

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

* * * * *

In the Matter of:

POWER DEVELOPMENT SYSTEMS, INC.)	
COMPLAINANT)	
VS.)	CASE NO. 9456
KENTUCKY UTILITIES COMPANY)	
DEFENDANT)	

ORDER TO SATISFY OR ANSWER

Kentucky Utilities Company is hereby notified that it has been named as Defendant in a formal complaint filed on October 24, 1985, a copy of which is attached hereto.

Pursuant to 807 KAR 5:001, Section 12, Kentucky Utilities Company is hereby ORDERED to satisfy the matters complained of or to file a written answer to the complaint within ten (10) days of receipt of this Order.

Done at Frankfort, Kentucky, this 12th day of November, 1985.

PUBLIC SERVICE COMMISSION

Richard D. Hemminger
For the Commission

ATTEST:

Secretary

POWER DEVELOPMENT SYSTEMS, INC.
1813 Knollwood, Louisville, KY 40207 (502) 896-8977

October 22, 1985

Mr. Forest Skaggs, Secretary
Kentucky Public Service Commission
P. O. Box 615
730 Schenkel Lane
Frankfort, Kentucky 40601

C.N. 9456

FILED

OCT 24 1985

**PUBLIC SERVICE
COMMISSION**

Dear Mr. Skaggs:

This letter is to update the Public Service Commission on the Weisenberger Mill Small Hydroelectric Project that is to be interconnected with the Kentucky Utilities system. We have been meeting with KU and keeping Mr. M. J. Fisher, who is on the Commission Staff and was assigned to this project, informed of our progress.

On September 26, I met with Mr. Nelson Maynard of KU and a member of his staff at the KU offices in Lexington. The purpose of this meeting was to resolve any problems with the interconnection of our project with KU. I am happy to report to you that most of our problems were resolved at this meeting and are summarized in the seven points in the letter from Mr. Nelson Maynard dated October 14, 1985, which I have enclosed.

I regret to inform you that there are two related issues that could not be resolved and it became obvious that there was no possibility of a compromise.

Thus after exhausting all other avenues, I am forced to request that the Public Service Commission investigate and resolve these differences. The differences between our position and that of KU is so great that the decision will effect whether or not this project is feasible. In addition, a ruling by the PSC is necessary to set a standard so this problem is not encountered by other small power producers in the future.

Our differences are in how this project is to be metered and thus the ownership and value of the power produced by our proposed hydro-electric turbine. The KU's position is outlined in the metering diagram and proposed contract attached to Mr. Maynard's letter.

KU proposes using three meters, the two standard kwh meters for QF interconnection that measure power flowing to and from the Mill and KU. In addition, KU proposes a third kwh meter to put on the generator to monitor its production and a time-of-day magnetic recorder to record the outputs of each of the three meters. KU contends that this extra meter on the generator is necessary since the Commission has not allowed a capacity component in KU's interpretation of PURPA, thus Mr. Weisenberger is forced by law to sell all of his output from his generator to KU at the rate allowed by the Commission. KU believes that to let Mr. Weisenberger use the electricity he generates for his own needs would be the equivalent to KU paying a capacity component which is not presently in the SQF rate structure.

We find this position to be absurd. Having never heard of this position before, I requested that Mr. Maynard produce the names of any other utility in the country that was using this policy in their interconnections with QF's. He could not produce the names of any other utilities with this approach.

October 22, 1985

We find this position unreasonable and not supported by PURPA. Our position is that if Mr. Weisenberger invests \$60,000 in an electric generator, he has the right under law to use the electricity he produces for his own consumption. Under PURPA, he has the right to sell all or any part of the electricity he produces to KU at a rate established by the Commission. But PURPA does not force him to sell all of his production to KU. This is evident in PURPA 292.305 (b) (1) "Additional Services to be Provided to Qualifying Facilities. Upon request of a qualifying facility, each electric utility shall provide: (1) Supplementary power." And under "292.101 Definitions (b) (8) "Supplementary power" means electric energy or capacity supplied by an electric utility, regularly used by a qualifying facility in addition to that which the facility generates itself." But by KU's definition, there would be no such concept as supplementary power since Mr. Weisenberger would have to buy all his power from KU and sell all his production to KU. Furthermore PURPA 292.304 (d) (1) discusses purchases on an "as available" basis, which is what we propose. We intend to sell power as available at any time Mr. Weisenberger's production exceeds uses. The KU proposal is similar to 292.304 (d) (2) where Mr. Weisenberger would be legally obligated to sell all his production to KU. Under PURPA, Mr. Weisenberger is given the choice of option (d) (1) or (d) (2). He has selected (d) (1) but KU fails to honor this option. Furthermore, it is our position that KU has no right to mount metering equipment on our generator. The output of that generator is no business of KU. The concern of KU is how much net electricity is flowing from the KU grid into the Mill, how much net electricity is flowing from the Mill into the KU grid, and whether or not the electricity flowing from the Mill to KU is of the quality required by KU. How much electricity is generated and used by the Mill and not available for sale to KU should be of no concern to KU.

As far as metering, all that is necessary is a one way kwh meter to measure flow into the Mill and a one way kwh meter to measure flow leaving the Mill. A third meter on the generator is not necessary.

In addition, the use of a time-of-day meter for a small facility under 100 kwh is unreasonable. The \$4,000 of meters proposed by KU could make this project economically infeasible. More important, this requirement for a theoretical 1 kw home-size photovoltaic or wind system could double the cost of the system with just the metering. This is the reason PURPA calls for different requirements for facilities over and under 100 kw. Facilities under 100 kw should have one averaged rate instead of the time-of-day rates in the KU SQF schedule. It would also seem that this is required by PURPA in 292.304 (a) (1) (ii) "(a) Rates of purchases (1) Rates for purchases shall; (ii) Not discriminate against qualifying cogeneration and small power production facilities." As a small business customer, Mr. Weisenberger's General Service does not require him to use time-of-day rates. But KU would discriminate against him as a small power producer and force him to install expensive time-of-day metering.

As you can see, this difference in interpretation of PURPA will determine if our project can be completed. We presently have a small Hydropower License Exemption application being processed by FERC. All issues with government agencies have been resolved on this project. Our only holdup is this contract with KU.

We are concerned that KU is using this as a way to delay our project. Since this is the final hurdle on this project, we would appreciate the Commission resolving this difficulty as soon as possible. If I can supply you with any additional information, please contact me.

I hope to hear from you soon.

CC: M. J. Fisher, FSC (w encl.)
Owen Lewis, KU (w/o encl.)
Nelson Maynard, KU (w/o encl.)

Sincerely,


David H. Kinloch

KENTUCKY UTILITIES COMPANY

ONE QUALITY STREET
LEXINGTON KENTUCKY
40507

October 14, 1985

FILED

OCT 24 1985

Mr. David H. Kinloch
Power Development Systems, Inc.
1813 Knollwood Road
Louisville, Kentucky 40207

**PUBLIC SERVICE
COMMISSION**

Subject: Cogeneration
Weisenberger Mill, Inc.
Midway, Kentucky

Dear Mr. Kinloch:

It was a pleasure to meet and discuss your project. The following responses are to questions asked in your letter of August 2, 1985. The Company has included as a rate schedule to its approved Tariff a Rate SQF-Cogeneration and Small Power Producer. Response references to requirements as contained in this letter apply to the SQF rate sheet.

- 1) The protective relaying plans as submitted in accordance with requirement #5 under "Parallel Operation" of Rate Schedule SQF meets with our approval. The provision for a lock on the main disconnect handle in the "off position" will satisfy requirement #4 of the Rate Schedule which is to enable separation of the two electric systems. The operation of this equipment must be accessible to Company personnel at all times.
- 2) Power factor correction may be accomplished utilizing a fixed capacitor bank.
- 3) The transformer connection is a 7200/12470 volt wye - 120/240 volt grounded delta. A drawing is attached. The existing transformer bank provides 75 KVA capacity.
- 4) You will be responsible for paying the cost as detailed in requirement #9 of Rate Schedule SQF, associated with providing additional metering for this project. The estimated meter investment is \$4000. In addition, you will provide a lockable current transformer metering cabinet and conduit for the control circuitry. Design and installation details will be provided in the future. A sketch of the proposed metering arrangement is attached.
- 5) Requirement #11 as stated in our Rate SQF will not be invoked at this time; however, we reserve this right.

Mr. David H. Kinloch
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October 14, 1985

- 6) Requirement #12 as stated in our Rate SQF has been provided for under PSC Order and is consistent with PURPA Section 210.
- 7) The Company believes that it is in the interest of its customers not to participate in the payment of the additional metering costs of this project. Therefore, it is not desirable to promote the project in this manner as a means of obtaining publicity.

Each of the above items were discussed in our meeting of September 26, 1985. We also discussed a supplemental agreement to the existing contract for electric service. I have enclosed a copy of this agreement which incorporates the requirements of the Company's Rate Schedule SQF and provides for the credit to Weisenberger Mill for KWH's generated based on the Company's avoidable costs.

Please provide a copy of the exemption from obtaining Hydro License and a copy of the certificate certifying the project as Small Power Production Facility.

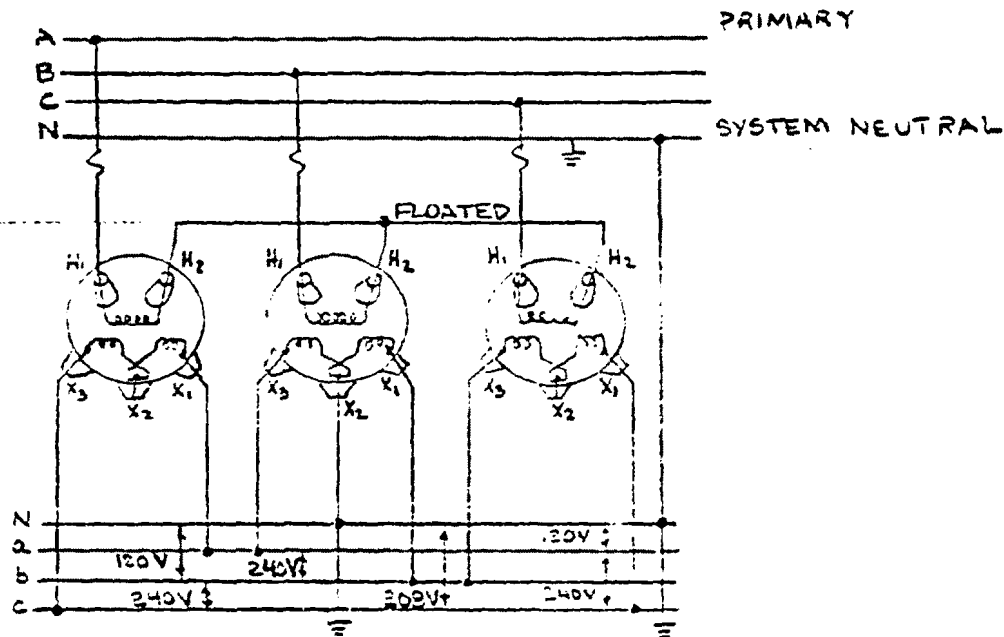
If you should have other questions or comments, please contact me.

Very truly yours,

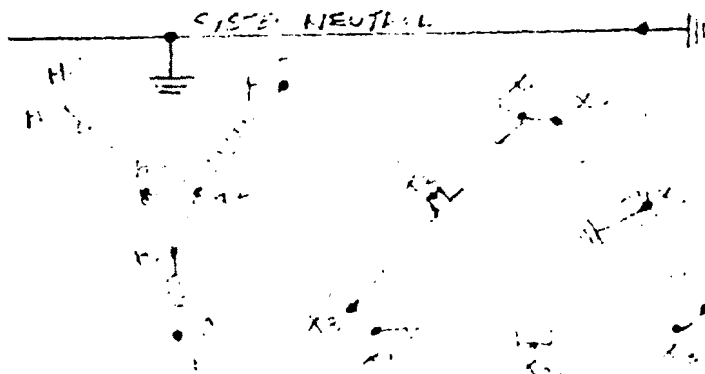

Nelson M. Maynard
Bluegrass Division Engineer

/mb

cc: ERobinson
SOmer
JCarloss
JOrr

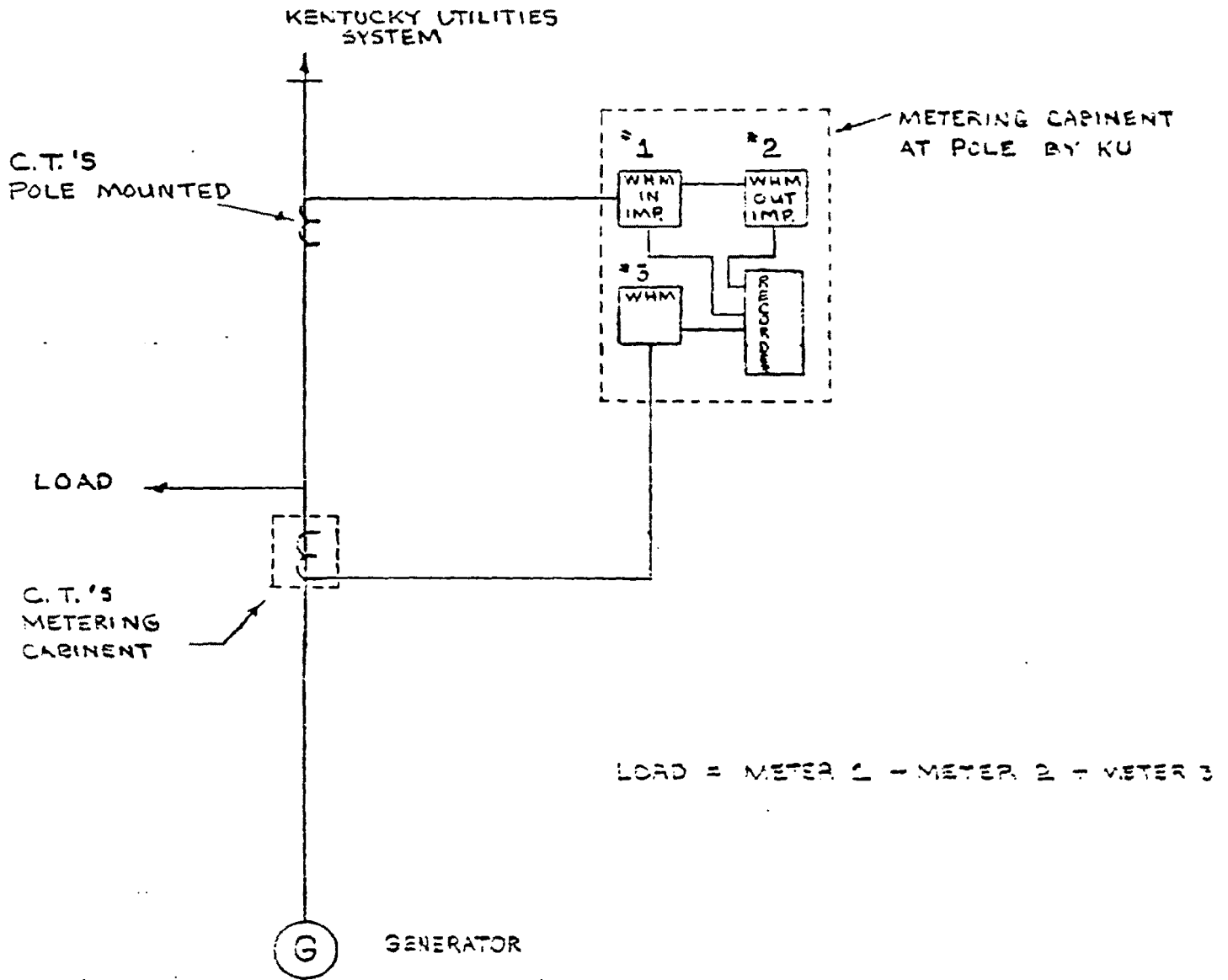


THREE PHASE WYE-DELTA
120 / 240 VOLT 4 WIRE
SECONDARY OR SERVICE



TRANSFORMER CONNECTION
WISENBURGER HILLS
MIDWAY KENTUCKY

10 / 3 / 3E
KENTUCKY UTILITIES CO
HELSON MAYNARD
DIVISION ENGINEER



COGENERATION METERING

WISENBURGER MILLS
MIDWAY, KENTUCKY

10/3/88
KENTUCKY UTILITIES CO.
NELSON MAYNARD
DIVISION ENGINEER

K.U. Office Georgetown 321
Route No. 540
Acct. No. 0280-1

CONTRACT FOR ELECTRIC SERVICE

This contract and agreement made and entered into this _____ day of _____, 19____ by and between the **KENTUCKY UTILITIES COMPANY**, hereinafter called "Company" and WEISENBERGER MILL COMPANY (Weisenberger Road) Midway Kentucky, hereinafter called "Customer".
Town State

Witnesseth: For a period of Five (5) years, beginning _____ and subject to the Company's general rules and regulations or terms and conditions, the Company will sell and deliver to Customer at mill site on South Elkhorn Creek, and Customer will receive and pay for electric energy for the operation of flour and corn mill. If Customer continues service after the expiration of the above period, this contract automatically will be renewed in accordance with provisions of the rate schedule.

All energy taken under this agreement will be delivered as three phase, 60 cycle, alternating current of a nominal voltage of 120/240 volts at the point of delivery, and will be measured as secondary Service.
Secondary, Primary, Transmission

This point of delivery requires an estimated system capacity, expressed as Contract Capacity, of 78 KW, to serve a total connected load of 82 KW, consisting of 80 Horse Power and 2 KW Lighting, and _____ KW of _____ and _____.
1 HP = 1 KW

The Customer may, facilities permitting, cause to be increased the amount of contract capacity stated hereon, by making written request to the Company, stating the amount of additional power desired, such request to be made at least 90 days prior to the time such additional power is required by the Customer.

Each month the Customer will pay to the Company at its office, within 10 days of rendition of bills, for all energy delivered to the Customer during the preceding month or bi-month, determined in accordance with Rate Schedule GS, as from time to time approved by the Public Service Commission of Kentucky and in effect, which is made a part of this contract. The minimum bill will be as provided in the rate schedule, but not less than \$ 1,224.24 a year, including any applicable Customer Charge.
Month Bi-Month, or Year

A "month" or "bi-month" as used in this contract will mean the period between any two consecutive regular readings by the Company of the meters at the Customer's premises, such readings to be taken as nearly as may be practicable every thirty days for "month" or every 60 days for "bi-month".

Where rate schedule has optional clause and/or service is metered or billed at other than delivered voltage, and/or minimum other than standard minimum is required, give explanation below.

Supplemental Agreement for small power production facilities is attached and made a part of this Contract For Electric Service.

RULES AND REGULATIONS

It is mutually agreed that the Company's general rules and regulations or terms and conditions and rate applicable to the service supplied hereunder, as from time to time approved by and on file with the Public Service Commission of Kentucky, are made a part of this contract as fully as if written herein.

In Witness Whereof, the parties hereto have caused this contract to be executed by these duly authorized representatives this day and year shown above.

KENTUCKY UTILITIES COMPANY

WEISENBERGER MILL COMPANY Customer

By _____

By _____

Vice President

Type or Print Name of Signer

Attest: _____
Official Capacity

Attest: _____
Official Capacity

Attest:

SUPPLEMENTAL AGREEMENT

THIS SUPPLEMENTAL AGREEMENT, made this _____, 1985, by and between KENTUCKY UTILITIES COMPANY (hereafter called Company) and WEISENBERGER MILL COMPANY (hereafter called Customer), supplemental to that Contract for Electric Service (hereafter called Service Contract) between the parties for electric service at Customer's mill on Elkhorn Creek near Midway, Kentucky,

WITNESSETH:

WHEREAS, Customer desires to install and operate, on its said mill site, a 67 KW, three-phase, 120/240 volt induction generator to be powered by water (Elkhorn Creek), all of the electricity to be produced by operation of such generator to be used by Customer only to supply part of Customer's requirements of electricity at such site; and

WHEREAS, Company presently supplies all of Customer's requirements of electricity at such site, and will continue to supply all of such requirements to the extent not from time to time supplied by Customer's proposed generator; and

WHEREAS, Customer's proposed generator must operate in parallel with Company's power supply system; and

WHEREAS, Company is willing for Customer to install and operate such proposed generator, upon the terms and conditions in the Service Contract as modified herein, and the additional terms and conditions herein;

NOW, THEREFORE, in consideration of the premises and the mutual covenants and agreements herein contained, the parties hereby agree as follows:

1. Customer will provide to Company the proposed basic plans for Customer's generating and associated facilities; and Company shall have the right, but no obligation, to approve or disapprove plans for any of such facilities to the extent that their installation and operation might in any manner affect Company's equipment, facilities and system or the operation thereof. Customer will inform Company in writing of any change which Customer desires to make in any facility approved by Company; and Company shall have a like right, but no obligation, to approve or disapprove such change.

2. Except as may be otherwise specified herein, Customer will provide, install, maintain and operate all generating and associated facilities on its plant site. Such facilities shall include, but not be limited to, equipment adequate to provide control of frequency and voltage for parallel operation of Customer's generator and Customer's electric supply system, which is connected to Company's system pursuant to the Service Contract; and Customer will operate its generator in parallel with Company's system.

3. Customer also will provide, install and maintain adequate protective equipment between the systems of Customer and Company; notwithstanding which, Customer will be liable to Company for any damage to Company's equipment, facilities and

system arising in any manner from or in connection with the installation, maintenance, operation or existence of any of Customer's electrical facilities and equipment, or any act or omission of Customer, its officers, employees, agents or representatives in any capacity, in relation thereto.

4. Company will have the right, but no obligation, to inspect Customer's facilities and to request and witness any tests to determine that such facilities are installed and operating properly; however, Company will have no responsibility of any kind in relation to any of Customer's facilities or the operation thereof.

5. Each, Customer and Company, will designate one or more Operating Representatives for the purpose of contacts and communications between the parties concerning operation of Customer's generator and associated facilities.

6. Customer will at any time or times, upon direction of Company, immediately disconnect and discontinue operation of Customer's generator.

7. Customer will provide, install and maintain circuit breakers or similar equipment, as specified by Company, at a location designated by and accessible to Company, to accomplish disconnection of Customer's electric system from the system of Company; and such breakers or equipment will be operated only by or at the express direction of Company personnel.

8. Customer assumes all responsibility for the electric service, and the installation, maintenance and operation of all

electrical facilities and equipment, upon Customer's premises at and from the point of delivery of electricity from Company; and Customer will indemnify and save Company harmless from all claims for injury or damage to persons or property occurring at any location, arising, or alleged to have arisen, in any manner from or in connection with the installation, maintenance, operation or existence of any of Customer's electrical facilities and equipment, or any act or omission of Customer, its officers, employees, agents or representatives in any capacity, in relation thereto, including costs and expenses of defense against such claims.

9. During the effectiveness of this Supplemental Agreement, in application of the provisions in the "Minimum Charge" section of Electric Rate Schedule GS, which is part of the Service Contract, at all times the parts of Customer's load supplied by Company and by Customer's generator will be metered separately and added, and Customer's KW demand at any time will be the sum of such meterings for minimum charge purposes.

10. During the effectiveness of this Supplemental Agreement, during each month, the parts of Customer's energy supplied by Company and by Customer's generator will be metered separately and added, and, against the Energy Charge computed on such combined consumption in the manner set out in Electric Rate Schedule GS, Customer will be credited, for energy supplied during such month by Customer's generator, amounts determined as follows:

- a. For summer billing months of June, July, August and September during the hours 9:01 A.M. thru 10:00 P.M., weekdays exclusive of holidays (on-peak hours) 1.423¢/KWH
- b. For winter billing months of December, January, and February during the hours 7:01 A.M. thru 10:00 P.M. weekdays exclusive of holidays (on-peak hours) 1.464¢/KWH
- c. All other hours (off-peak hours) 1.247¢/KWH

DETERMINATION OF ON-PEAK AND OFF-PEAK HOURS

On-peak hours are defined as the hours of 9:01 A.M. through 10:00 P.M., E.D.T. (8:01 A.M. through 9:00 P.M., E.S.T.), Mondays through Fridays exclusive of holidays (under a. above) and the hours of 7:01 A.M. through 10:00 P.M., E.D.T. (6:01 A.M. through 9:00 P.M., E.S.T.) Mondays through Fridays exclusive of holidays (under b. above).

Off-peak hours are defined as all hours other than those listed as on-peak (under c. above).

Company reserves the right to change the hours designated as On-Peak from time to time as conditions indicate to be appropriate.

11. Company, at Customer's cost, will provide and install needed additional meters and associated equipment.

12. Except to any extent otherwise provided herein, Company's Rules and Regulations or Terms and Conditions will apply to the service hereunder, as provided in the Service Contract.

13. The term of this Supplemental Agreement shall be concurrent with the term of the Service Contract.

IN WITNESS WHEREOF, the parties hereto have executed this Supplemental Agreement, as of the day and year written first above.

KENTUCKY UTILITIES COMPANY

By _____
Vice President

WEISENBERGER MILL COMPANY

By _____
Title _____