

COMMONWEALTH OF KENTUCKY
BEFORE THE ENERGY REGULATORY COMMISSION

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In the Matter of:

EMERGENCY PROCEDURES OF THE ELECTRIC)
DISTRIBUTION UTILITIES SERVED BY THE)
TENNESSEE VALLEY AUTHORITY (TVA):)
)
1. HICKMAN-FULTON COUNTIES R.E.C.C.)
2. PENNYRILE RURAL ELECTRIC COOPERATIVE) ADM. CASE NO. 242
CORPORATION)
3. TRI-COUNTY ELECTRIC MEMBERSHIP)
CORPORATION)
4. WARREN R.E.C.C.)
5. WEST KENTUCKY R.E.C.C.)
6. JELICO ELECTRIC)

O R D E R

The Commission in accordance with the provisions of KRS 278.040 and upon its own motion, finds that it is prudent and desirable for electric distribution utilities to have emergency procedures available for implementation prior to the onset of an energy shortage and furthermore it is desirable, insofar as possible, that all utilities with similar operating and service characteristics should have similar emergency procedures.

IT IS THEREFORE ORDERED that within twenty (20) days from the date of this Order that the electric distribution utilities who are served by TVA shall submit their plan of emergency procedures to be followed during any shortage of energy for the generation of electric power. In the preparation of the emergency procedures submitted the utility shall consider the appropriateness of the use of the procedures and substance contained in Attachment No. 1, which is a part of this Order.

Done at Frankfort, Kentucky this 2nd day of February, 1981.

ENERGY REGULATORY COMMISSION

Chairman

Vice Chairman

Commissioner

ATTEST:

Secretary

ATTACHMENT NO. 1

TO AN ORDER OF THE ENERGY REGULATORY COMMISSION

IN ADM. CASE NO. 242 DATED: February 2, 1981

ENERGY EMERGENCY CONTROL PROGRAM

Purpose -- To provide a plan for reducing the consumption of electric energy on the Electric Distribution Utility Company (Company) system in the event of a severe coal shortage, such as might result from a general strike in the coal mines.

For the purpose of this program, the following priority levels have been established:

- I. Essential Health and Safety Uses -- as defined in Appendix B
- II. Residential Use
- III. Commercial and Industrial Uses
- IV. Nonessential Uses -- as defined in Appendix C

It is the intent of this Program that the Company's wholesale customers will be treated in a manner consistent with the curtailment procedures applicable to the Company's retail customers. Implementation in the case of wholesale customers will be in accordance with the curtailment provision contained in the service agreement between the parties or the applicable tariff.

Procedures -- In the event of a potential severe coal shortage, such as one resulting from a general coal strike the following steps will be implemented. These steps will be carried out to the extent not prohibited by contractual commitments or by order of the regulatory authorities having jurisdiction. The "days' operation" referred to below will be furnished by the generation and transmission utility which supplies the wholesale power to the company.

- I. To be initiated when fuel supplies are decreased to 50 days' operation of coal-fired generation and a continued downward trend in coal stocks is anticipated:
 - 1) Curtail the use of energy in all company offices, plants, etc.
- II. To be initiated when fuel supplies are decreased to 40 days' operation of coal-fired generation and a continued downward trend in coal stocks is anticipated:
 - 1) Discontinue all short-term sales to neighboring utilities.
 - 2) Limit emergency deliveries to neighboring utilities to situations where regular customers of such utilities would otherwise be dropped or where the receiving utility agrees to return like quantities of energy within 14 days.
 - 3) Curtail electric energy consumption by customers on interruptible contracts to a maximum number of hours of use per week as negotiated within the context of the contract provisions.
 - 4) Purchase energy from neighboring systems to the extent practicable.

- 5) Purchase energy from industrial customers with generation facilities to the extent practicable.
- 6) Through use of the news media and direct customer contact, appeal to all customers, both retail and wholesale, to voluntarily reduce their use of electric energy as much as possible, and in any case endeavor to reduce the nonessential usage of electricity (Priority Level IV) by at least 25%.
- 7) Utilize voltage reduction as a means of reducing KWH consumption if this is deemed a feasible and viable measure in the Company's service area.
- 8) The Company shall advise customers of the nature of the mandatory program to be introduced in Section III below through direct contact and mass media, and establish an effective means of answering specific customer inquiries concerning the impact of the mandatory program on his electricity availability.

III. To be initiated -- in the order indicated below -- when fuel supplies are decreased to 30 days' operation of coal-fired plants and continued downward trend in coal stocks is anticipated:

- 1) Discontinue emergency deliveries to neighboring utilities unless the receiving utility agrees to return like quantities of energy within 7 days.
- 2) Implement mandatory curtailment of electric service to all customers as indicated below:
 - (a) Priority Level IV - 100%
 - (b) Priority Level III - 25% (based on the "monthly base period use" as defined in Appendix D).
 - (c) Priority Level II - 15%
- 3) The Company shall advise all customers of the mandatory program specified in Section IV below.

IV. To be initiated when fuel supplies are decreased to 20 days' operation of coal-fired generation and continued downward trend in coal stocks is anticipated:

- 1) Implement mandatory curtailment of electric service to all priority levels (including Priority Level I) at a minimum service level which is not greater than that required for protection of human life and safety, protection of physical plant facilities, and employees' security.
- 2) The Company shall advise all customers of the mandatory program specified in Section V below.

V. To be initiated as a measure of last resort when fuel supplies are decreased to 15 days' operation of coal-fired generation and continued downward trend in coal stocks is anticipated:

- 1) Implement procedures for interruption of selected distribution circuits on a rotational basis, while minimizing -- to the extent practicable -- interruption to Priority Level I.

With regard to mandatory curtailments identified in Sections III, IV and V above, the Company proposes to monitor compliance after the fact, to the extent feasible, as approved by the Commission. A customer exceeding his electric energy allotment would be warned to curtail his usage or face, upon continuing noncompliance and upon one day's written notice, disconnection of electric service for the duration of the energy emergency.

Termination of Energy Emergency -- The Energy Emergency Control Program shall be terminated upon notice to the Commission, when (a) the remaining days of operation of coal-fired generation is at least 20 days, (b) coal deliveries have been resumed, and (c) there is reasonable assurance that the coal stocks are being restored to adequate levels.

APPENDIX "B"

ESSENTIAL HEALTH AND SAFETY USES

Essential health and safety uses given special consideration in these procedures shall, insofar as the situation permits, include the following types of use and such other uses which the Commission may subsequently identify:

- (a) "Hospitals", which shall be limited to institutions providing medical care to patients.
- (b) "Life Support Equipment", which shall be limited to kidney machines, respirators, and similar equipment used to sustain the life of a person.
- (c) "Police Stations and Government Detention Institutions", which shall be limited to essential uses required for police activities and the operation of facilities used for the detention of persons. These uses shall include essential street, highway and signal-lighting services.
- (d) "Fire Stations", which shall be limited to facilities housing mobile fire-fighting apparatus.
- (e) "Communication Services", which shall be limited to essential uses required for telephone, telegraph, television, radio and newspaper operations.
- (f) "Water and Sewage Services", which shall be limited to essential uses required for the supply of water to a community, flood pumping and sewage disposal.
- (g) "Transportation and Defense-related Services", which shall be limited to essential uses required for the operation, guidance control and navigation of air, rail and mass transit systems, including those uses essential to the national defense and operation of state and local emergency services.
- (h) "Other Energy Source Services", which shall be limited to essential uses required for the production, transportation, transmission and distribution -- for fuel -- of natural or manufactured gas, coal, oil or gasoline.
- (i) "Perishable Food or Medicine", which shall be limited to refrigeration for the storage and preservation of perishable food or medicine, when that use is substantially all of the customer's load.

Although these types of uses will be given special consideration when implementing the manual load-shedding provisions of this procedure, these customers are encouraged to install emergency generation equipment if continuity of service is essential. In case of customers supplied from two utility sources, only one source will be given special consideration. Also, any other customers who, in their opinion, have critical equipment should install emergency generation equipment.

APPENDIX "C"

NONESSENTIAL USES

The following and similar types of uses of electric energy and others which the Commission may subsequently identify shall be considered nonessential for all customers:

- (a) Outdoor flood and advertising lighting, except for the minimum level to protect life and property, and a single illuminated sign identifying commercial facilities when operating after dark.
- (b) General interior lighting levels greater than minimum functional levels.
- (c) Show-window and display lighting.
- (d) Parking-lot lighting above minimum functional levels.
- (e) Energy use greater than that necessary to maintain a temperature of not less than 78 degrees during operation of cooling equipment and not more than 65 degrees during operation of heating equipment.
- (f) Elevator and escalator use in excess of the minimum necessary for non-peak hours of use.
- (g) Energy use greater than that which is the minimum required for lighting, heating or cooling of commercial or industrial facilities for maintenance cleaning or business-related activities during non-business hours.

APPENDIX "D"

MONTHLY BASE PERIOD

"Monthly Base Period Use" is defined as the customer's usage during the corresponding monthly billing cycle of the twelve monthly billing periods immediately prior to December 31 of the year immediately preceding the current year, adjusted to reflect any increases or decreases of load in the most recent three-month period due to the installation or removal of equipment or a change in operating rate as computed in the formula.

Upon application by the customer and agreement by the Company, a one-time adjustment of the monthly energy use of the twelve-month billing period ending December 31 of the year immediately preceding the current year, or an adjustment of the prior three-month usage (PQKWH), will be made to correct any abnormalities of energy use resulting from such events as strikes and breakdowns of major equipment that may have occurred during the period in question. For customers connected after December 31 of the year preceding the current year by one year, base period energy use will be negotiated between the customer and the Company.

$$AMBP = CM \times \frac{PQ}{BPQ}$$

WHERE:

AMBP = Adjusted Monthly Base Period (KW or KWH).

CM = Corresponding month during the year immediately preceding the current year.

PQ = Average use (KW or KWH) for the second, third and fourth monthly billing periods immediately prior to the date of the curtailment order. Should a curtailment be extended so that one of the three monthly billing periods reflects usage under a curtailment period, the actual billing for that month is replaced with the AMBP previously calculated for that month.

BPQ = Average of corresponding three monthly billings prior to CM.

Example: (Curtailment ordered during month of May 1977)

1st Curtailment Month

Since the April 1977 billing may not always be available, then for uniformity to all customers -- from the time curtailment is ordered until the May meter reading date:

$$\text{May '77} = \frac{(\text{Jan.}, \text{Feb.}, \text{March}) \text{'77} \times \text{May '76}}{(\text{Jan.}, \text{Feb.}, \text{March}) \text{'76}}$$

2nd Curtailment Month

$$\text{June '77} = \frac{(\text{Feb.}, \text{Mar.}, \text{April}) \text{'77}}{(\text{Feb.}, \text{Mar.}, \text{April}) \text{'76}} \times \text{June '76}$$

3rd Curtailment Month

Since May '77 will reflect electric use under a curtailment, May '77 will be replaced with May '76 as calculated in the 1st Curtailment Month:

$$\text{July '77} = \frac{(\text{Mar.}, \text{Apr.}, \text{May}) \text{'77}}{(\text{Mar.}, \text{Apr.}, \text{May}) \text{'76}} \times \text{July '76}$$

NOTE: The nomenclature for any one billing period is determined by the last reading date in the period, i.e., a bill from April 2 to May is considered the May billing period.