

**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

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In The Matter Of The Petition Of US )  
Magnesium LLC For Approval Of A )  
Contract For The Sale Of Capacity ) Docket No. 03-035-38  
And Energy From Its Existing And )  
Proposed Qf Facilities )

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DIRECT TESTIMONY

OF

BRUCE W. GRISWOLD

August 13, 2004

1 **Q. Please state your name, business address and position with PacifiCorp dba Utah**  
2 **Power & Light Company (the Company).**

3 A. My name is Bruce W. Griswold. My business address is 825 N. E. Multnomah, Suite  
4 600, Portland, Oregon 97232. I am a Manager in the Origination section of the  
5 Company's Commercial and Trading Department.

6 **Qualifications**

7 **Q. Please briefly describe your education and business experience.**

8 A. I have a B.S. and M.S. degree in Agricultural Engineering from Montana State and  
9 Oregon State, respectively. I have been employed with PacifiCorp over eighteen  
10 years in various positions of responsibility in retail energy services, engineering,  
11 marketing and wholesale energy services. I have also worked in private industry and  
12 with an environmental firm as a project engineer. I currently work in the Commercial  
13 and Trading Business unit of PacifiCorp. My responsibilities are wholesale and large  
14 retail transactions including the negotiation and management of the non-tariff power  
15 supply and resource acquisition agreements with PacifiCorp's largest retail customers.

16 **Q. Have you previously appeared in any regulatory proceedings?**

17 A. Yes. I have appeared in proceedings in Utah and Idaho.

18 **Purpose of Testimony**

19 **Q. What is the purpose of your testimony?**

20 A. In December of last year, US Magnesium filed the testimony of Mr. Roger Swenson,  
21 together with a proposed contract for purchases from its generating facility  
22 ("Facility"). Since that time, the Commission has approved a stipulation  
23 ("Stipulation") in Docket No. 03-035014, which establishes the prices, terms and

1 conditions applicable for purchases from Qualifying Facilities (“QF”), including that  
2 Facility. As a result, that testimony and proposed contract would no longer appear to  
3 represent US Mag’s position on the issues in this case. In addition, the Commission  
4 has recently approved an agreement (“Agreement”) for purchases by the Company  
5 from the Desert Power QF. As a result, my testimony will address the Stipulation  
6 and the Agreement and discuss how they have affected this proceeding. I will also  
7 discuss some of the contract terms and conditions that still need to be resolved..

8 **Q. Please summarize the Stipulation..**

9 • A. Among its other provisions, the Stipulation established the prices paid for  
10 power purchased from QFs by the Company, subject to any appropriate  
11 adjustments to the price for the specific operating characteristics of the QF on a  
12 contract-by-contract basis. It also provided two options for the QF to be eligible  
13 for those prices. Those two options as called out in Appendix A of the Stipulation  
14 were:

- 15 1. if the Company has the right to dispatch the QF, then the QF must  
16 commit to meet an 85% monthly availability factor; or
- 17 2. if the Company has the right to preschedule on a day-ahead basis the  
18 QF delivery of power at contract capacity, the QF must commit to  
19 meet an 85% monthly capacity factor.

20 In the Stipulation, "dispatch" means a day-ahead pre-schedule of desired  
21 operating levels with the Company holding the right to make adjustments to  
22 the schedule during the day of delivery (subject to agreed upon machine  
23 limitations and the availability of fuel).

1 The Stipulation also provides two options to the QF for the scheduled and delivered  
2 energy payment. The QF can be paid for scheduled energy on a fixed price per MWh  
3 basis or it can be paid based on a fixed heat rate times the daily gas index, both as  
4 identified in Appendix A of the Stipulation.

5 During non-scheduled hours, the QF has the right to put the energy to PacifiCorp as  
6 non-firm energy for which it would receive 93% of hourly shaped Dow Jones Palo  
7 Verde Firm energy prices.

8 **Q. What is your understanding of US Magnesium's position relative to the**  
9 **Stipulation?**

10 A As I mentioned earlier, prior to the stipulation, US Magnesium initiated this  
11 proceeding to obtain an order requiring PacifiCorp to purchase all power and energy  
12 offered t from its Facility under the terms and prices specified in its draft contract.

13 **Q. Did US Magnesium participate in the settlement negotiation leading up to the**  
14 **Stipulation?**

15 A. Yes. Both Mr. Lee Brown of US Magnesium and Mr. Roger Swenson, its consultant,  
16 actively participated in the settlement negotiations that lead to the Stipulation. US  
17 Magnesium agreed to and signed the Stipulation.

18 **Q. How does the Stipulation affect US Magnesium's petition for a QF contract?**

19 A. The Stipulation sets the base contract prices that US Magnesium would receive for  
20 selling power to the Company as a QF if they complied with the outlined conditions  
21 in Appendix A of the Stipulation. US Magnesium must both its dispatch option and  
22 its energy payment option. Once this selection is made, any adjustments to the

1 Stipulation prices and / or other contract terms are specific to the Facility's operating  
2 characteristics, location and ability to procure fuel.

3 **Q. What is your understanding of US Magnesium's selection of its dispatch option?**

4 A. The Company's understanding is that US Magnesium has chosen option 2 in the  
5 Stipulation. In this option, the Company has the right to preschedule on a day-ahead  
6 basis the delivery of power at contract capacity by US Magnesium and they commit to  
7 meet an 85% monthly capacity factor. During non-scheduled hours, US Magnesium,  
8 as a QF, has the right to put the energy to PacifiCorp as non-firm energy for which  
9 they would receive 93% of hourly shaped Dow Jones Palo Verde Firm energy prices.

#### 10 **Discussion of Contract Terms and Conditions**

11 **Q. Have a number of the contract issues identified in US Magnesium direct**  
12 **testimony been addressed?**

13 A. Yes. First, the Stipulation establishes the prices and conditions that US Magnesium  
14 must comply with to receive those prices. Second, the Desert Power Agreement  
15 provides a template for contract negotiations with US Magnesium. Mr. Swenson,  
16 who is the consultant for both US Magnesium and Desert Power, has indicated a  
17 willingness to utilize the basic structure of the Desert Power Agreement for the US  
18 Magnesium agreement. While there remain a number of open issues to be addressed  
19 and some of the language will need to be modified to fit US Magnesium's operation,  
20 the basic structure of a purchased power agreement ("PPA") for US Magnesium  
21 appears to be complete. It is also my understanding from Mr. Swenson that at this  
22 time US Magnesium does not intend to expand its Facility as proposed in its latest  
23 FERC filing. This affects some of the fundamental terms in the PPA for the Facility

1 as well as the overall operational and security components of the PPA. I have listed  
2 them below and will address them individually.

- 3 1. Identification of Facility configuration and selection of energy payment  
4 structure per the Stipulation (i.e., fixed energy price or daily gas index times  
5 the stipulated heat rate)
- 6 2. Security issues, including the amount and type of security required;
- 7 3. Default and Remedies, including what constitutes a default and the remedies  
8 available, specifically involving the costs to cover such a default;
- 9 4. Delivery, Operation and Control issues, including issues regarding dispatch  
10 and scheduling of the Facility by the Company; and
- 11 5. Liability and Insurance issues, including the appropriate insurance limits.

12 **Q. Is US Magnesium’s current plan for the Facility configuration different than the**  
13 **configuration mentioned in Mr. Swenson’s direct testimony?**

14 A. Yes, my understanding is that US Magnesium will not expand or convert the existing  
15 simple-cycle combustion turbine (“SCCT”) to a combined-cycle combustion turbine  
16 (“CCCT”) at this time. While they have filed an expansion with FERC for self-  
17 certification, Mr. Swenson has indicated US Magnesium will not expand its Facility  
18 at this time. The size, output and schedule of the Facility affect other issues in the  
19 PPA such as security. Additionally, US Magnesium needs to select the energy  
20 payment structure as defined in the Stipulation. This selection will also impact the  
21 amount and structure of security.

22 **Q. How does PacifiCorp address risk mitigation in its QF Contracts?**

1 A. PacifiCorp must be able to rely on the financial capability of its QF suppliers to  
2 deliver the energy that the Company has contracted to purchase. This is necessary to  
3 maintain ratepayer protection. Accordingly, PacifiCorp includes in the PPAs for both  
4 large and small QFs, commercially reasonable terms addressing security, insurance  
5 and other necessary forms of risk mitigation. **Q. Please describe the Company's**  
6 **position on Security as it applies to QF contracts in general.**

7 A. The amount of the required security is determined by a number of factors including  
8 the following: (a) the length of the QF PPA, (b) the avoided cost payment to the QF  
9 (c) the type of QF, (d) the amount and type of insurance that the QF owner carries on  
10 the QF, (e) the quality of design and construction of the QF, (f) the funds available for  
11 QF maintenance, (g) the availability and form of a lien on the QF to the Company,  
12 and (h) PacifiCorp's ability to schedule and / or dispatch the QF. These components  
13 are then used to determine a reasonable level of security to set aside for two Security  
14 needs: (i) not meeting the agreed Commercial Operation Date and (ii) to mitigate the  
15 risk in the event of default by the QF.

16 **Q. Does the proposed US Magnesium QF contract provide for a reasonable level of**  
17 **security?**

18 A. No. The US Magnesium's proposed PPA as submitted with Mr. Swenson testimony  
19 does not detail the amount of collateral that would be necessary to secure the size and  
20 duration of the firm scheduled deliveries by US Magnesium. By the term firm I am  
21 referring to a unit contingent product, with reserves provided by PacifiCorp. Like the  
22 Desert Power Agreement, the US Magnesium Facility will be a resource that the  
23 Company is counting on for power deliveries and, in the event of default, the

1 Company needs adequate collateral to secure those deliveries. While the total amount  
2 of collateral may be different, the security provision developed in the Desert Power  
3 Agreement, which provides the Company with an initial letter of credit and monthly  
4 withholding to meet the total security level and then releases the funds back to the  
5 QF, is a reasonable approach to use with US Magnesium.

6 **Q. Please describe the Company's position on Defaults and Remedies as it applies to**  
7 **QF contracts in general.**

8 A. These provisions, as all risk mitigation provisions do, protect the ratepayer and  
9 Company from counterparty non-performance. This is important because the  
10 Company plans on power from the QF as being available as contracted for. If the QF  
11 is unable or unwilling to perform, then the Company must take alternative actions in  
12 order to meet its obligation to serve.

13 **Q. Does the contract proposed by US Magnesium provide adequate provisions for**  
14 **default and remedies?**

15 A. No. The US Magnesium proposal eliminates the default provisions included in the  
16 generic GF PPA on file with the Commission, including the provision for default in  
17 the event of bankruptcy, and modifies other provisions including how PacifiCorp's  
18 cost to cover would be calculated in the event of default. None of US Magnesium's  
19 proposed variations from the generic QF PPA is acceptable to the Company because  
20 they fail to protect the Company from the specific default conditions identified in the  
21 QF PPA. In other words, while some aspects of the default provisions would remain  
22 under US Magnesium's proposed PPA, the Company, and ultimately its ratepayers,  
23 would be left without adequate remedy in the event of default.



1 **Q. Do you have any other specific comments regarding the default and remedy**  
2 **provisions proposed by US Magnesium?**

3 A. Yes. US Magnesium's definition of Replacement Price and its use in its draft QF  
4 PPA is inappropriate. First, US Magnesium has identified the point of delivery for  
5 power that PacifiCorp must procure during QF default as a main receipt point on  
6 PacifiCorp's transmission system as opposed to the contractual Point of Delivery.  
7 PacifiCorp's generic QF PPA is priced based on delivery by the QF to a specific  
8 agreed physical location and PacifiCorp could incur additional costs to effectuate the  
9 delivery of an alternative supply source. It is unreasonable to expect the Company  
10 and customers to be considered indifferent to power delivered anywhere on the  
11 Company's transmission system as compared to power delivered at the contractual  
12 Point of Delivery.

13 Second, in the event of default, US Magnesium limits its financial exposure  
14 for the Company's cost to cover replacement power costs. While covering  
15 replacement Power Costs is a reasonable approach, the time period that coverage  
16 should apply to must be specified. As with Desert Power, the Company believes a  
17 thirty-six (36) month period is adequate to replace this size of resource. Otherwise,  
18 customers will be exposed to additional costs during the period of replacement.

19 **Q. Please describe how the Company covers Delivery, Control and Operation as it**  
20 **applies to QF contracts in general.**

21 A. These three issues are individually negotiated with the QF project based on the  
22 specific operating characteristics of the QF project. The only general Control and

1           Operation requirements are those that cover safe operations of the physical system  
2           and notification of scheduled maintenance.

3   **Q.    Are the Control and Operation characteristics of the US Magnesium Facility**  
4   **clearly established?**

5   A.    No.  At this point, US Magnesium has indicated that they are selecting Option 2 as  
6   called out in the Stipulation which means that PacifiCorp has the right, but not the  
7   obligation to day-ahead preschedule firm power deliveries by US Magnesium.  That  
8   nomination by US Magnesium provides the general level of control and operation  
9   afforded the Company, but the specifics have not been agreed to by US Magnesium  
10   and the Company.  US Magnesium had initially in their draft PPA identified their QF  
11   project as a fully dispatchable QF generation unit.  However, the language in Section  
12   6.5 of US Magnesium’s proposed PPA states that their deliveries are to be a day-  
13   ahead prescheduled.  To accomplish this, the contract language will require  
14   modification and detail to describe firm deliveries.  The Company believes that the  
15   Desert Power PPA section that describes operation and control with modifications to  
16   reflect only a day-ahead preschedule option would provide adequate description and  
17   detail.  Per the Stipulation, US Magnesium has the right but not the obligation to sell  
18   power to PacifiCorp in non-scheduled hours at the non-firm price of 93 percent of the  
19   hourly-shaped Palo Verde firm on and off-peak index price.

20   **Q.    Please describe how the Company deems the QF to be commercially operational**  
21   **and what remedies are implemented for failure to meet the specified date of**  
22   **commercial operation.**

1 A. The generic QF PPA has two key operation dates. The first is the Scheduled  
2 Commercial Operation Date which is specified by the QF. The second is the  
3 Commercial Operation Date and is the actual date that the QF project is deemed by  
4 the Company to be fully operational and reliable. The Company has established eight  
5 specific criteria that must be met by the QF to be deemed “commercially operational”.  
6 Many of the criteria are verified by an independent party, a Licensed Professional  
7 Engineer, who will certify to the Company that the QF is commercially operational.  
8 Once the Scheduled Commercial Operation Date is set by the QF in the PPA and the  
9 PPA is signed by both parties and approved by the Utah Commission, the  
10 implementation and verification process starts. The responsibility to achieve the  
11 Scheduled Commercial Operation Date is now with the QF project. In the event the  
12 QF does not complete the eight criteria by the Scheduled Commercial Operation Date,  
13 the Security and Default provisions as described in my earlier testimony are invoked.  
14 Since this date is set by the QF, the QF is in the best position to plan a construction  
15 schedule that is achievable. This is important since the Company is entering into the  
16 QF agreement in lieu of taking other prudent actions to meeting its load service  
17 obligations.

18 **Q. How does US Magnesium’s proposed PPA contract differ?**

19 A. The Company is uncertain as to how US Magnesium will proceed with any  
20 modification of its existing QF. The proposed US Magnesium PPA had a number of  
21 changes that reflected a physical expansion to its existing Facility. If US Magnesium  
22 does not proceed with an expansion then this issue is moot since its existing Facility is  
23 currently operational and would be operational on the Scheduled Commercial

1 Operation Date barring any forced outage event. If US Magnesium decides to modify  
2 and expand its Facility, then the Commercial Operation Date issue would apply. If  
3 we assume that the Facility is expanded as described in the proposed PPA, then the  
4 first issue is that US Magnesium's proposed PPA modifies the Scheduled  
5 Commercial Operation Date to allow US Magnesium to change the date pending  
6 approval of the Effective Date. Second, US Magnesium has modified the  
7 Commercial Operation Date language to eliminate some of the criteria required for  
8 commercial operation and has made US Magnesium the final decision maker. . This is  
9 not acceptable because, as I mentioned earlier, PacifiCorp views a QF like any other  
10 power resource. PacifiCorp must be able to rely on the capability of its QF suppliers  
11 to deliver the energy that the Company has contracted to purchase. Having the  
12 operating performance and reliability verified by a third party is critical to that goal.

13 **Q. Please describe what Indemnification, Liability and Insurance requirements the**  
14 **Company applies in the generic QF PPA.**

15 A. The Indemnification, Liability and Insurance requirements in the QF PPA are set to be  
16 consistent with the Company's general risk and insurance requirements.

17 **Q. How does the US Magnesium proposed PPA differ?**

18 A. US Magnesium's Indemnification clauses are not acceptable as written. US  
19 Magnesium as the seller of power is responsible for energy and facilities up to and  
20 including the Point of Delivery. PacifiCorp is responsible for the energy and facilities  
21 after the Point of Delivery. However, US Magnesium has not agreed to indemnify  
22 PacifiCorp at the Point of Delivery for facilities, nor have they agreed to indemnify  
23 PacifiCorp for the energy up to and at the Point of Delivery. For the most part, the

1 insurance requirements as written in US Magnesium's proposed PPA are consistent  
2 with PacifiCorp's requirements.

3 **Q. What other terms and conditions should be included in the US Magnesium**  
4 **PPA.?**

5 A. As I indicated earlier in my testimony, the Company believes that the Desert Power  
6 QF PPA resolved issues on a number of terms and conditions. It is the Company  
7 position that it would support inclusion of the following provisions as written in the  
8 Desert Power QF PPA into US Magnesium Facility PPA.

9 1. Lines losses of 4.92% added on scheduled and non-scheduled energy delivery  
10 by US Magnesium to PacifiCorp and replacement energy purchased by  
11 PacifiCorp.

12 2. Inflation increase on fixed O&M component of the capacity payment as  
13 defined in the Desert Power PPA.

14 **Q. Does this testimony address all the concerns with Desert's QF Agreement?**

15 A. No. For example, the performance of the US Magnesium Facility may be impacted  
16 by the terms and conditions of any interruptible service agreement US Magnesium  
17 enters into with the Company. For instance, it is not clear how the Facility could be  
18 dispatched if US Magnesium is subject to interruption at the same time. We hope to  
19 get a better understanding of US Magnesium position on operation and contract issues  
20 in the discovery and discussion process. Based on what we find out, we will address  
21 other issues in later testimony.

22 **Q. Does this conclude your testimony?**

23 A. Yes it does.