to as the standard general service tariff, the other is an "all electric" general service tariff.[1] The standard and all electric tariffs within each of the three general service categories have the same rate structure (i.e., a seasonal, load factor energy rate structure that will be described later in my testimony) and the same energy rates during the four summer months (i.e., May 16 through September 15), but different energy rates for the winter season (i.e., the eight month period from September 16 through May 15). Within each of the three general service categories, the all electric tariffs have substantially lower winter season energy rates as can be illustrated by using the small general service category as an example in the chart below:

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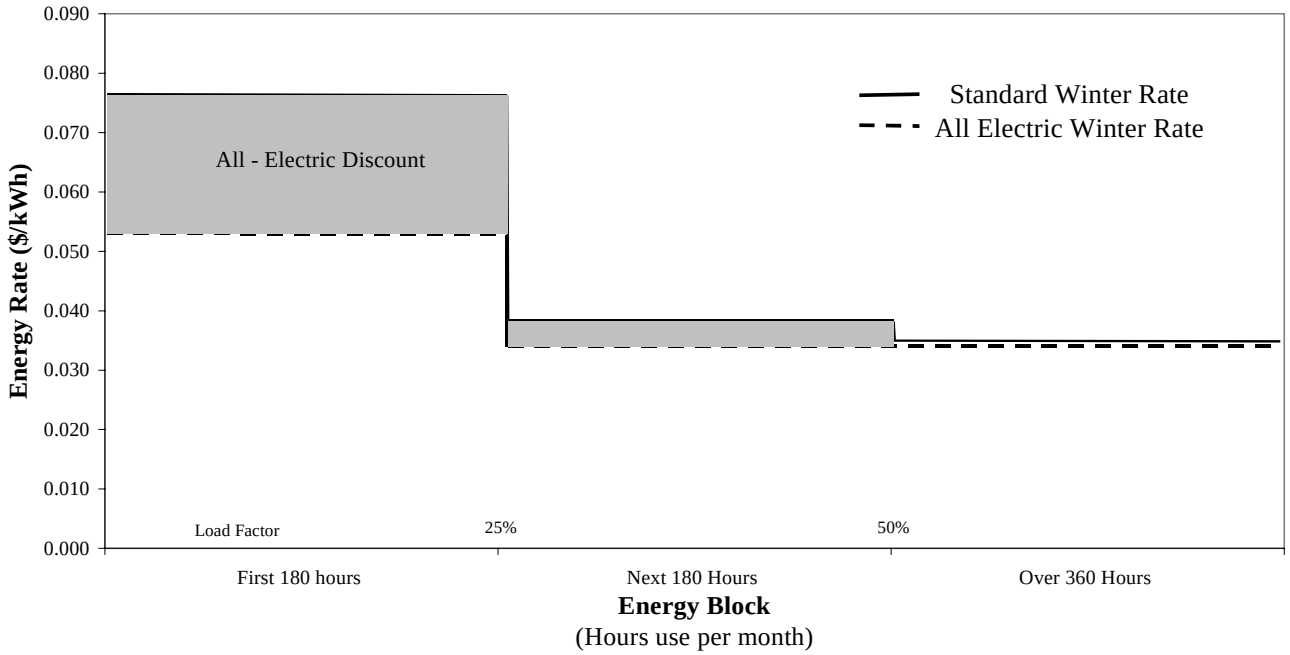
[1] The reference to standard general service tariffs in my testimony includes the Small General Service Schedule SGS Sheet No. 9, Medium General Service Schedule MGS Sheet No. 10, and Large General Service Schedule LGS Sheet No. 11. The reference to all electric general service tariffs in my testimony includes the Small General Service All Electric Schedule SGA Sheet No. 17, Medium General Service All Electric Schedule MGA Sheet No. 18, and Large General Service All Electric Schedule LGA Sheet No. 19.

Chart 1

Comparison of Winter Season Energy Rates
Small General Service
Standard Winter Rate vs All Electric Winter Rate



Although the small general service category was used in the above chart, a similar illustration, and result, occurs if one were to use the medium general service category or the large general service category.[2]

The above chart illustrates two important points. The first obvious point is that the all electric tariff provides for a substantial rate discount from the standard tariff. But, the second equally important point is to note where this rate discount occurs, which is, low load factor customers. As shown in Chart 1 above, the low load factor energy use by commercial and industrial customers taking service under the all electric tariff receive a

[2] See Schedule JAH-3 for similar charts comparing the winter rates of KCP&L's standard and all electric tariffs for the medium general service and large general service categories.

substantial rate discount. Later in my testimony I explain load factor and why low load factor customers are generally not considered as desirable loads on a utility's system. In any event, the large rate discounts available to commercial and industrial customers with low load factor energy usage under KCP&L's all electric general service tariffs is substantial as shown in Schedule JAH-1 and summarized in Table 1 below:

Table 1
General Service All Electric Discount From Standard Tariff

		Discount from Standard Tariff (Winter Season)	
General Service – All Electric	No. of Customers	Amount ($000)	Percent
Small - Secondary	555	$ 253	25%
Medium - Secondary	433	1,394	26%
- Primary	2	11	26%
Large - Secondary	211	5,188	22%
- Primary	8	504	23%
	1,209	$7,350	23%

During the winter seasons, commercial and industrial customers served under KCP&L's all electric general service tariffs pay approximately twenty three (23%) less for their entire electricity usage than such customers would pay under KCP&L's standard general service tariffs. This reduction in winter season charges is the result of the lower all electric tariff rate applied to the entirety of the commercial or industrial customer's energy usage, not just the customer's space heating usage, in the low load factor energy rate blocks. It should also be noted that KCP&L proposes in this proceeding to broaden the availability of the all

electric tariff within each of the three general service categories to allow additional customers that are currently on the standard general service tariff to be eligible for the all electric discounted rates on the all electric tariff.

Discount Rates

Q. How does KCP&L propose to broaden the availability of the discounted all electric tariff rates to customers currently served at the standard tariff rates?

A. As noted in the Company's testimony, KCP&L is "proposing to change the availability section in the all electric rates to allow customers who are not all electric, but whose primary heating source is electric heat, to qualify for this rate." (See Direct Testimony of Tim M. Rush, page 8, lines 13-15.) To do this, KCP&L proposes to re-label the "all electric" tariff in each of the three general service categories as a "space heating tariff," and has modified the "Availability" section of the all electric tariffs. The following paragraph shows, in strike and add format, the changes that KCP&L proposes to make to the existing availability sections of the three all electric general service tariffs:

> "For electric service using electric space heating as the primary source for heating. ~~through one meter and using only electric service for all lighting, cooking, water heating, comfort space heating (except aesthetic fireplaces), comfort cooling, general purposes, and any other purposes requiring energy. The customer must have electric water heating and electric space heating equipment. This equipment~~ Electric space heating equipment shall be of a size and design sufficient to heat the entire building. The electric space heating equipment may be supplemented by active or passive solar heating, or other means approved by the Company. Electric space heating ~~and electric water heating~~ equipment shall be permanently installed, ~~connected, and~~ thermostatically controlled and used throughout the building."

As shown above, KCP&L's proposed changes to the availability section of the all electric general service tariffs broadens the availability of the discounted, low load factor energy rates to customers that are now served under the standard general service tariff rates. Previously, eligibility for the "all electric" discounted rate required that the commercial or industrial customer have electric water heating, electric cooking, electric space heating, etc. In the Company's proposed revised availability, the commercial or industrial customer need only "use electric space heating as the primary source for heating," which space heating "may be supplemented…by other means."

Q. How many of KCP&L's commercial or industrial customers are affected by, and what is the revenue impact of, the Company's proposal to expand the availability of the discounted all electric rate to customers that are currently served under KCP&L's standard general service tariff rates?

A. Apparently, KCP&L has conducted no analyses or otherwise possesses no information as to the impact of this proposed change on pro forma revenues. It would appear that the impact of this proposed change is neither known nor measurable at this time. In response to Trigen's Question No. 7, KCP&L states:

> "Potential customer shifts that would result from the requested change in availability of this rate has not been measured. As a result, billing determinates are not available to project the associated revenue impact."

In spite of the fact that KCP&L is proposing to broaden the availability of the all electric winter discount to other commercial and industrial general service tariff customers, in direct competition with Trigen, KCP&L does not appear to have developed any cost

support or analysis underlying this proposal. In response to Trigen's Question No. 11, KCP&L states:

> "Within the context of the rate case, the Company did not perform any incremental or marginal cost studies related to serving our all-electric, electric space heating customers."

In the absence of any such studies or analyses, KCP&L has failed to produce any support for the substantial winter discount currently offered to its all electric (low load factor) commercial and industrial customers much less in support of the expansion of that discount beyond all electric customers to encompass winter heating customers.

Q. Has KCP&L proposed to increase the current all electric winter energy rate at a rate higher than the average proposed increase?

A. Yes. It is true that KCP&L has proposed to adjust the discounted all electric winter energy charges by 5% above the average increase in conjunction with broadening the availability of the general service all electric tariffs. (Page 8, lines 11 through 12 of the Direct Testimony of Tim Rush.) However, KCP&L has failed to produce any cost basis for either broadening the availability of this discount or the reasonableness of the 5% differential increase. In other words, had KCP&L performed detailed cost studies related to serving all electric or electric space heating customers, the result may have supported a differential increase significantly higher than 5% or may have not supported broadening the availability of this winter discount beyond all electric customers.

Q. What is the basis of the Company's proposal to adjust the all electric winter energy charge rates by 5% above the average increase?

A. When asked this question in Trigen Question No. 5, KCP&L replied:

> "This increase in rates will shift responsibility of costs associated with this service to those customers using this rate. In addition, by broadening the availability of the all electric (space heat) winter energy charge, load characteristics will slightly change for the overall class and the increase will reflect a recognition of the change."

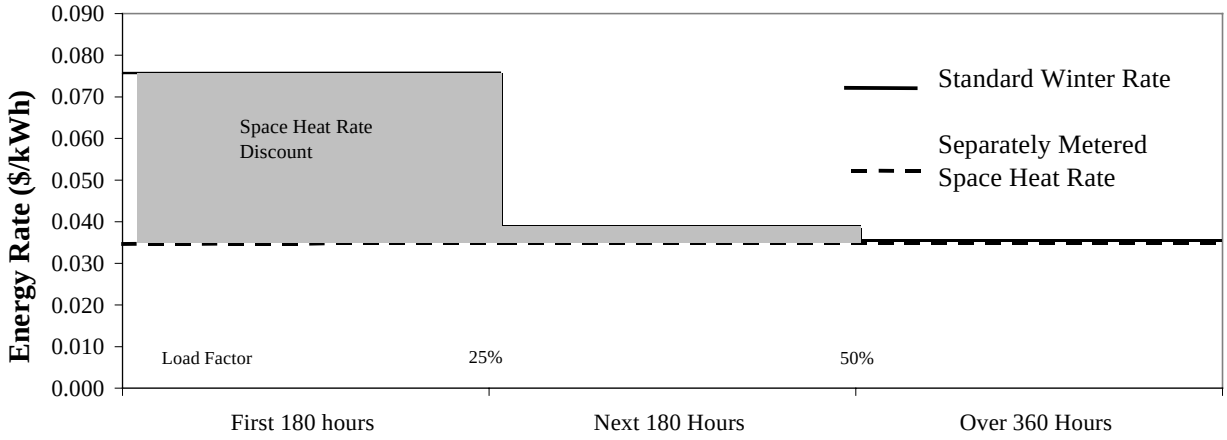
However, as previously noted above, KCP&L indicated it has not performed any cost analysis, and KCP&L does not know, nor apparently cannot measure, the customer or revenue impact of its proposed changes to broaden the availability of the discounted all electric general service tariff rates. In other words, KCP&L has no factual basis or foundation to conclude that a 5% differential increase will recover the full costs of providing winter electric service from the cost causer. KCP&L's response to Trigen Question No. 5 is based on speculation and conjecture.

Q. Are there any other discounted rates related to space heating in KCP&L's general service tariffs?

A. Yes. In each of the small, medium and large standard general service tariffs, there is a special rate provision for separately metered space heating. Like the discounted all electric tariff rates, the separately metered space heating provision provides for a substantially lower winter season energy rate as can be illustrated by using the small general service category as an example in the chart below:

Chart 2

Comparison of Winter Season Energy Rates
Small General Service
Standard Winter Rate vs Separately Metered Space Heat Rate



Although the small general service category was used in the above chart, a similar illustration, and result, occurs if one were to use the medium general service category or the large general service category[3]. The above chart illustrates the same two important points as Chart 1 discussed earlier in my testimony. Just as was the case with the all electric tariff, the separately metered space heating provision provides for a substantial rate discount from the standard tariff rate. Secondly, the rate discount most significantly benefits low load factor energy use by commercial and industrial customers served under the separately metered space heating provision. The large rate discount available to commercial and industrial customers with low load factor energy usage under KCP&L's separately metered space heating provision is substantial, as shown in Schedule JAH-1 and summarized in Table 2 below:

[3] See Schedule JAH-4 for similar charts comparing the winter rates of KCP&L's standard rate with the separately metered space heating rate for the medium general service and large general service categories.

Table 2
Separately Metered Space Heating Discount From Standard Tariff Rate

General Service – Separately Metered Space Heating	No. of Customers	Discount from Standard Tariff Rate (Winter Season) Amount ($000)	Percent
Small – Secondary	355	$218	62%
Medium – Secondary	127	337	55%
Large – Secondary	47	610	51%
	529	$1,165	54%

During the winter seasons, commercial and industrial customers served under KCP&L's separately metered space heating provision pay approximately fifty four percent (54%) less for such separately metered electricity usage than they would pay for such usage under KCP&L's standard general service tariff rates.

Standard tariff customers in essence pay more for their winter electric service as a consequence of the discounted rates for low load factor usage under the all electric tariffs (which KCP&L proposes to expand to a broader customer base by modifying space heating tariffs) and KCP&L's separately metered space heating provisions.

Q. What do you recommend be done so that standard tariff customers do not pay significantly higher winter rates as a consequence of KCP&L's discounted all electric/proposed space heating tariffs and separately metered space heating provisions?

A. The obvious "fix" would be to eliminate the discounted rates that cause the standard tariff customers to subsidize the commercial and industrial customers served under KCP&L's all electric tariffs and the separate space heating provisions. General service tariff customers, which often are in competition with each other, that have identical monthly usage characteristics should have the same electric bill, and not be discriminated against by having different electric bills depending on what the electricity may or may not be used for behind (i.e., on the customers' side) the meter or whether or not a portion of the usage is submetered. Eliminating KCP&L's practice of charging different rates to similar general service customers for substantially the same service (i.e., electricity use) rendered under similar circumstances is especially important when the general service customers being discriminated between are in competition with one another. In other words, there are questions as to whether these selective end user rate discounts materially contribute to undesirable effects.

On the other hand, if the Commission were to authorize KCP&L to offer discount rates to general service space heating customers, the "fix" for KCP&L rate case purposes would be to impute additional revenues to eliminate the discount to the standard general service tariffs so as to avoid subsidization by the remainder of the standard general service customers. To the extent that KCP&L's cost of policing, monitoring and administrating these discounted rates are included in KCP&L's revenue requirements, then additional revenue will need to be imputed to offset such costs, if the Commission were to concur that standard tariff customers should not pay more as a consequence of KCP&L's continued use of discounted rates. While this imputation of revenues would result in standard tariff

general service customers not paying more as a consequence of KCP&L's discounted all electric/space heating general service tariffs and separately metered space heating provisions, it would not fix the discrimination problem between general service customers that may be competing with each other.

Appropriateness of Discounted, End Use Rates

Q. Before addressing the added administrative, monitoring and policing problems and burdens alluded to in your last answer, are you suggesting KCP&L's rates should not make a distinction between different types of customers and the differences in customer usage of electricity?

A. No. There are a number of distinctions that are reasonable and appropriate that should be recognized in the design of a utility's rates, including KCP&L. Examples of such reasonable and appropriate rate distinctions would include those that recognize the cost responsibility differences among types and sizes of customers, such as KCP&L's rate tariffs distinguishing between residential, commercial and industrial general service, and large power customers. Also, distinctions between low load factor commercial and industrial customers that impose high demands on KCP&L's system but use little energy versus those high load factor commercial and industrial customers that are high energy users but do not impose high demands on KCP&L's system because their electricity use is relatively constant and consistent. Customers benefiting from all electric rate discounts receive preferential treatment, to their benefit and to the detriment of the ineligible customers, even though such other customers may have similar characteristics and be served by KCP&L under similar circumstances. A possible reason for KCP&L's

discounted rates to continue to exist would be to provide the Company a selective use pricing for the purpose of space heating customers to remain on KCP&L's system or to migrate from alternative means of space heating.

Q. What do you mean by load factor?

A. Load factor is commonly used as a measure or ratio (expressed as a percentage) of a commercial or industrial customer's energy use for a period of time to its maximum rate of use (i.e., peak demand) during that same time period. Let's use an example of a commercial customer that in one month uses 100,000 kWh and has a peak demand of 1,000 kW. The monthly load factor of the commercial customer in this example would be 13.4%.[4] Let's take another example of another commercial customer that also uses 100,000 kWh but whose peak demand is 200 kW; the monthly load factor for this customer would be 67.2%.[5]

Q. Why is load factor an appropriate and reasonable distinction to recognize in the design of rates for commercial and industrial customers?

A. In the examples described above, both commercial customers used the same amount of energy (i.e., 100,000 kWh) but one commercial customer (the 13.4% load factor customer) imposed a peak demand of 1,000 kW on KCP&L's system, whereas the other commercial customer (the 67.2% load factor customer), imposed a much smaller peak demand of 200 kW on KCP&L's system. In order to meet the service requirements of its customers,

[4] 100,000 kWh divided by the product of 1,000 kW multiplied by the number of hours in the month (e.g., 31 days times 24 hours/day).

[5] 100,000 kWh divided by the product of 200 kW multiplied by the number of hours in the month (e.g., 31 days times 24 hours/day).

KCP&L must have in place an infrastructure of the size and capacity to meet peak demands of each of its customers. In other words, the 1,000 kW, 13.4% load factor customer essentially requires KCP&L to have available five times the capacity in its transmission and distribution delivery system and power production generating facilities as compared to the 200 kW 67.2% load factor customer. Also, higher load factor commercial and industrial customers tend to make better use of a utility's lower energy cost base load units because their electricity usage is relatively more constant than low load factor industrial customers, which tend to require more energy from a utility's higher cost peaking units and higher cost purchase power during high demand periods. As a result, the cost to serve low load customers is typically higher than that for high load factor customers. Consequently, low load factor customers are generally not viewed as attractive or desirable of loads to be served by the utility, contrary to desirable high load factor customers. Accordingly, KCP&L's tariffs generally recognize the concept of load factor differentiation, but providing significant winter discounts to low load factor customers is neither conceptually sound nor cost supported by KCP&L in this proceeding.

Q. How are commercial and industrial customer load factors recognized in KCP&L's general service tariffs?

A. KCP&L's general service tariffs have energy rates that decline as the commercial and industrial customers' load factor increases. In other words, it isn't so much the amount of energy a customer uses in a month that determines which energy block rate applies, but rather the ratio of a commercial or industrial customer's energy use to its peak demand (i.e., the load factor) that determines which energy block rate applies and whether the

commercial or industrial customer is able to avail itself of the lower tail block energy rate. As previously indicated, KCP&L's all electric/proposed space heating general service tariffs and separately metered space heating discount rate provisions are contrary to the typical cost of service study that recognizes the efficiencies inherent in serving high load factor customers. In other words, KCP&L's proposed winter discounts for low load factor customers are not reasonable, are not supported by any study or analysis prepared by or for KCP&L, and simply do not make sense. It is my recommendation that such discounts should be eliminated, rather than expanded as proposed by KCP&L.

Q. Why do you believe that KCP&L's all electric/proposed space heating general service tariffs and separately metered space heating discounted rate provisions are not reasonable?

A. As shown at the beginning of my testimony, the all electric/proposed space heating general service tariffs and separately metered space heating provisions essentially provide huge rate discounts. Schedule JAH-2 illustrates that the winter seasonal load factors for commercial and industrial customers receiving the separately metered space heating customers discount rate are lower than the load factors for the standard rate general service customers. Also, as shown by Schedule JAH-2, there doesn't seem to be a discernable difference in the winter season load factors between the all electric rate and standard tariff rate commercial and industrial customers in the small and medium general service categories. Schedule JAH-2 shows that only the large general service all electric customers have load factors that are greater than the standard tariff rate customers.

Q. Did you have anything else to add to your earlier discussion regarding reasonable and appropriate rate distinctions?

A. Yes. There is one more thing I would like to add which is to recognize that KCP&L is a summer peaking utility. Thus, KCP&L's standard tariffs already have seasonal rates with lower rates in the winter than in the summer to recognize the seasonal nature of the KCP&L system. Since the structure of KCP&L's seasonal rates already recognize that costs are typically lower in the winter season, even though no detailed cost of service study has been produced to support the magnitude of the cost differential, KCP&L has failed to provide any documentation in support of offering even more winter discounts into the proposed rate structure.

Q. Since KCP&L is a summer peaking utility, wouldn't this mean that building more space heating load during the winter months would be a good thing?

A. I would generally agree that building customer usage in off-peak months is a good thing. However, KCP&L is using the wrong approach. Instead of offering increasing winter rate discounts to selected low load factor customers, KCP&L should be targeting its efforts on its Affordability, Energy Efficiency and Demand Response programs. KCP&L's programs include commercial and industrial programs such as Online Energy Information and Analysis Program, C&I Energy Audit, C&I Customer Rebate – Retrofit and C&I Customer Rebate – New Construction. These programs provide rebates to the customer to promote energy efficiency that will benefit the participating customer and hopefully not be detrimental to other ratepayers. These programs require that the measure to be implemented by a customer is economically viable or it cannot be implemented. These

programs are a better approach to marketing specific end uses than are discount rates. Discriminating rate treatment is not appropriate, as two customers with the exact same usage, regardless of end use, should be treated the same. If building space heating load is a reasonable objective for KCP&L, it should be achieved through programs specifically designed to examine the relative costs and benefits of such an undertaking, not with additional discounts embedded in the all electric/proposed space heating tariff – especially when such tariffs are not based on a detailed cost of service study. KCP&L's general service all electric tariff structure provides a huge rate discount for all of a particular commercial and industrial customer's low load factor usage, not just a discount on space heating use. If space heating is deemed to be important, it should be encouraged through specifically designed programs, not through rate discrimination.

Administrative Burdens

Q. Could you describe the burdens and cost of policing, monitoring and administering the all electric/proposed space heating and separately metered space heating rate discount provisions mentioned earlier in your testimony?

A. Yes. In order to apply discounted rates for selective end use, the Company's tariffs require KCP&L to have an administrative process that involves gathering information about the commercial or industrial customer's space heating system and the reporting on the usage of these customers periodically.

Q. How does the Company ensure that the customers using the all electric rate schedules are, in fact, using electric heat as their primary source of space heating?

A. The Company indicates that when a customer requests service under a rate schedule that requires electric heat as the primary heating source, a Company representative reviews the customer's electric service application and building plans to determine if electric heat is, in fact, the primary heating source.[6] The Company also indicated that it performs a seven-month usage check on the customer's account and utilizes a rate comparison tool that is embedded in the Company's CIS system.[7]

Q. In your opinion, does the Company properly and effectively monitor the application of discounted rates for electric heating?

A. The Company indicates that it has the capability to monitor usage under these rate schedules. However, it is not clear to me that the Company has a process under which it would remove a customer from a discounted rate schedule because the customer no longer meets the requirements of that schedule. Although the Company has a process to qualify the customer initially, the Company indicates that "Only in the event that a customer would contact KCP&L and inform us of a significant change in the size and design of equipment would KCP&L have cause to revisit the availability of an all electric tariff for a customer".[8]

Q. Why is there a concern about the customers meeting the eligibility requirements, and the continued status of a customer's qualification, for discounted electric heat rate important?

A. If a customer initially meets the Company's availability requirements for a discounted rate and then later no longer meets the requirements of that discounted rate, the nature of that

[6] Response to Trigen Question No. 9.
[7] Response to Trigen Question No. 22.
[8] Response to Trigen Question No. 25.

customer's use would then be similar to a customer that is not receiving a discounted rate. As a result, the customer on the discount rate is then inappropriately receiving the benefit of the discounted rate.

Q. Do you agree that a customer currently receiving a discount rate should continue to qualify for that rate in the future?

A. No. Just because a customer may be currently receiving electric service on a discounted rate schedule such a fact should not be controlling as to whether that customer actually qualifies for, or should continue to receive, that discount. Not only is the continued qualification of the customer for the discount rate somewhat questionable, but it is not apparent that the energy usage of these customers is increasing the efficiency of KCP&L's electric system – which KCP&L indicates is one of the benefits it realizes from the discount rates. Specifically, the Company has stated that "space heating increases KCP&L's winter season loads while improving our overall system utilization or load factor, a benefit for all rate payers."[9]

Q. Why do you believe that space heating is not increasing the load factor of the KCP&L system?

A. Using billing information provided by KCP&L, I calculated the load factor of the customers on the winter discount rates. As previously discussed, the load factors of the small and medium general service all electric load factors are approximately equal to the standard tariff rate load factors. The load factors of the customers served under the

[9] Response to Trigen Question No. 6.

separately metered space heating discounted rate are lower than the load factors of standard tariff rate customers. Based on this information, I do not believe that the offering of discounted space heating rates, particularly rates that provide the largest discount on a customer's low load factor energy usage, has the intended effect of improving KCP&L's system load factor.

Q. Do you have an explanation for the difference in the load factors of customers on non-discounted and discounted rates?

A. Yes. As I stated earlier in my testimony, it is not clear to me that all of the customers receiving the discount may actually continue to qualify for service under that discount rate. If their space heating requirements were truly being served under the discount rates and serving to increase the Company's load factor, then I would expect the load factors of the customers under these discount rate schedules to be greater than the load factors of the standard rate schedules. However, the information provided by KCP&L does not support such a finding for the small and medium general service categories. Thus, my conclusion is that these customers' electric usage is either not occurring as originally intended or, even if the usage is electric space heating, it may not be meeting the objectives of increasing the electric system load factors.

Q. Are there any other reasons that could explain the poor load factor?

A. It could be that the heating equipment does not use significant amounts of energy but incurs a significant demand. Heat pumps often have this type of load profile. Another

possibility is that some customers are in operation for a period of 12 hours or less and use set back thermostats that will cause lesser energy use during off-peak periods.

Q. Do you have any suggestions that would solve these issues related to qualification for the discount rates?

A. Yes. I suggest that the Company discontinue its space heating related rate discounts and instead treat all commercial and industrial general service tariff customers the same if their usage and service conditions are substantially similar.

Competition For Heating Load

Q. Are there competitive reasons for KCP&L to have all electric/proposed space heating general service tariffs and separately metered space heating provisions with discounted rates?

A. In the absence of a complete and detailed cost if service study, it appears that the basis for KCP&L's discounted rate recommendations relating to space heating in this proceeding is the continuation of past practices. According to KCP&L, such discounted rates have been in the Company's rates for a long time, and it appears that they are still being offered because it has always been that way. KCP&L has presented no direct testimony or analyses demonstrating that the discounted rates related to space heating are needed by either the Company or its commercial and industrial customers for competitive reasons. In my opinion, if selective price cuts or tariff discounts are allowed, such as KCP&L's space heating related discounts, that are specifically directed at an alternative energy supplier (such as Trigen) available to the customer, the Commission should want to proceed with

extreme caution so as to not undermine or encourage the elimination of such competition that could allow predatory situations to arise.

Q. Do the discounted rates related to space heating create more options for commercial and industrial customers?

A. No. The options are the same under KCP&L's standard general service tariffs. The real question is whether KCP&L should be allowed to engage in price discrimination between commercial and industrial customers with identical usage under identical circumstances in the name of competition. It is interesting to note that in response to Trigen's Question No. 21, KCP&L states:

> "Load increases identical to the characteristics of electric space heating increases would provide the similar benefits."

As previously discussed, KCP&L already has programs in place that are directed toward specific commercial and industrial space heating programs.

Q. Do KCP&L's discounted rates related to commercial and industrial space heating exceed the incremental cost of providing the service?

A. Although no documentation has been provided to allow this question to be assessed, KCP&L's response to Trigen's Question No. 21 states:

> "All recommended tariff proposals exceed the incremental price of providing the service, resulting in every additional sale benefiting all rate payers by lowering the cost of providing service."

KCP&L's statement regarding incremental cost is interesting in light of Trigen's data request and KCP&L's response below:

> "Question No.: 11
>
> Has the Company performed an incremental or marginal cost analyses of serving any of its all electric, electric space heating customers or customer classes? If so, please describe the results of such analyses and provide copes (both in hardcopy and working electronic model copy) of all such studies, analyses and documents.
>
> Response:
>
> Within the context of the rate case, the company did not perform any incremental or marginal cost studies related to serving our all electric, electric space heating customers."

So, in the absence of any specific cost study or other analysis, KCP&L's declaratory statement in response to Trigen's Question No. 21 is speculative and unsupportable.

Q. KCP&L filed a class cost of service study with its direct testimony in this proceeding. Are KCP&L's all electric tariff customers and separately metered space heating customers included in the Company's class cost of service study?

A. Yes. However, they are rolled in with the standard tariff customers within each general service tariff category and therefore the cost of service study results shown are for the entire general service category (i.e. – standard rate customers, all electric customers and separately metered space heating customers). In other words,

KCP&L does not have any support for its proposed winter discounts for all electric tariff customers and separately metered space heating customers.

Conclusion

Q. Your testimony has focused on the all electric proposed space heating general service tariffs and separately metered space heating provisions in the standard general service tariffs. Are there similar provisions in the residential tariffs and, if so, do you have the same concerns with discounted space heating rates in those residential tariffs?

A. Although it was outside my scope to review and investigate similar provisions in the residential tariffs, it is my understanding the residential tariffs do have provisions for discounted rates for space heating. Because I have not reviewed nor investigated the residential tariffs and the space heating provisions in those tariffs, I can only respond in general to the question. The concerns raised in my testimony regarding discounted rates relating to the commercial and industrial general service tariff customers would generally be applicable to the residential tariff customers; but there are distinctions between the two groups that should be recognized. First, because residential customers are not demand metered, the residential tariff rates are not capable of making the same load factor usage rate distinctions that is inherent in the commercial and industrial general service tariffs. Second, the residential group is generally viewed as being a more homogenous class of electricity users as compared to the commercial and industrial general service customers which represents a diverse and broad spectrum of electricity users that vary significantly in the size, type and electricity usage characteristics. Third, residential customers are not in competition with one another, whereas commercial and industrial customers use electricity

for their commercial interests and may compete to provide similar products and services in the market place. Therefore, it may not be unreasonable, preferential or discriminatory to have discounted residential rates, but one would need to address the same concerns raised in my testimony regarding the all electric/proposed space heating and separately metered space heating provisions of the commercial and general service tariffs.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric Service to Begin the Implementation of its Regulatory Plan	)))))	Case No. ER-2006-0314

AFFIDAVIT OF JOSEPH A. HERZ

STATE OF OHIO)
) ss
COUNTY OF HANCOCK)

Joseph A. Herz, being of lawful age, on his oath states: that he has participated in the preparation of the attached Direct Testimony in question and answer form and Schedules to be presented in the above case; that the answers in said Direct Testimony were given by him; that he has knowledge of the matters set forth in such answers and schedules; and that such matters are true and correct to the best of his knowledge and belief.

Joseph A. Herz

Subscribed and sworn to before me this 31st day of August, 2006.

Debra K. Cody
Notary

NOTARIAL SEAL
STATE OF OHIO

DEBRA K. CODY
Notary Public, State of Ohio
My Commission Expires
~~April 1, 2008~~ dc
3/31/11

General Service Rate Class Information Winter Season

General Service Rate Class	Number of Customers	Estimated Winter Season Sales			Discount from Standard Rate	
		kWh	Revenue at Currently Applied Rate	Revenue at Standard Tariff Rate	($)	(%)
Small General Service						
Secondary						
Standard	21,065	258,097,909	18,825,688	18,825,688	0	0
Separate Metered Space Heat	355	3,864,595	133,213	350,744	217,531	62.0
Total w/Standard Meter	355	7,330,743	601,661	601,661	0	0
All Electric	555	13,780,133	759,117	1,012,443	253,326	25.0
Primary						
Standard	29	559,111	48,812	48,812	0	0
Medium General Service						
Secondary						
Standard	4,049	495,642,392	29,846,447	29,846,447	0	0
Separate Metered Space Heat	127	9,356,247	270,957	608,395	337,438	55.5
Total w/Standard Meter	127	18,703,440	1,193,628	1,193,628	0	0
All Electric	433	93,057,193	4,022,357	5,416,035	1,393,678	25.7
Primary						
Standard	24	5,328,716	300,018	300,018	0	0.0
All Electric	2	754,607	30,943	41,884	10,941	26.1
Large General Service						
Secondary						
Standard	739	651,420,040	33,428,373	33,428,373	0	0
Separate Metered Space Heat	47	21,928,835	594,710	1,204,326	609,616	50.6
Total w/Standard Meter	47	49,718,399	2,650,546	2,650,546	0	0
All Electric	211	479,406,563	18,285,419	23,473,188	5,187,769	22.1
Primary						
Standard	70	111,615,479	5,494,692	5,494,692	0	0
All Electric	8	50,472,643	1,726,916	2,231,424	504,508.0	22.6
Total	27,714	2,235,887,367	117,214,617	125,729,424	8,514,807	6.8

The above kWh sales are based on 6-months (November 2004 through April 2005) of billing frequency data by general service customer rate class provided by KCP&L, extrapolated to 8 months to estimate a full winter season.

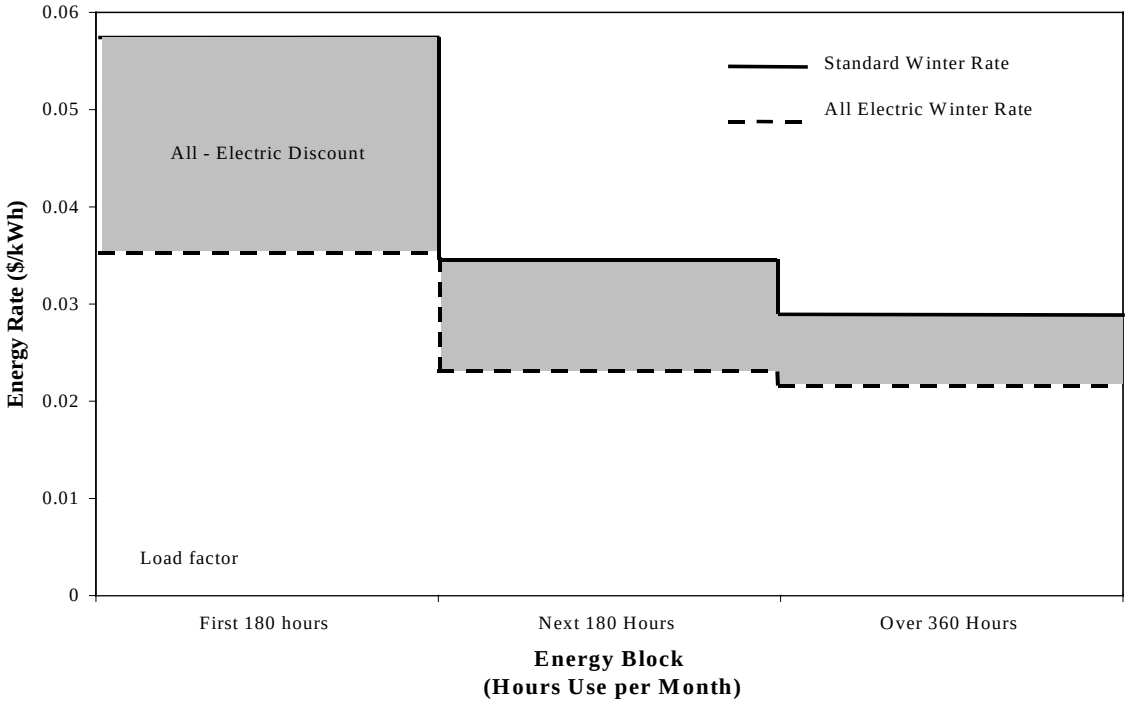
Winter Season Load Factor by Rate Class

KCP&L

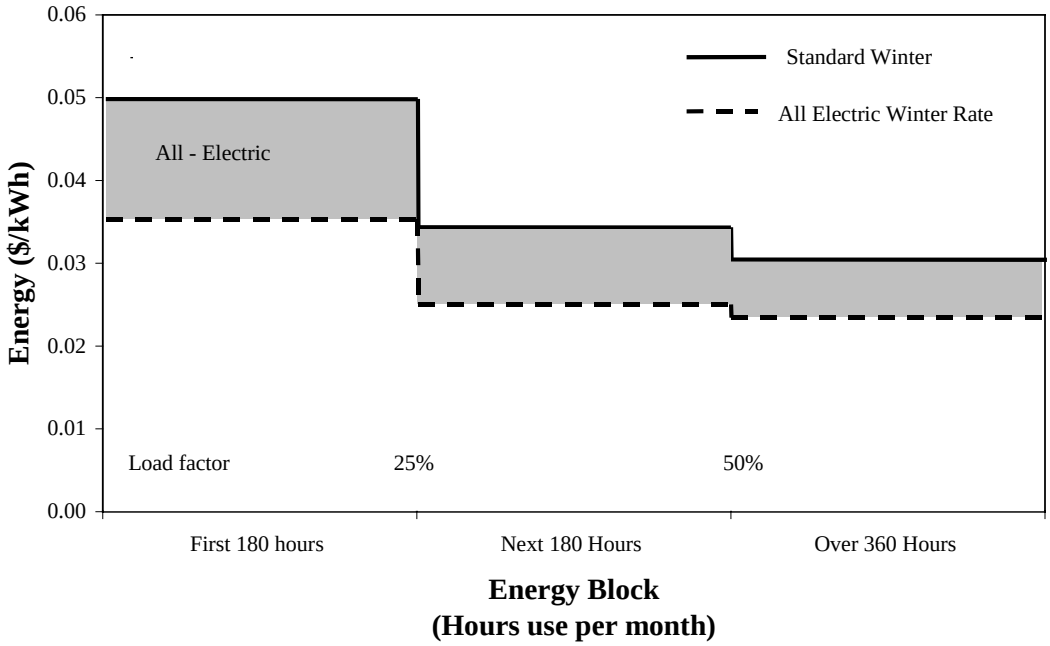
Rate Class	Load Factor
Small General Service	
Secondary	
Standard	21.31
Separate Metered Space Heat	12.97
All Electric	21.51
Primary	
Standard	8.78
Medium General Service	
Secondary	
Standard	40.59
Separate Metered Space Heat	32.57
All Electric	40.29
Primary	
Standard	37.04
All Electric	37.87
Large General Service	
Secondary	
Standard	46.95
Separate Metered Space Heat	42.33
All Electric	52.86
Primary	
Standard	50.46
All Electric	64.53

The above load factors were calculated based on 6-months (November 2004 through April 2005) of billing frequency data by general service customer rate class provided by KCP&L.

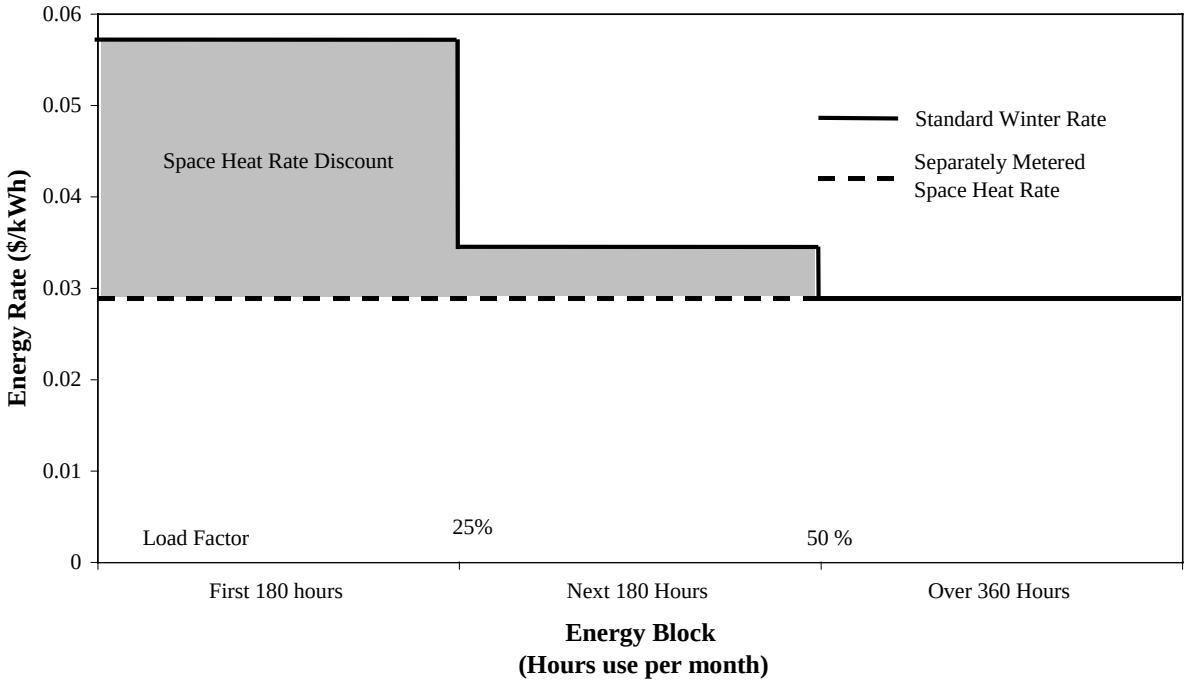
Comparison of Winter Season Energy Rates
Medium General Service - Secondary
Standard Winter Rate vs All Electric Winter Rate



Comparison of Winter Season Energy Rates
Large General Service - Secondary
Standard Winter Rate vs All Electric Winter Rate



Comparison of Winter Season Energy Rates
Medium General Service - Secondary
Standard Winter Rate vs Separately Metered Space Heat Rate



Comparison of Winter Season Energy Rates
Large General Service - Secondary
Standard Winter Rate vs Separately Metered Space Heat Rate