BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

CASE NO. EO-88-196

In the matter of Cominco American, Inc. for authority to change electrical suppliers.

APPEARANCES: Gerald E. Roark, Attorney at Law, Hendren & Andrae, P. O. Box 1069, Jefferson City, Missouri 65102, for Cominco American, Inc.

Gary W. Duffy, Attorney at Law, Hawkins, Brydon, Swearengen, & England, P.C., P. O. Box 456, Jefferson City, Missouri 65102, for Arkansas Power & Light Company.

Richard W. French, First Assistant Public Counsel, P. O. Box 7800, Jefferson City, Missouri 65102, for the Office of the Public Counsel and the Public.

Douglas C. Walther, Assistant General Counsel, P. O. Box 360, Jefferson City, Missouri 65102, for the Staff of the Missouri Public Service Commission.

HEARING

EXAMINERS: Melody C. Schroer and Martha S. Hogerty

REPORT AND ORDER

On January 19, 1988, Cominco American, Inc. (Cominco or Applicant) filed with the Commission its Application To Change Electrical Suppliers. Cominco states that, due to the considerable distance over which it must distribute electricity through its underground cables, it is currently unable to meet its needs for electrical power in its West Mine area. Cominco requests authority from the Commission to allow Black River Electric Cooperative (BREC) to serve a new point of delivery solely in the West Mine area.

Also on January 19, 1988, Cominco filed a Request For Expedited Hearing Schedule.

On January 28, 1988, Arkansas Power & Light Company (AP&L or Intervenor) filed its Motion To Intervene. AP&L states that it requests intervention to protect its interests and its statutory right to continue to serve an existing customer under Sections 393.106 and 394.315, RSMo 1986.

By Order issued February 11, 1988, the Commission granted Cominco's request for an expedited schedule and granted AP&L's Motion To Intervene. The Commission set a hearing in this matter for March 3, 1988.

On March 2, 1988, Cominco filed its Amended Application For Partial Change In Electrical Supplier. The amended application requests authority to purchase electrical power in the West Mine area from BREC and to place an electrical switch in the mine to connect its water pumps to this new power supply in the event AP&L's power supply is disconnected for any reason.

The hearing was held on March 3, 1988, as scheduled, and Cominco and AP&L have filed posthearing briefs. The provisions of Section 536.080 were not waived by all parties.

Findings of Fact

The Missouri Public Service Commission, having considered all the competent and substantial evidence upon the whole record, makes the following findings of fact:

Applicant, Cominco American, Inc., is a mining company established in the 1960s and has, since its date of inception, purchased electricity from AP&L and its predecessor, Arkansas-Missouri Power Company (Ark-Mo).

Intervenor, Arkansas Power & Light Company, is a corporation organized and existing under the laws of the State of Arkansas, duly licensed to do business as a foreign corporation in the State of Missouri. Intervenor is a public utility within the meaning of Section 393.106, RSMo 1986, and is engaged in the business of supplying electricity in parts of Arkansas and southeastern Missouri, including Iron County, Missouri.

Cominco in this matter seeks an additional source of power for its West
Mine area. The mine involved is the Magmont Mine, owned by Cominco and located in

Iron and Dent Counties in Missouri. Cominco began its lead mining operations in the 1960s after the main shaft was completed in the Magmont East area in Iron County. The mine consists of various tunnels located approximately 1,200 feet underground. Mining began in the Magmont West area in Dent County in 1982 following completion of Magmont West Drive. Magmont West Drive is a tunnel or "drift" approximately 28 feet wide, 20 feet high and two miles long which connects Magmont East and Magmont West. The Magmont West area contains three drifts which extend north, south and west from the center to the mining areas.

Electrical power to the mine is supplied by AP&L. A 4,160 volt line is carried down through the main shaft into Magmont East. The electricity is then distributed throughout the mine area. Electrical power is carried through Magmont West Drive to the Magmont West area via a No. 2 cable attached to the ceiling of the tunnel. In Magmont West the power from the No. 2 cable is fed into several transformers where the voltage is cut down from 4,160 to 480 in order to operate the equipment. The electricity is then distributed to the north, south and west drifts of Magmont West.

Cominco is currently experiencing problems with the voltage levels in the Magmont West area. As the mining proceeds further north and south in the drifts, the mining activity moves further from the power source and a drop in voltage results. The largest voltage drop problem exists in the north drift. Cominco plans to mine further north but cannot do so at present because it does not have enough voltage to start the fans. These fans are used to remove contaminated air and to provide fresh air to the areas where the miners work. Their operation is, therefore, essential. Cominco has already burned up a few fans in the north area because the voltage was insufficient for the fans to start. Electricity is also needed to run the water pumps, the drilling equipment, and to provide light and heat.

In late 1986, Cominco determined that further mining was necessary in the north, south and west drifts of Magmont West and began to examine alternatives to solve the inadequate power problems. The first of these alternatives involved the

installation of an additional AP&L line down the main shaft and through Magmont West Drive, parallel to the existing line. Cominco estimated that installation of the cable would require 320 man-hours. Production would be interrupted during the installation because workers and equipment would be unable to pass through the tunnel. This additional line was expected to cost approximately \$50,000, including the cost of the cable and installation. It would also have left Magmont West powerless in the event of a fire or cave-in in Magmont East. Consequently, this alternative was eliminated.

A second alternative considered by Cominco involved extending a line down vent shaft #8 near the center of Magmont West. This vent shaft, however, is used for escape in case of emergency. In order to ensure the safety of the miners in such a situation, the escape hatch would need to be placed on a track so as not to touch the electrical cable. This alternative was eliminated as too costly.

The remaining alternatives involved drilling a borehole through which an electric line could be dropped down into Magmont West. Three sites for this borehole were discussed. Cominco then solicited bids from AP&L and BREC for service to the alternative sites. The first bid presented to Cominco from AP&L for service to the three sites required an "up-front" charge of \$93,500 for the line extension and \$40,000 for the substation. This total cost of \$133,500 was to be made in the form of a nonrefundable cash contribution in aid of construction. BREC submitted a bid which required an "up-front" payment of \$4,199 to construct the line plus the monthly rate based on required kva. BREC subsequently submitted a second bid for the site eventually chosen by Cominco. This second bid required a construction payment of \$4,116.39.

A decision was then made to install the borehole in Dent County at the north end of the north drift, and to accept the second bid for service from BREC. The testimony indicates that this site was chosen for its proximity to the area where the mining was to expand and to the BREC line. In December, 1988, the borehole was completed at a cost of approximately \$20,000. Later that month, AP&L applied to the

Circuit Court of Dent County, Missouri, for a temporary restraining order to prevent BREC from installing the line. On December 31, 1987, the order was granted pending a hearing on the merits. AP&L then submitted a new bid for service. This subsequent proposal eliminated the cash contribution included in the earlier bid and required an \$1,850 per month minimum payment plus the applicable rate schedule minimum if usage exceeded \$1,850 for a five-year period. A facilities charge of \$330 was also included but was later eliminated.

Cominco is before this Commission to request authority to accept service from BREC. BREC proposes to install a 750 kv transformer on the surface, from which a 4,160 volt cable is to be brought down through the existing borehole in the north drift. The existing AP&L line which runs throughout the Magmont Mine extends into the north drift of Magmont West, and ends approximately 50 feet south of the borehole. The testimony of Cominco's witnesses indicated that, in addition to using the power supplied by BREC to mine further north of the borehole, the electric line may also be brought south of the borehole to pick up currently operating fans and pumps powered by the AP&L line. This would allow the AP&L voltage to be transferred to other areas of Magmont West where more voltage was needed. Cominco stated, however, that it intends to fully utilize the power from AP&L.

In addition to its request for a new source of power to increase the voltage levels, Cominco also intends to use this new source for emergency "backup" power in the event the present AP&L system fails. Currently, if a power failure occurs, the water pumps are unable to work and, as a result, the mine will flood. This damages equipment and stops production until the water is pumped out and the equipment repaired. Cominco has experienced two such power failures in the past four years. In the event of a power failure, Cominco proposes to connect the BREC line to the existing power lines fed by AP&L and "back-feed" this power into the main pump room in Magmont East. This power would then be used to run two 350 hp pumps and a small 30 hp pump. Once AP&L's power is restored the BREC power would be

disconnected. The testimony of Cominco witnesses indicates, however, that the exact method of connection has not yet been determined.

The issue which the Commission must decide in this case is whether it is in the public interest to authorize a change of suppliers pursuant to Sections 393.106 and 394.315, RSMo 1986.

AP&L argues that the voltage problems for which Cominco now seeks relief are the result of improper engineering and planning by Cominco's own staff. AP&L states that had Cominco installed 4/0 cable instead of No. 2 cable in Magmont West Drive, it would not experience the voltage problems that it does today. While the Commission agrees that the voltage problem may not have occurred with the use of 4/0 cable, the Commission is not in a position to second guess the engineering decisions of Cominco. Mr. Key, manager of Magmont Mine, testified that when the Magmont West property was purchased in 1978 Cominco anticipated that the ore body would be smaller than it turned out to be. The ore did not appear to be a continuous channel, but rather sporadic pockets of ore. Consequently, at the time Magmont West Drive was built, Cominco believed that a No. 2 cable would adequately meet their electrical needs. AP&L's own witness, Mr. McElhanon, testified that if Cominco thought they were only going to mine a small area, No. 2 cable would have been sufficient. The Commission finds that this should not preclude Cominco from seeking relief.

The Commission finds from the evidence in the record that it is in the public interest to grant Cominco's application for a change of suppliers for the reasons discussed hereafter.

One of the primary considerations in determining questions of "public interest" is the health and safety of the public, more particularly in this case, the miners. The evidence establishes that the need for power is immediate. A witness for Cominco testified that on several occasions they have been forced to evacuate their men from the mining areas because the voltage was insufficient to operate the ventilation fans. Without proper ventilation these miners are in danger of breathing contaminated air. Consequently, it is important to the health and safety of the

miners that Cominco acquire a reliable source of power to correct its voltage problems. The evidence establishes that little, if any, difference exists between the reliability of the AP&L or BREC systems.

AP&L argues that if the health and safety of the miners is a paramount issue, Cominco would have installed an additional cable in Magmont West Drive in the time that has passed since the temporary restraining order was issued. AP&L also argues that the public interest would best be served by requiring Cominco to install the cable rather than receiving service at the borehole. Cominco's witnesses have testified to their reasons for eliminating that alternative. They include the inability to use the tunnel during installation, the time involved if installation took place on weekends only, the failure to solve the need for backup power, the cost, and the loss of all power to the West Mine area in the event of a catastrophe in Magmont East. Cominco has instead chosen to request authority for an alternative which it feels will better address their concerns, including health and safety. This decision was made after an examination of the advantages and disadvantages of all possible alternatives.

AP&L has expressed numerous concerns about the safety of the installation of the BREC line. In particular, AP&L is concerned with the compatibility of the two systems (i.e., AP&L's existing line and the new BREC line) brought together in the same structure, the operating methods used to tie the systems together as alternate feeds in emergency situations, and the increased complexity of operations from an employee safety standpoint. These are all important points and the Commission shares these concerns. The Commission determines, however, that the conditions of service, as set forth infra, will ensure the safe operation of the additional power and emergency back-feed system.

Another concern of this Commission is the wasteful use of resources and duplication of existing services. Thus, the distance involved in the extension of service must also be considered by this Commission. BREC only needs to extend a line approximately 300 feet to serve the existing borehole. AP&L, on the other hand, must

extend its line approximately two miles, almost half of which is through national forest. The testimony indicates that a forty to fifty-foot path would need to be cleared in order to install the line, although the proposed route of the AP&L line does not contain a solid line of trees. The Commission recognizes that it does not have the jurisdiction to make determinations about the use of forest land. It is, however, the duty of this Commission to prevent wasteful duplication of services. The Commission finds that to allow such an extension by AP&L would be wasteful and duplicative and, therefore, not in the best interest of the public or AP&L.

The Commission also considers the cost of the proposed extension by AP&L, the time needed to complete it, and the resulting burden to Cominco, to be important factors in its decision. In addition to the immediate need for power to operate the ventilation fans, Cominco is unable to expand its mining operations due to the lack of voltage. Consequently, Cominco needs this new source of power as soon as possible. The evidence establishes that BREC has received the requisite authority from the Forest Service and could install the new line in a matter of days. AP&L estimates that it would need four months to complete the extension. Even if the construction time of AP&L could be expedited, it must still obtain easements from private land owners and a permit from the Forest Service. Consequently, some question exists not only with regard to the time it would take to complete the extension, but to whether AP&L could acquire the necessary permission at all.

A wide disparity also exists between the cost of the two proposed lines. BREC will extend a line for a total cost of \$4,116.39. This includes a membership fee of \$25, a billing deposit of \$500 and a construction cost of \$3,591.39. The total cost of the extension by AP&L is \$93,000. This cost would be recovered by a minimum monthly payment by Cominco of \$1,850 for a period of five years. Conflicting testimony was presented as to whether Cominco actually needs \$1,850 worth of electricity per month to serve the requested area. The testimony indicated, however, that the life expectancy of the mine is only four years. Thus, Cominco could end up paying \$1,850 per month in the fifth year of the contract although it uses no

electricity. In addition, the evidence shows that AP&L would be unlikely to pick up any new customers along the proposed extension. Thus, while it appears that AP&L would recover the actual costs of construction, it is doubtful that it could recover a return on their investment.

All the factors which the Commission has examined are important to the determination of "public interest" questions. BREC has existing facilities a short distance away and could complete the extension in a short period of time, at a relatively small cost, and without the wasteful duplication of existing lines or needless destruction of forest.

The Commission must weigh these public interest concerns against the effect such a decision would have on AP&L. A witness for Cominco stated that, in the event the application is granted, Cominco still intends to use AP&L's power "to its maximum". The Commission does not here authorize BREC to extend their lines throughout the entire West Mine area. Instead, BREC will serve only that load in excess of what AP&L can adequately serve. Consequently, the Commission determines that the grant of this request by Cominco will have little effect on the service currently provided by AP&L.

AP&L argues that, if the Commission grants the application in this case, it would open a "Pandora's box" of similar requests which would ultimately erode AP&L's revenue base. AP&L states that other mines might attempt to switch to a supplier with lower rates by citing internal problems or a need for greater reliability of service. The Commission disagrees. The decision in this case is not based upon internal problems or reliability. Rather, the Commission has carefully examined the time involved in completing the extension, the distance, cost, and the effect on the present supplier. The facts of this case are very unusual and the Commission does not believe that its decision will have a sweeping application to other situations. Requests for a change of supplier have been, and will continue to be, based upon a case-by-case analysis.

Cominco shall, therefore, be authorized to accept limited service from BREC, provided, however, that it comply with the following conditions:

In no event shall the facilities of BREC be connected to the lines served by AP&L. BREC is hereby authorized to serve any new load north of the borehole.

If additional power is needed in other areas of Magmont West then an amount equal to that new load may be shifted to the BREC line south of the borehole in the north drift in order for AP&L's voltage to be sufficient to serve that new load.

In no event shall BREC's line be used to provide power in any area other than the north drift of Magmont West.

When an emergency arises due to a loss of power from AP&L and the mine is in danger of flooding, arrangements may be made to backfeed the BREC power to the pumps, provided Cominco has a manual disconnect switch which has the capability to be locked out of service to isolate the facilities of the mine from the facilities of AP&L.

When the emergency is over and AP&L's power is available, the BREC connection must be disconnected and isolated by removing a section of cable before the manual disconnect switch is closed to restore the AP&L connection.

Both BREC and AP&L shall be notified when these events occur and when the systems are back to normal.

Under no circumstances shall the two systems be connected at the same time.

Conclusions

The Missouri Public Service Commission has arrived at the following conclusions:

Cominco requests authority from the Commission for a partial change in electrical supplier pursuant to Sections 393.106 and 394.315, RSMo 1986, which provide in part:

Section 393.106 - Every electrical corporation and joint municipal utility commission shall be entitled to continue to supply retail electric energy to persons at structures at which service is being provided on August 13, 1986. Notwithstanding any other provision of law to the contrary, no electrical corporation or joint municipal utility commission shall be permitted or required to supply retail electric energy to any person at a structure where said person is receiving, or has within the last sixty days received, retail electric energy from another supplier of electric energy. Provided, however, that the commission may order otherwise after a finding that a change of

suppliers is in the public interest for a reason other than a rate differential. Except as provided in this section, nothing contained herein shall affect the rights, privileges or duties of existing corporations pursuant to this chapter.

Section 394.315 - Every rural electric cooperative shall be entitled to continue to supply retail electric energy to persons at structures at which service is being provided on August 13, 1986. Notwithstanding any other provision of law to the contrary, no rural electric cooperative shall be permitted or required to supply retail electric energy to any person at a structure where said person is receiving, or has within the last sixty days received, retail electric energy from another supplier of electric energy. Provided, however, that the public service commission may order otherwise after a finding that a change of suppliers is in the public interest for a reason other than a rate differential, and the commission is hereby given jurisdiction over rural electric cooperatives to accomplish the purpose of this section. Except as provided herein, nothing in this section shall be construed as otherwise conferring upon the commission jurisdiction over the service, rates, financing, accounting or management of any such cooperative, and except as provided in this section, nothing contained herein shall affect the rights, privileges or duties of existing cooperatives pursuant to this chapter.

AP&L argues that the statutes do not give the Commission the authority to grant requests for "partial" change of suppliers. AP&L states that these statutes speak in terms of a "change" of suppliers, not a "partial" change, and that the Commission has only those powers expressly granted by statute or reasonably incidental thereto. A "partial" change of supplier, AP&L argues, is not clearly authorized by the statutes.

The Commission determines that Sections 393.106 and 394.315 confer upon it the authority to authorize a partial change of supplier. Had the Missouri Legislature intended to limit the scope of these sections to "complete" or "total" change they would have done so. Instead, the statute speaks only of a "change". It is, therefore, a reasonable interpretation of the statute that it include "partial" change of suppliers.

In determining whether it is in the public interest to grant an application for a change of supplier, the burden of proof rests with the Applicant. In <u>Cuivre</u>

<u>River Electric Cooperative</u>, Inc., Complainant, v. Union Electric Company, Respondent,

29 Mo P.S.C. (N.S.) at 25, the Commission stated:



The Commission does not believe that customer preference by itself is sufficient reason to find that it is in the public interest to change suppliers. The Commission notes that the legislative intent of Sections 393.106 and 394.315, RSMo Supp. 1984, is to prevent duplication of facilities and the waste inherent in competing for customers. The purpose of these statutes would be defeated if customer preference alone was considered sufficient reason to change suppliers...Under the statutes, the customer or utility requesting a change of suppliers has the burden of proof to show that there is a reason for changing suppliers other than a differential in rates that would result in a benefit to the public.

The Commission finds that Cominco has met its burden of proof in this case.

The Commission has jurisdiction over Rural Electric Cooperatives with regard to matters of safety, pursuant to Section 394.140, RSMo 1986.

Having found that the Commission has jurisdiction over the instant application pursuant to Sections 393.106, 394.315, and 394.140, the Commission determines that a change of suppliers is in the public interest, for a reason other than a rate differential, and, therefore, the application should be granted upon the condition that the Applicant comply with the conditions of service as set forth herein.

The Commission also determines that the objections to page 37 and part of page 38 of Exhibit 10, and the objections to Exhibits 22 and 24 are overruled and those exhibits will be made part of the record. The objection to Exhibit 13 is sustained.

It is, therefore,

CRDERED: 1. That the Amended Application of Cominco American, Inc., for a partial change of supplier in the West Mine area and for "backup" power be, and it hereby is, granted on the condition that Applicant comply with the conditions of service as set forth in the body of this Report and Order.

ORDERED: 2. That the objection to part of Exhibit 10, and the objections to Exhibits 22 and 24, are hereby overruled and thereby made a part of the record.

ORDERED: 3. That the objection to Exhibit 13 is hereby sustained.

ORDERED: 4. That this Report and Order shall become effective on the 29th day of April, 1988.

BY THE COMMISSION

Harvey G. Hubbs Secretary

(S E A L)

Steinmeier, Chm., Musgrave, Mueller, Hendren and Fischer, CC., Concur and certify compliance with the provisions of Section 536.080, RSMo 1986.

Dated at Jefferson City, Missouri, on this 19th day of April, 1988.