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**BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

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IN THE MATTER OF THE APPLICATION  
OF US MAGNESIUM LLC FOR  
APPROVAL OF A QF CONTRACT

Docket No. 03-035-38

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**PREFILED SUPPLEMENTAL TESTIMONY OF ROGER J. SWENSON**

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US Magnesium LLC hereby submits the Supplemental Testimony of Roger J. Swenson in  
Docket 03-035-38.

DATED this 15<sup>th</sup> day of November, 2004.

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Gary A. Dodge,  
Attorney for US Magnesium LLC

PREFILED SUPPLEMENTAL TESTIMONY

Of

ROGER J. SWENSON

On behalf of US Magnesium LLC

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IN THE MATTER OF THE APPLICATION OF US MAGNESIUM LLC FOR APPROVAL OF  
A QUALIFYING FACILITY CONTRACT FOR THE SALE OF POWER TO PACIFICORP

Docket No. 03-035-38

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November 15, 2004

1    **Q.    What is the purpose of this supplemental testimony?**

2    A.    US Mag’s original petition in this docket, filed in December 2003, sought pricing  
3           and terms for a long-term firm QF arrangement and attached a proposed firm QF  
4           contract submitted for approval. Since that time, US Mag has participated  
5           extensively with others in reaching a comprehensive stipulation (“QF  
6           Stipulation”) in the large QF pricing docket, 03-035-14, and has engaged in  
7           numerous discussions and negotiations with PacifiCorp, the Division and the  
8           Committee. US Mag has determined that a non-firm QF arrangement is in its best  
9           interest. This supplemental testimony will explain why US Mag is now  
10          requesting a non-firm power sales contract rather than a firm agreement.

11                 Submitted for approval with this supplemental testimony is a non-firm QF  
12          contract that has been negotiated between PacifiCorp and US Mag. As explained  
13          by Mr. Griswold in his Rebuttal Testimony in this docket dated September 17,  
14          2004, several weeks ago PacifiCorp and US Mag reached tentative agreement on  
15          terms and conditions for the attached contract that are fully consistent with the QF  
16          Stipulation. Dr. Powell’s Direct Testimony in this docket dated September 10,  
17          2004, also recognizes that the terms of the agreement between US Mag and  
18          PacifiCorp are generally consistent with the QF Stipulation. However, while the  
19          Division and Committee have not filed testimony in this docket explaining any  
20          concerns, my understanding is that some parties might have some concerns  
21          regarding the proposed 20-year term of the agreement and/or the transmission loss

1 adjustment. This supplemental testimony will also explain why both of these  
2 contractual terms are appropriate and fully consistent with the QF Stipulation.

3 **Q. Why did US Magnesium decide to request a non-firm agreement?**

4 A. There are four primary reasons why US Magnesium decided to pursue a non-firm  
5 agreement rather than a firm agreement: (1) To provide backup power supplies to  
6 US Magnesium during interruptions to US Magnesium's electric service; (2) The  
7 economics of US Mag's operations are such that QF generation may not be  
8 economical at certain times; (3) To avoid burdensome credit requirements  
9 requested by PacifiCorp for a firm contract; and (4) US Magnesium is currently  
10 exploring alternative electric generation scenarios that may require contractual  
11 changes in the future.

12 **Q. With respect to the first reason, why does US Magnesium need a backup  
13 power supply?**

14 A. US Magnesium's power supply arrangement is based upon interruptible  
15 deliveries. In the event of physical interruptions, US Magnesium must have the  
16 capability to meet its critical power needs in some manner. This onsite generating  
17 capability has as times been cited as a reason why US Magnesium can tolerate  
18 interruptible service. Given the significant potential physical interruptions  
19 contemplated under power supply arrangements in 2005 and beyond, our need for  
20 QF flexibility is much greater.

1 **Q. Your second reason for a non-firm arrangement references economics of QF**  
2 **generation. Can you explain why the cost of QF generation is a factor in**  
3 **seeking a non-firm contract?**

4 A. Yes. The heat requirements of the magnesium facilities can be produced either  
5 through the QF generation facilities or by other systems that utilize natural gas. It  
6 makes sense for US Mag to operate the QF facilities only when the net cost of  
7 running the generation system is less than the net cost of running the alternative  
8 systems. When the cost of the extra gas and O&M to produce power are greater  
9 than the value received from running the generation and selling the output, it  
10 makes no sense to run the QF generation except during interruption conditions.  
11 The economics of QF generation is very close to break-even when compared to  
12 alternative sources of heat at this time. A firm QF contract might require us to  
13 operate the QF facilities even when it is not economical.

14 **Q. How about the third factor, the credit requirements for a firm service**  
15 **agreement?**

16 A. We are familiar with the substantial credit requirements imposed on Desert Power  
17 for a firm agreement. Those requirements would be very difficult for US Mag to  
18 meet.

19 **Q. Please comment on the fourth factor, the alternative generation systems that**  
20 **US Magnesium is exploring.**

21 A. US Magnesium is looking into increasing the size of its generation, if economics  
22 permit. US Magnesium is also looking at various operating changes that would

1 allow the plant to use clean coal technologies. Any change of this type would  
2 likely involve large capital outlays and would likely necessitate different  
3 contractual conditions in order for the project to obtain financing. The flexibility  
4 to negotiate an alternative arrangement is greater under a non-firm arrangement.

5 **Q. Please generally describe the terms of the contract that US Magnesium has**  
6 **negotiated with PacifiCorp and submitted for approval.**

7 A. The contract has a 20-year term, as expressly authorized by the Commission-  
8 approved QF Stipulation. The non-firm pricing, also based on the approved QF  
9 Stipulation, uses published Palo Verde index prices discounted by 7% to reflect  
10 the value of operating reserves. Under the approved QF Stipulation, this is the  
11 price that a firm contract customer receives when it runs in non-dispatch hours.

12 **Q. Why is a 20-year term appropriate?**

13 A. The 20-year term was expressly negotiated by US Mag and others in the QF  
14 Stipulation and was approved by the Commission. Denying US Mag the benefit  
15 of the Stipulation that it helped negotiate would be unfair and inappropriate.  
16 Others have received such a term and there is simply no legitimate reason to deny  
17 it to US Mag. Moreover, a non-firm agreement with an energy price tied to a  
18 widely-used index should not present any significant concerns.

19 **Q. What about the line loss factor included in the contract?**

20 A. This factor is also based on the QF Stipulation and on the approved Desert Power  
21 contract. The QF stipulation specified in section 5 that “appropriate adjustments”  
22 would be made to the prices based on operating characteristics of each specific

1 plant. One such operating characteristic that is clearly relevant and appropriate is  
2 the degree to which a specific QF facility avoids line losses that would occur if the  
3 utility generated or purchased an equivalent amount of energy. Applicable federal  
4 regulations, 18 CFR Ch. 1 292.304, Rates for Purchases, clearly identify avoided  
5 line losses as one of the factors that should be taken into account in setting  
6 avoided cost rates. See Exhibit USM 1S.1. This obviously-relevant factor was  
7 recognized as such in the Desert Power QF contract, which included a  
8 compromise line loss adjustment percentage of 4.92%. Since US Magnesium is at  
9 the very same location, it makes sense to use this same percentage, and that is the  
10 percentage that was negotiated with PacifiCorp for use in the contract that is  
11 submitted for approval.

12 I can demonstrate from an engineering perspective that avoided line losses  
13 for this site should be much higher. In fact, a 1995 line loss study prepared by  
14 PacifiCorp, attached hereto as Exhibit USM 1S.2, shows that line losses to the  
15 Rowley substation located at the US Mag site were 7.2%, assuming a load of 80  
16 MW. We remain willing to accept the Desert Power compromise value of 4.92%.

17 However, if other parties who accepted the benefit of that compromise in the  
18 Desert Power case refuse to continue to accept it here, we submit that the  
19 appropriate line loss adjustment should be at least 7.2%

20 **Q. Does this complete your testimony?**

21 **A. Yes.**

## CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was served by email or US Mail, postage prepaid, this 15<sup>th</sup> day of November, 2004, on the following:

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