COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

GREEN RIVER STEEL CORPORATION Complainant	)	
v.	)	CASE NO. 10300
KENTUCKY UTILITIES COMPANY Defendant	)	

O R D E R

BACKGROUND

Green River Steel Corporation ("GRS") owns a basic steel manufacturing plant in Daviess County, Kentucky. Between 1953 and 1986, Kentucky Utilities Company ("KU") provided electric service to GRS's plant under a series of special contracts, the last of which was negotiated in 1963. The 1963 special contract was for a term of 5 years but continued in effect until either party gave two years' written notice of termination or GRS gave one year written notice and ceased plant operations. It allowed KU to curtail GRS's usage on short notice 66 times each year for a total of 400 hours. It also provided, among other things, for reduced demand and energy charges for weekends and certain periods of each weekday. These reduced charges were made available for 16 hours

daily. Aside from changes made in the special contract demand and energy charges as a result of general rate proceedings, this special contract remained unchanged for 23 years.

On December 1, 1985, GRS closed its steel plant. By the parties' mutual agreement, the 1963 special contract was terminated on November 27, 1986. Thereafter, KU continued to serve GRS's steel plant, but "under a standard contract (maximum capacity of only 240 KW) stating that service was for maintenance only."[1]

In March 1988, GRS advised KU that its steel plant would reopen and began negotiations with KU for a new service contract. GRS sought terms comparable to those in the 1963 special contract. KU, in turn, insisted that service to the steel plant be based on its LCI-TOD rate schedule.

When negotiations reached an impasse, GRS filed a formal complaint against KU, alleging that the LCI-TOD rate schedule as applied to GRS was "unjust, unreasonable, and unjustly discriminatory."[2] The LCI-TOD rate, GRS alleged, failed to provide enough consecutive hours as off-peak demand period to allow for efficient steel production. GRS further alleged that KU's insistence on five years' notice of termination was

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1 Direct Testimony of Robert Hewett at 9.

2 Complaint of GRS (June 15, 1988) at 6.

unreasonable and unnecessary as "little or no new investment is required"[3] by KU to provide service to the steel plant.[4]

In its complaint, GRS asks the Commission to: 1) hold that KU's LCI-TOD rate schedule as applied to GRS is unjust and unreasonable; 2) fashion a rate for GRS which combines time-of-day and interruptible features and allows for 16 consecutive hours of off-peak demand period; 3) hold that KU's insistence on a 5-year perpetual notice of termination provision in its LCI-TOD rate schedule service contracts is unreasonable; and 4) if the other relief is denied, authorize GRS to negotiate with Owensboro Municipal Utilities ("OMU") for electric service.

A hearing in this matter was held on February 2 and 3, 1989. Testifying at this hearing were: George A. Hulse, consultant to and former President of GRS; O.D. Hazelrigg, Jr., consultant to and former Vice President and Treasurer of GRS; James W. Rasberry, President of GRS; Randall Falkenburg, a GRS consultant; Ronald Wilhite, Director of Rates and Research for KU; Robert M. Hewett, Vice President of Rates, Budget and Financial Forecasts for KU; James W. Tipton, Senior Vice President of Engineering,

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3 Id. at 4.

4 Green River Steel has reopened its steel plant and is now receiving service from KU under the terms of LCI-TOD Rate Schedule. The parties agreed that beginning July 1, 1988 service would be provided to Green River Steel at that rate schedule subject to such affirmation, revision, or the modification as may be made by any final Order entered in this case.

Construction and Production for KU; and Richard H. Verdier, a KU consultant. Both parties submitted written briefs following the hearing.

KU'S TIME-OF-DAY RATE LCI-TOD

The present electric time-of-day rate standard in Kentucky had its inception in Administrative Case No. 203.[5] The Commission initiated that proceeding to meet its responsibilities under Section 111 of the Public Utility Regulatory Policies Act of 1978 ("PURPA") to consider certain rate-making standards, including time-of-day rates.

Time-of-day rate-making is based on the premise that a utility's system costs are prone to hourly and daily variations and that electric consumers should bear the full costs of their consumption patterns. Rates, therefore, should be developed to better reflect the cost of providing service. Section 111(d)(3) of PURPA states:

> The rates charged by any electric utility for providing electric service to each class of electric consumers shall be on a time-of-day basis which reflects the costs of providing electric service to such class of electric consumers at different times of the day unless such rates are not cost effective with respect to such class.

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5 Administrative Case No. 203, The Determinations with Respect to the Rate-making Standards Identified in Section 111(d)(1)-(6) of the Public Utility Regulatory Policies Act of 1978.

The cost-effective criterion is explained further in Section 115(b):

> [A] time-of-day rate charged by an electric utility for providing electric service to each class of electric consumers shall be determined to be cost-effective with respect to each such class if the long-run benefits of such rate to the electric utility and its electric consumers in the class concerned are likely to exceed the metering costs and other costs associated with the use of such rates.

In Administrative Case No. 203, the Commission found that time-of-day rates are cost effective for large users in Kentucky.[6] The Commission also found that electric utilities experience daily and hourly variations in their costs and that the implementation of time-of-day rates would serve to promote the Commission's objectives of conservation, efficiency, and equitable rates based on cost incurrence.[7]

KU's time-of-day rates, LCI-TOD and LMP-TOD, were approved by the Commission in Case No. 8915.[8] During that proceeding, KU implemented the four-phase plan adopted by the Commission in Administrative Case No. 203. Consistent with this plan, KU selected a group of large customers and gathered extensive load research data for a 12-month period while these customers were

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6 Administrative Case No. 203, Order dated February 28, 1982, page 31.

7 Id. at 30.

8 Case No. 8915, Time of Day Tariff Filing by Kentucky Utilities Company, Order dated July 29, 1985.

served on existing, non-time-differentiated rates. These customers were then placed on time-of-day rates for a 12-month period and additional load research data was collected. Finally, KU performed a cost-benefit analysis which compared the load research data collected from the experimental group during the 12-month period in which they were charged non-time-differentiated rates with that collected when they were charged under time-of-day rates.

Based on its review of the collected data, the Commission found that KU's time-of-day rate structure is appropriate since it better reflects to the customer the cost which he imposes on the utility.[9] The Commission further found that it was reasonable for KU to continue serving those customers under time-of-day rates.[10] Following a public comment period, the Commission ordered KU to place all customers with demands of 5,000 KW or greater on time-of-day rates.[11]

In a supplemental Order, the Commission identified three types of customers and prescribed the manner in which time-of-day rates would be implemented for them.[12] The Commission ordered that new customers with demands of 5,000 KW or greater locating in

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9 Case No. 8915, Order dated July 29, 1985, page 5.

10 Id. at 6.

11 Case No. 8915, Order dated October 25, 1985, page 5.

12 Case No. 8915, Order dated November 15, 1985, pages 1-2.

KU's service territory be served under a time-of-day tariff. The Commission further ordered that, pending KU's next rate case, existing customers not taking part in the time-of-day experiment and whose demand was 5,000 KW or greater continue to receive service on their current non-time-differentiated tariff unless they agreed to use a time-of-day tariff. Finally, for existing customers who were part of the time-of-day experiment but whose demand fell below 5,000 KW, the Commission held that these customers should be taken off the time-of-day tariff and be placed on an appropriate non-time-differentiated tariff.

GRS argues that the Commission never intended it to be subject to the LCI-TOD rate schedule. It characterizes itself as an existing KU customer whose demand exceeded 5,000 KW and who was excluded from the time-of-day experiment. Under the terms of the supplemental Order in Case No. 8915 and the LCI-TOD rate schedule,[13] GRS contends, it cannot be subjected to the LCI-TOD rate schedule without its expressed consent. Rather, KU must wait until its next rate case before attempting to impose that rate schedule on GRS.

Rejecting this contention, KU argues that, although GRS was a special contract customer at the time the LCI-TOD rate schedule

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13 "Other existing customers who demonstrate an average demand of 5,000 kilowatts or greater over a period of twelve (12) months may be placed on this rate by mutual agreement with the Company. Otherwise, service availability under this schedule will be evaluated and decided during the next general rate case." KU Tariff Sheet No. 13-A (Fourth Revision).

was established, GRS subsequently terminated its special contract and reduced its demand significantly below 5,000 KW. GRS, in fact, closed its steel plant and limited its demand to that needed for minimum maintenance of that plant. GRS further executed an agreement with KU in which it agreed that the 1963 special contract would terminate on November 27, 1986 and that thereafter GRS would "pay for electric service at the rates on file and approved from time to time by the Kentucky Public Service Commission for a customer in its classification."[14] Once the special contract was terminated and GRS reduced its demand, KU asserts, KU was no longer precluded from applying the LCI-TOD rate schedule to GRS without its agreement. When it again applied for electric power at a demand level above 5,000 KW, GRS was essentially a "new" customer.

At its inception, the LCI-TOD rate schedule was not intended to apply to GRS. The Commission ordered its application only to new customers whose demand was 5,000 KW or greater and to existing KU customers who participated in the time-of-day experiment conducted in Case No. 8915. All of KU's customers whose demand was then 5,000 KW or greater, with two exceptions - GRS and West Virginia Pulp and Paper Company ("Westvaco"), were required to participate in the experiment. Because GRS and Westvaco were already subject to time-of-day rates contained in their special

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[14] Hulse Exhibit 3.

contracts with KU, both were excluded.[15] Unlike the experiment's participants, neither received notice of the proceedings in Case No. 8915, was advised of its right to intervene, served with Commission Orders in that proceeding, or requested to comment on the proposed LCI-TOD rate. Imposing the LCI-TOD rate on GRS or Westvaco under such circumstances, to have effectively altered their rights in their respective special contracts, would have raised serious due process problems. The Commission instead chose to defer addressing the application of the LCI-TOD rate to these customers until KU's next rate case where each would have an adequate opportunity to represent its interest.

GRS's exclusion from the application of the LCI-TOD rate depended on the continued effectiveness of its 1963 special contract. When GRS terminated that contract and agreed to "pay for electric service at the rates and tariffs on file and approved from time to time by the Kentucky Public Service Commission for a customer in its classification,"[16] it voluntarily surrendered any rights or interests in the 1963 special contract and ceased to be in the category of customers exempted from the LCI-TOD rate. When it again increased its demand to 5,000 KW after two years of very low demand, it was no longer an existing customer, but a new

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[15] Case No. 8915, "Report of Time-of-Day Rates Experiment Large Customers August 1982-January 1985," May 29, 1985, at 3.

[16] Hulse Exhibit 3.

customer with a demand of 5,000 KW. Accordingly, the LCI-TOD rate schedule applies to GRS.

GRS also contends that its usage characteristics differ so significantly from other KU customers that application of the LCI-TOD rate schedule would be unfair, unreasonable, and unjustly discriminatory. It notes that it is the only steel plant served by KU. All other LCI-TOD customers are "other public utilities, colleges and universities, and general manufacturing companies."[17] According to GRS, 16 hours of off-peak demand is required for the efficient operation of its steel plant. The LCI-TOD rate currently allows only 10 hours of off-peak demand.[18] GRS maintains that its production processes will not allow it to fit its peak energy usage into the LCI-TOD rate schedule's off-peak hours. Since its peak demand will occur during portions of the rate's peak demand period, GRS insists that it will have no incentive to shift its demand to off-peak periods. Based on the rate schedule's method of calculating demand charges, GRS insists that the rate schedule provides it an incentive to shift more of its peak demand to the rate schedule's on-peak demand period -- a result not intended by the Commission.

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17 GRS Brief at 17.

18 KU's LCI-TOD rate schedule provides that the on-peak period, during which higher demand charges are incurred, is from 8:00 a.m. to 10:00 p.m. on Monday through Friday, and the off-peak period includes all remaining hours on Monday through Friday and all hours on Saturday and Sunday. At present, the on-peak charge is $4.25 per kilowatt while the off-peak demand charge is $0.75 per kilowatt.

The evidence of record does not support GRS's contention that its production processes are so fixed and rigid that they could not be adapted to accommodate the LCI-TOD rate schedule. GRS's steel plant has two electric arc furnaces which are used to melt scrap metal. Once melted, the molten steel is poured into ingot molds. Before 1986, GRS used the "top pour method." A ladle poured the molten steel into the ingot molds in much the same way as milk is poured from a pitcher into a cup. When the plant resumed operations, the "bottom pour method" was used. Bottom pour molds have a center tube open at the bottom. Molten steel is then poured into this tube and quietly fills the mold from the bottom. The result is less splashing and a higher quality steel product.

Changing production methods required GRS to change its usage characteristics. Prior to the plant's closing in 1985, GRS operated its electric arc furnaces simultaneously, 24 hours per day. It now staggers its melts so that both furnaces are not melting simultaneously at their peak demand and operate no more than 16 hours per day. These changes were necessary because the plant is not designed to accommodate the bottom pour process. Space and equipment on the plant floor is limited, thus causing production bottlenecks. GRS's president testified:

> [T]he reason we need the 16 hours for melting is that it takes us eight hours of crane time, with tremendous moves, in order to set up the bottom pouring setups, to be ready for the pouring the next night. So, during the daytime, we do all of our preparations for the molds, tools, and have all of our setups made so that, when

> we're ready to start melting, then we can just melt, degas, pour it, and strip it, melt, degas, pour it, and strip it. That's all we can get done while we're melting. There's not enough cranes or space provided for us to be able to tear down and set up again. Our competitors, in contrast to Green River Steel, most of the, pour the steel out of the air melt furnaces and take it to another building or take it to another location and do their teeming, but our shop was built in 1952, and it was built for a top pouring setup, and we have to live with what we have now.[19]

The record reflects that the existing steel plant can be modified for more efficient steel production and energy usage and to enable GRS to fix its production schedule within the LCI-TOD off-peak period. At the time of the hearing, GRS was to shortly install a "ladle refining process." GRS currently refines its steel while it remains in the electric arc furnace. During this process, the furnace must remain in use and must continue to receive electricity through the same transformer. With a ladle refining process, molten steel would be removed from the electric arc furnace in a ladle and taken to a separate area. The electric furnace is thus free to begin melting another batch of scrap steel, while refining takes place in the ladle. GRS's president also stated in his testimony that plant efficiency could be increased by expanding the steel plant's current floor space or constructing additional facilities.[20]

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19 Transcript of Evidence ("T.E."), Vol. I, at 142.

20 Id. at 148-150.

KU presented testimony from a steel industry consultant who suggested several changes in current production operations to enable GRS to fit its production schedule into the LCI-TOD off-peak period and reduce its energy costs. These included improving load factor, rescheduling its operations to take advantage of off-peak hours on weekends, installation of a ladle refining station, and changing its melting patterns. GRS, in the Commission's view, failed to satisfactorily rebut the feasibility of these proposals. Its witnesses instead chose to concentrate on the cost of making necessary capital expenditures to improve production. They conceded, however, that no studies had been conducted to determine the actual cost of such improvements.

The Commission finds that the application of the LCI-TOD rate schedule to GRS is neither unfair, unreasonable, nor unjustly discriminatory. GRS is no different from other LCI-TOD rate schedule customers. These customers, which include a paper company, an automobile manufacturer, a business machine manufacturer, and a chemical company, compose a large and diverse group. Their load characteristics span a wide range. They are, however, distinguishable from other KU customers in that each imposes a substantial demand on KU's system. In fully adopting the concept of time-of-day rates, the Commission stated that:

> The primary consideration which argues for time-of-day rates is the requirement that a consumer bear the full cost, to the utility, of his consumption pattern.[21]

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21 Administrative Case No. 203, Order dated February 28, 1982, at 30.

With its current usage patterns, GRS is imposing costs on to KU which the LCI-TOD rate was designed to accurately reflect. As such, the Commission cannot find that this rate as applied to GRS is either unfair or unjustly discriminatory.

A complainant bears the burden of proof to show that an existing rate is unjust or unreasonable. Antioch Milling Co. v. Pub. Serv. Co. of N. Illinois, 123 N.E.2d 302 (Ill. 1954). GRS has failed to meet this burden. The evidence suggests that it can alter its production methods to accommodate the LCI-TOD rate schedule. Its usage characteristics furthermore do not differ significantly from other LCI-TOD customers to warrant different rate treatment. As to this portion of GRS's complaint, the Commission finds that it should be denied.

NOTICE OF TERMINATION

KU's LCI-TOD rate schedule requires that customers demonstrating a demand of 5,000 KW or greater, contract for service for a fixed term of not less than 5 years and for yearly periods thereafter subject to 90 days' notice of termination. It further provides that KU may require a longer fixed term of contract and termination notice if warranted by conditions associated with the customer's service requirements. Since the LCI-TOD rate structure was adopted, KU has required all large industrial customers with new or increased loads to agree to a 5-year notice of termination provision in their service contracts, in effect, requiring a 5-year continuing contract.

KU contends that a 5-year termination requirement for large customers, such as GRS, is necessary for it to meet its long-range

planning and capacity construction requirements and to avoid adverse cost consequences to other customers. According to KU, current construction lead time is, at least, 10 to 12 years. As a result of long lead times, the risk associated with load forecasts increases. The high cost of new capacity only compounds the uncertainty and risk. To minimize these risks for other ratepayers and to ensure cost effective capacity planning, KU maintains, long-term commitments by large customers are essential.

GRS characterizes the 5-year termination provision as onerous and unreasonable. It contends that, if forced to close its plant, it would have to make minimum bill payments to KU for 5 years for service neither provided nor received. It further contends that, since KU's customers are constantly coming and going, and even a very large customer such as GRS represents a very small fraction of the total capacity upon the system, no justification for the 5-year termination notice exists for any customer.

With this issue, the burden of proof falls upon KU. The 5-year notice of termination is not expressly contained in KU's tariff. The tariff merely permits the utility to require a notice of termination period if a customer's requirements for service warrant. Because a discretionary act, an act not mandated by its filed tariff, is involved, KU must demonstrate the reasonableness of its demand. KU has failed to adequately show why such a lengthy notice period is required when little investment or construction was involved to restore large demand service to GRS.

It further failed to adequately address, among other things, the impact of the loss of a large customer on its planning process and the relationship between its existing reserve margin and the need for a 5-year notice provision. Accordingly, the Commission finds that, as to the 5-year notice of termination, the relief sought in GRS's complaint should be granted.

The Commission expresses its concern over the manner in which KU has imposed the 5-year notice of termination requirement. KRS 278.160(1) states:

> [E]ach utility shall file with the commission, within such time and in such form as the commission designates, schedules showing all rates and conditions for service established by it and collected or enforced. (Emphasis added).

Despite the fact that KU uniformly requires all new LCI-TOD rate customers to agree to 5-year notice of termination as a condition of receiving service under that rate schedule, it does not mention this condition in its filed tariffs. Its tariff instead refers to requiring longer termination notices "because of conditions associated with the customer's requirements for service." As a KU witness testified, however:

> [I]t's KU's opinion now that any customer this large [i.e., large enough to qualify for the LCI-TOD rate] the conditions associated with serving them will require that five year notice of termination provision. . .[22]

22 T.E., Vol. II, at 117.

We reach no decision herein on the reasonableness of a requirement for 5-year notice of termination provision for all LCI-TOD rate customers. If KU intends to impose such a requirement, it should revise its existing tariff to expressly state this requirement. If such a revision is proposed, the Commission expects KU to present more substantial and comprehensive evidence than that presented in this proceeding.

NEGOTIATIONS WITH OMU

GRS seeks Commission authorization to negotiate with OMU for electric service. GRS sought service from OMU before opening its steel mill in 1953, but turned to KU because of OMU's limited generation capacity. With the construction of its Elmer Smith Generating Unit, which is closely situated to GRS's steel mill, OMU currently has sufficient capacity to serve GRS. OMU, however, is expressly prohibited from serving GRS without KU's consent under the terms of a contract between the two utilities. KU refuses to grant its consent to such service.

No legal basis exists upon which to grant GRS's request. Municipal utilities, such as OMU, are not subject to Commission jurisdiction. McClellan v. Louisville Water Co., 351 S.W.2d 193 (Ky. 1961). Negotiations for utility service between a municipal utility and a potential customer, therefore, do not require Commission authorization.

GRS argues that KRS 278.200[23] permits the Commission to alter the terms of the KU-OMU contract to nullify any provision prohibiting service to it by OMU. KRS 278.200, however, empowers the Commission to alter only contracts between utilities and cities which affect a utility's rates or service standards. In this instance, the contractual prohibition against serving GRS affects only OMU's service standards, not KU's. KRS 278.200 is therefore not applicable.

Assuming Commission jurisdiction over OMU, GRS's request fails to meet the requisites of the Certified Territory Act. KRS 278.016 et seq. KRS 278.018 grants each retail electric supplier exclusive right to furnish retail electric service to all electric-consuming facilities located within its certified territory. Another retail electric supplier may be permitted to operate within that territory if the current supplier is shown not to be providing "adequate service." GRS's complaint does not go

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23 "The commission may, under the provisions of this chapter, originate, establish, change, promulgate and enforce any rate or service standard of any utility that has been or may be fixed by any contract, franchise or agreement between the utility and any city, and all rights, privileges and obligations arising out of any such contract, franchise or agreement, regulating any such rate or service standard, shall be subject to the jurisdiction and supervision of the commission, but no such rate or service standard shall be changed, nor any contract, franchise or agreement affecting it abrogated or changed, until a hearing has been had before the commission in the manner prescribed in this chapter."

to the adequacy of service, as the statute[24] defines the term, but concerns solely the rate charge -- a factor the statutory definition fails to mention. Accordingly, no statutory basis exists to authorize negotiations between GRS and OMU for electric service.

SUMMARY

After review of the evidence of record and being otherwise sufficiently advised, the Commission finds that:

1. Under the terms of the Commission's Order in Case No. 8915 and the LCI-TOD rate schedule, GRS should be considered a new customer. Therefore, KU is not precluded from applying the LCI-TOD rate schedule to GRS without its agreement.

2. GRS's average demand while operating its steel plant will exceed 5,000 KW, requiring it to be provided electric service under the LCI-TOD rate schedule.

3. GRS's steel production process can be modified to place its peak energy usage within the off-peak hours of the LCI-TOD rate schedule.

4. The current operation of GRS's steel plant imposes costs on KU's system which the LCI-TOD rate schedule was designed to accurately reflect.

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24 KRS 278.010(12) states: "'Adequate service' means having sufficient capacity to meet the maximum estimated requirements of the customer to be served during the year following the commencement of permanent service and to meet the maximum estimated requirements of other actual customers to be supplied from the same lines or facilities during such year and to assure such customers of reasonable continuity of service;"

5. GRS's usage characteristics do not differ so significantly from other KU customers as to make the application of the LCI-TOD rate schedule to it unfair, unreasonable, or unjustly discriminatory.

6. KU has failed to adequately demonstrate why the conditions associated with GRS's requirements for service require GRS to provide written notice of termination in excess of the 90-day period expressly prescribed in its filed tariff.

7. The Commission lacks any statutory basis to authorize GRS to conduct negotiations with OMU for electric service.

IT IS THEREFORE ORDERED that:

1. GRS's complaint, except for those portions relating to the 5-year notice of termination provision, is hereby denied.

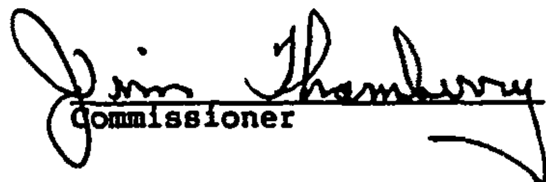
2. So long as the present contract between KU and GRS for electric service is in effect, KU shall not require GRS to provide written notice of termination for a period in excess of 90 days as a condition for providing it electric service under the LCI-TOD rate schedule.

Done at Frankfort, Kentucky, this 27th day of March, 1990.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman



Commissioner

ATTEST:

Executive Director