In the Matter of the Application of	)	
PACIFICORP, dba Utah Power & Light	)	DOCKET NO. 01-035-38
Company for Approval of Provisions for the	)	
Supply of Electric Service to Magnesium	)	<u>ORDER</u>
Corporation of America.	)	

ISSUED: May 24, 2002

By the Commission:

### **HISTORY**

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This Docket results from the Application of PacifiCorp to resolve disputes it has with Magnesium Corporation of America (Magcorp). Magcorp is a large industrial customer which received electric service from PacifiCorp under a special service contract. The contract has been amended eight times since its origination in 1968. Prior to the expiration of the last amended contract, these two parties began negotiations to determine the terms and conditions under which electric service would continue to be furnished for Magcorp's Utah plant facilities. As the expiration date of the service contract neared, contract negotiations apparently stalled. Then, on August 2, 2001, Magcorp (and its parent, Renco Metals) voluntarily sought Chapter 11 bankruptcy relief in the United States Bankruptcy Court for the Southern District of New York. Although the latest service contract expired by its own terms on December 31, 2001, and the parties have been unable to agree to a mutually acceptable new contract, Magcorp continues to receive electric power service from PacifiCorp by order of the bankruptcy court.

In its December 14, 2001 Application, PacifiCorp asks the Commission to resolve the parties' impasse and resolve their disputes on the terms and conditions for service to Magcorp. Magcorp objected to proceedings before this Commission, which might alter Magcorp's service or set terms for service to Magcorp, absent bankruptcy court approval. However, in a March 5, 2002 pleading, Magcorp requested that the Commission resolve the dispute on an expedited schedule, and requested mediation of the dispute and disputes in Docket No. 02-035-02, relating to the terms and conditions of a contract with Magcorp as a PURPA qualifying facility. Through mediation, Magcorp and PacifiCorp have resolved and reached agreement on the qualifying facility contract. Interested parties joined with them in recommending Commission approval of that contract in Docket No. 02-035-02, and the Commission approved it May 16, 2002. No resolution of the disputes involved in this docket was reached and this matter was set for hearing on May 8 and 9, 2002.

At the May hearings, PacifiCorp appeared through counsel Edward A. Hunter, of the law firm Stoel Rives, LLP; the Division of Public Utilities (Division), Utah Department of Commerce, appeared through Kent Walgren, Assistant Attorney General, Utah Attorney General's Office; the Committee of Consumer Services (Committee), Utah Department of Commerce, appeared through Reed Warnick, Assistant Attorney General, Utah Attorney General's Office; and Magcorp appeared through Gary A. Dodge, of the law firm Hatch, James & Dodge. Magcorp presented evidence through witnesses Michael H. Legge, Lee Brown, and Roger J. Swenson. PacifiCorp presented evidence through witnesses Bruce W. Griswold, and David L. Taylor. The Division presented evidence through witness Dr. Laura Nelson. The Committee presented evidence through the testimony of Andrea Coon. The Commission heard from public witnesses on May 8, 2002.

# **POSITIONS OF THE PARTIES**

In this case, the parties ask the Commission to set a rate for electric service to Magcorp, a large retail customer. Magcorp requests non-firm, or interruptible, service at a price lower than that for firm service. All parties agree that large customers who are willing to receive interruptible service under certain conditions impose less cost on the utility

than do firm customers, and therefore warrant special pricing consideration. Each party provides analysis supporting its view on how best to consider special pricing for service to Magcorp, and makes recommendations regarding the rate, terms and conditions of service. Each party, however, tempers its recommendations with the recognition that further study of the value of interruptibility is required.

Magcorp witnesses testify that a price of 21 mills per kilowatt-hour for interruptible service, substantially below a firm tariff rate, can be justified. Magcorp's witnesses testify that Magcorp's operational capabilities permit it to be interrupted from the utility's service under circumstances which can lower system costs. Specifically, in addition to interruption for system emergencies, Magcorp states that its load can be interrupted 2 hours per weekday for 12 months and up to 8 hours per weekday depending on electricity buy-through terms and conditions and the number of months subject to interruption. In direct testimony, Magcorp proposed an eight-hour per weekday service interruption option in the months of July and August. This amounts to 360 hours of potential interruption. Magcorp's subsequent proposal, offered in response to the Division's recommendations, is to be interrupted two hours per weekday, twelve months of the year, with day ahead notice, and the option for Magcorp, at its discretion, to buy-through the interruption based on indexed, on-peak, firm rates. The price for power consumed during non-interrupted hours would be 21 mills per kilowatt hour. This amounts to 520 hours per year of potential interruption. Magcorp requests a term ending December 31, 2004, with a reopener no earlier than 18 months from the date of the contract, or December 31, 2003. At hearing, Magcorp stated its willingness to include a two-hour notice for interruption.

These witnesses testify that by curtailing service to Magcorp during the two-hour period, PacifiCorp may avoid the cost of generating electricity or purchasing it to serve Magcorp's load during periods when the cost is particularly high. Magcorp witnesses testify that a load shedding option was the justification for the discounted pricing Magcorp received through its initial contract and eight amendments during the past thirty years. Magcorp states that it is willing to continue to shed its load, and that the value of this non-standard or less than firm service should be reflected in the price it pays for the electricity it consumes. Magcorp wants prices, terms and conditions in a single, integrated contract, based on its need to estimate future costs for purposes of bankruptcy proceedings. The 21-mill pricing is in its view required to attract a potential buyer under the bankruptcy plan. Magcorp states that this rate, coupled with the terms and conditions proposed, amounts to a 17 to 39 percent increase in rates compared to its previous contract. Magcorp recommends characterizing the new contract as experimental, subject to further study of the cost and terms of interruptible service. Magcorp recommends the Commission establish a task force to study these issues.

All other parties acknowledge that interruption of the Magcorp load can lower system cost, but differ on the conditions necessary to achieve the lower cost. PacifiCorp's initial testimony recommends service to Magcorp at the firm service rate of 30.2 mills per kilowatt-hour. It then proposes to treat interruption under a separate agreement as a power purchase by PacifiCorp from Magcorp. PacifiCorp proposes to directly assign the costs of serving Magcorp to the Utah jurisdiction, a departure from the past practice of allocating these costs system wide to match the system wide benefits of interruption. PacifiCorp opposes including a price discount for interruptibility in one electric service agreement because that would assign a fixed value to potential interruptions, even though the value of interruption may vary, over the term of the agreement. If, in the alternative, a single contract is executed, PacifiCorp testifies that the terms and conditions of interruption necessary to justify a 21-mill rate require the potential to interrupt Magcorp eight months of the year, eight hours per day, six days per week, or a total of 1,600 hours per year. Otherwise, shareholders or other customers will be adversely affected. This is based on its embedded cost-of-service analysis. PacifiCorp later testifies that subsequent statistical analysis indicates six hours per day may be enough to justify this rate. This amounts to 1,200 hours per year of potential interruption. The term of this recommended agreement ends December 31, 2004. PacifiCorp proposes day-ahead interruption notice but indicates that the shorter the notice, the greater the value of interruption.

Based on its embedded cost-of-service analysis, the Division states that a rate for an integrated contract priced in the 21-mill range, to be compensatory, would require interruption opportunity over eight months of the year, eight hours per day, five days per week, totaling 1,440 hours per year. The eight months must include the peak summer months. The term of this recommended agreement is through December 31, 2004. To mitigate the impact on Magcorp of the resultant rate increase, the Division testifies that interruption terms and conditions could be phased-in over the contract term. The Division also recommends that the pricing, terms and conditions of the new contract should be considered a pilot, during which the proper value of interruptibility could be determined. Thus, the Division recommends reopening the contract after twelve months to consider adjustments. For purposes of this study, the Division supports establishment of

a task force.

Based on its embedded cost analysis, the Committee testifies that a cost compensatory rate for interruptible service is \$25.16 per megawatt hour. This rate assumes Magcorp loads can be curtailed when the PacifiCorp system is short of resources during summer and winter peak months. The Committee also testifies that the establishment of a task force for the study of interruptible cost of service is appropriate.

# DISCUSSION, FINDINGS AND CONCLUSIONS

The parties request that the Commission address, based on the evidence presented, four aspects of Magcorp service. Thereafter, PacifiCorp and Magcorp will negotiate remaining terms of a contract, incorporate the Commission's four determinations and present an integrated written service contract or two separate contracts for future consideration. These four aspects are, first, whether special pricing should be structured in one integrated contract or two separate contracts; second, the term of the service agreement and any reopening terms; third, a price for electric service to Magcorp; and fourth, interruption terms and conditions, including the times of day, week and year when interruption may occur, its duration, required notice, and the provisions according to which Magcorp may buy-through an interruption.

PacifiCorp proposes, with Division concurrence, to directly assign the contract to the Utah jurisdiction for ratemaking purposes. We do not address this recommendation in this Docket. Further, the Division and Magcorp recommend consideration of the Magcorp agreement as experimental or as a pilot for further study of cost-of-service pricing for interruptible service.

### A Single, Integrated Contract Versus Two Separate Agreements

All parties analyze the rate for interruptible service to Magcorp through a single, integrated agreement rather than as PacifiCorp proposes, a firm rate for electricity sales to Magcorp coupled with an additional agreement for payments to Magcorp for service interruption. PacifiCorp argues for its two-agreement approach based on its experience of the volatility and change in the value of interruption that can occur over time, and therefore the difficulty of assigning an unchanging value to it for the term of a contract. Since the term proposed by all parties for this agreement is less than three years, we view the risk of fixing a value today for interruption as less consequential than in the case of a longer-term contract. Support for this view comes from party recommendations to treat the Magcorp contract as experimental, subject to adjustment going forward. We conclude that a single, integrated agreement is reasonable.

#### Contract Term

All parties support a short-term agreement ending December 31, 2004. Due to the uncertain value of interruption on this record, we agree that this short term is reasonable. Based on this record, we are unsure of the number of hours of interruptibility required to justify a 21-mill per kilowatt-hour price, and conclude that a provision to reopen the contract to make adjustments, if study shows it to be necessary, is appropriate.

#### Price for Electric Service

Magcorp witnesses testify that the contract price for electric service from PacifiCorp, coupled with its proposed terms and conditions, cannot exceed \$21 per megawatt-hour (21 mills per kilowatt-hour) if the Company is to successfully exit bankruptcy. They believe that a price greater than this will deter interested bankruptcy parties, thus ending Magcorp's operations. Under questioning, Magcorp witnesses acknowledge that factors other than the price of electricity influence the bankruptcy proceedings and the prospects of avoiding bankruptcy liquidation. Indeed, Magcorp's witnesses testify that even if the Commission sets the price for electricity at 21 mills per kilowatt-hour, the price Magcorp desires, the Company may still be unsuccessful in maintaining operations or emerging from bankruptcy.

All other parties describe terms and conditions which they state could render compensating value to PacifiCorp and its firm retail customers from sales to Magcorp in the \$21 to \$25 per megawatt-hour range. For reasons stated below, we approve a \$21 per megawatt-hour rate for service to Magcorp, coupled with the terms and conditions of interruptibility we adopt in this order.

Our justification for a 21 mill per kilowatt-hour rate is based on the record before us, which contains embedded cost-of-service analyses of the value of interruptibility. PacifiCorp, the Division, and the Committee each introduces embedded-cost analysis to support its views of appropriate interruption price and terms. Each of these embedded-cost analyses is consistent with prior Commission rulings. Magcorp also provides an embedded-cost analysis to support its proposed terms, but proposes alterations which reduce cost of service. As noted by other witnesses, Magcorp's embedded cost-of-service proposals are ad hoc adjustments rather than coherent arguments for changes in allocation factors, the real basis of the cost-of-service results Magcorp disputes. Moreover, a critique of the results of an embedded-cost analysis must consider the impact of modifications on the entire customer base, not just a single customer. On the record before us, we will not adopt Magcorp's modifications. Instead, we employ the analyses of PacifiCorp, the Division and the Committee to define the areas within which we can consider the value of interruptibility.

Magcorp and the Division provide testimony concerning the application of the regulatory principle of gradualism in price changes. They testify that Magcorp price increases should be gradual rather than abrupt. We acknowledge that the concept of gradualism is a consideration and has been applied in past rate cases. We believe it is appropriate to price Magcorp's service at \$21 per megawatt-hour, which can be viewed as a gradual increase in the price Magcorp has paid. Given a \$21 price, we must arrive at a level of interruption which provides sufficient cost reduction to justify that price.

# **Interruption Terms and Conditions**

Time of day and year for interruption. All parties agree that interruption is of greatest value during the super peak hours of 1:00 pm to 9:00 pm, mountain daylight time. All parties also agree that interruption during the summer months has greatest value. All parties agree that the greater the number of months of interruptibility, the more likely interruption will reduce system cost by reducing monthly coincident peak demand.

Some testimony indicates that when the value of interruption is based on average embedded costs, a \$21 per megawatt-hour price requires eight months of interruption, with eight hours of interruption per peak day. Interruption over fewer months implies that the value of interruption, in terms of the costs PacifiCorp avoids, must be higher than average embedded cost. Because the cost of power is highest during peak hours of the summer months, to capture system cost efficiencies that may be greater than average embedded cost we conclude that Magcorp's load should be subject to interruption during the super peak hours of the summer months of June, July, August and September. To mitigate the impact on Magcorp and in recognition of the need for further study, we also conclude that in 2002, only the months of July and August will be subject to interruption. Magcorp has indicated that it has the ability to hedge its risk over this two-month period.

Duration and notice provisions for interruption, and buy-through rates, terms and conditions. The parties disagree on the number of hours per interruption necessary to justify a 21-mill rate for power. Magcorp argues two hours may be adequate. PacifiCorp argues for eight hours, though acknowledging six may be sufficient, to ensure that interruption occurs at the time of the coincident peak, and reduces rather than simply shifts that peak to a different hour. The Division assumes eight hours is required, but testifies that further study is necessary for confirmation.

In attempting to show what hours are required to ensure that interruptibility has value, Magcorp reviews PacifiCorp's past power costs, picks high-cost periods as those during which Magcorp could have been interrupted, sums the identified power costs, and equates this to the value of interruptibility. Other witnesses question whether this approach accurately characterizes the value of interruptibility. Identifying optimum interruption periods in the past, when data already shows peak, highest cost load periods, is not the same as selecting the proper time for future interruption. Data for future peak periods and associated costs is not available until they have passed. One must therefore predict the optimum time for a future interruption. That is the reason PacifiCorp and the Division specify an interruption window of eight hours per day: it is necessary to ensure a high probability that interruption will occur during the actual peak times of the day. Magcorp's initial testimony also uses an eight-hour window for its July and August interruption option. As noted, Pacificorp testified that an interruption period of six hours per day, six days per week, may provide a sufficiently high probability of success to obtain a value for interruption which could support the low price for electricity sought by Magcorp.

Magcorp plant processing operations place constraints on resolving this dispute as do other terms of interruption like the

length of notice prior to interruption and the option for Magcorp to buy-through an interruption at its own cost rather than interrupt its load.

While a processing cell at the Magcorp plant can be shut down with adequate notice, the operational aspects of an electric generation and transmission system obtain greater value from interruptions which can be achieved on comparatively shorter notice. Magcorp's witnesses testify that plant operations may be able to sustain an interruption lasting two hours. If electricity were not available for a period longer than two hours, processing facilities may be harmed and Magcorp could incur additional expense. While obviously desiring as much advance notice of an interruption as possible, Magcorp testifies that it is willing to accept short notice of interruptions to increase value to PacifiCorp's operations. This increased value can then justify a lower price for electric service. Party recommendations attempt to accommodate the conflicting drivers of providing notice of interruptions, short duration of interruption and planning opportunities that could lessen Magcorp service rates, while also providing planning and interruption opportunities that reduce the cost of providing utility service. We conclude that since Magcorp can respond to a two-hour notice, and since this shorter notice has value to PacifiCorp, we adopt a two-hour notice.

In an effort to address the impacts on Magcorp's physical plant facilities and production processing, no party opposes a contract provision which would allow Magcorp to buy-through a proposed interruption. In a buy-through situation, Magcorp has the opportunity to weigh the costs it incurs in accepting an actual interruption of electricity to its plant compared to the costs of continuing processing operations with "alternative" electricity. This alternative electricity would be delivered by Pacificorp to the Magcorp plant in lieu of a physical interruption of electric power. Its source would vary, based upon available generation sources and transmission capabilities at the time of the proposed interruption.

While a buy-through provision can address some of Magcorp's needs, it also raises another area of contention between Magcorp and PacifiCorp, the price for such power. Costs are incurred in securing and delivering electric power when Magcorp elects to buy-through. All parties agree that compensation must be paid for electricity that is delivered when Magcorp elects to buy through, rather than have no electricity delivered. Magcorp and PacifiCorp witnesses testify that a price based upon an existing electric power index would provide Magcorp with the cost information needed when deciding whether to buy-through an interruption. Other witnesses believe that the actual costs to secure and deliver electricity during a buy-through situation likely will vary from an index price.

We will authorize a buy-through provision in the contract at a rate based on a published index. When buy-through occurs, PacifiCorp must remove Magcorp's load from operational data in order to recognize reduction in load for system and jurisdictional cost-of-service purposes.

Based on the current record and these decisions, we agree that the eight- or six-hour interruptibility period is needed. All witnesses agree that there is little information upon which to make an evaluation of the predictive capability of shorter interruption periods. This is a reason further study is required. In Magcorp's view, service under a new contract should be viewed as an experiment to test the validity of current views and analyses relative to the impact of interruptibility on PacifiCorp's system operation and costs, develop better operational tools or procedures to capture the benefits of interruptibility, and develop better methods to determine the value of interruption.

All witnesses agree that, based on the present record, there is no single, definitive way to resolve these issues. They have reached different recommendations for interruption and its value. They also present various proposals of terms and conditions which they believe could translate the value of interruptibility into a service contract which results in a just and reasonable rate for electricity delivered to Magcorp. Consequently, the Commission finds value in approving rates, terms and conditions for Magcorp that will be considered experimental.

Accordingly, we conclude that the six hour, five days per week, July and August interruption scenario be used in the year 2002, and the six hour, five days per week in June, July, August and September interruption scenario be used in 2003, and thereafter unless the contract is reopened. We establish a task force to study the value of interruption and in addition to report to the Commission on the adequacy of the terms of this contract. A reopener to the contract will be allowed no earlier than December 31, 2003, if changes are warranted.

# **ORDER**

Based upon the foregoing, the Commission orders as follows:

- 1. PacifiCorp and Magcorp shall submit a written contract for Commission approval, incorporating the decisions made in this order, providing the terms and conditions for electric service to Magcorp.
- 2. The Division of Public Utilities shall initiate and undertake a study of the benefits of interruptible service and how they may be captured to the advantage of PacifiCorp and its customers, consistent with the public interest. The Division of Public Utilities shall also monitor and analyze the operational performance of the interruptible service provided to Magcorp and provide an annual report to the Commission, beginning October 31, 2002. This report should provide information comparing results of operation with anticipated benefits and recommendations on appropriate terms and conditions of service as analyzed experience with this interruptible load is gained. Interested parties should contact the Division of Public Utilities to participate in the study and, to the extent appropriate, in the analysis of the Magcorp experiment.

DATED at Salt Lake City, Utah, this 24<sup>th</sup> day of May, 2002.

/s/ Stephen F. Mecham, Chairman

/s/ Constance B. White, Commissioner

/s/ Richard M. Campbell, Commissioner

Attest:

/s/ Julie Orchard
Commission Secretary

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