

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of)
PACIFICORP for Approval of an)
IRP-Based Avoided Cost Methodology) Docket No. 03-035-14
For QF Projects Larger than One)
Megawatt)

REBUTTAL TESTIMONY OF BRUCE GRISWOLD

May 6, 2004

1 **Q. Please state your name and business address.**

2 A. My name is Bruce Griswold. My business address is 825 NE Multnomah, Suite 600,
3 Portland, Oregon 97232.

4 **Q. Are you the same Bruce Griswold that filed direct testimony in this case?**

5 A. Yes.

6 **Q. What is the purpose of your rebuttal testimony?**

7 A. I am responding to the direct testimony of Desert Power and US Magnesium witness,
8 Mr. Swenson, regarding Schedule 38 and providing comments on why Schedule 38
9 has worked as intended and approved by the Utah Commission. I will also be
10 providing testimony to clarify the avoided cost adjustments from my direct testimony
11 and refute comments regarding the adjustments included in the testimony of Mr.
12 Swenson and Committee of Consumer Services witness, Mr. Hayet.

13 **Q. What is the purpose of Schedule 38?**

14 A. Schedule 38, Qualifying Facilities Procedure, is an existing, approved schedule of the
15 Company that was the result of a work-group that included many parties participating
16 in the development and negotiation of the procedures in this tariff. Its purpose is to
17 provide the steps and schedule that both the Company and a proposed QF work
18 through to determine indicative or estimated avoided costs for a proposed QF project.
19 The tariff very clearly lays out the required information to be provided by the QF that
20 the Company needs to prepare the indicative prices for the proposed QF project.
21 Even a QF project in the conceptual stage by the developer should have most of the
22 information collected since it is necessary information for the design and construction
23 of the QF project. As the procedure outlines, the more complete and clear the

1 information provided by the developer, the less chance of a delay in developing and
2 providing indicative prices.

3 **Q. Has Schedule 38 worked as it was intended?**

4 A. Yes. Schedule 38 has worked as the task force intended it to. It provides the QF
5 developer a clear road map to work through its project details to secure indicative
6 prices from the Company and determine its own economics. If the QF wishes to
7 proceed with the project, there is a procedure that both parties follow through contract
8 negotiations. Schedule 38 was intended, however, to be used by serious projects that
9 had already performed their own engineering and financial analysis. It was not
10 intended to allow a QF developer to come to the Company with vague requests or
11 insufficient details hoping to have the Company design and size their QF.

12 **Q. Did US Magnesium and Desert Power comply with Schedule 38?**

13 A. No. US Magnesium's initial request for indicative pricing in October 2002 was
14 confusing and unreasonable. At that time, even though Schedule 38 had not formally
15 been approved by the Commission, the Company agreed to follow the Schedule 38
16 procedure. However, the Company didn't anticipate that US Magnesium would treat
17 the procedure as a way to obtain engineering and financial consulting service. US
18 Magnesium began by requesting indicative pricing for no less than ten (10) various
19 QF configurations and two (2) different lengths of contracts. In all, they asked for
20 twenty (20) sets of indicative prices in their initial request without the supporting
21 documentation required by Schedule 38, section I.B.2. This was obviously not done
22 in the spirit of what the Schedule intended. The Company responded as shown in
23 Exhibit UP&L_____ (BWG-1R), with a request that US Magnesium narrow the

1 evaluation and provide clarification of the QF project details, including details
2 regarding the involvement of Desert Power in a joint project. Without that
3 information, it was difficult, if not impossible, to provide a response within US
4 Magnesium's proposed schedule.

5 Over the first half of 2003, the Company continued to work with US
6 Magnesium on the various QF configurations they requested, providing them an all-in
7 indicative price per MWh so they could run their pro forma models. This was despite
8 the fact that they failed to provide the specific documentation requested.

9 US Magnesium continued to ignore requests for more specific documentation
10 of its proposed project and, when US Magnesium requested final pricing for a
11 combined US Magnesium/Desert Power QF project in July 2003, it had failed to
12 provide the documentation required under sections I.B.2, and I.B.4 of Schedule 38.
13 To add to the confusion, in September 2003, the Company received a third request for
14 indicative pricing for a proposed 284MW QF to be developed by another party, but
15 located at the US Magnesium site. As a result, it was even more unclear what was
16 going to be built at the site and how it was going to operate. In late 2003, the
17 Company finally obtained copies of the FERC QF self-certifications for US
18 Magnesium and Desert Power. That documentation showed that there was no joint
19 project. The certifications were for separate QF projects and not a single combined
20 project as originally requested.

21 **Q. Has Schedule 38 been a deterrent to QF development in Utah?**

22 A. No. Actually to the contrary, the Company has had several requests in Utah during
23 2003 for QF indicative pricing that have gone according to the Schedule 38

1 procedure. For example, we are currently in negotiations with two customers, Tesoro
2 and Kennecott on their QF contracts. Tesoro is a new greenfield QF project, which is
3 under construction in Salt Lake City. Kennecott, is an existing generation facility that
4 was recently self certified as a QF. Unlike US Magnesium, these QF developers came
5 to PacifiCorp with very specific projects and the documentation to support the
6 projects.

7 **Q. Are the price adjustments proposed by PacifiCorp appropriate and clear?**

8 A. Yes. My direct testimony described the specific calculation methodology by which
9 each adjustment is made. These adjustments are necessary to reflect the individual
10 operating characteristics of a specific QF project based on the starting point of the
11 Company's full avoided costs, as described by Dr. Weaver.

12 **Q. Please describe and respond to the criticisms of those price adjustments by**
13 **Mr. Hayet and Mr. Swenson.**

14 A. While Mr. Hayet and Mr. Swenson apparently agree that avoided cost prices should
15 reflect the characteristics of the individual QF, they assert that, if their respective
16 avoided cost methods were adopted, several of the Company's proposed adjustments
17 are unnecessary or inappropriate. However, regardless of the method adopted by the
18 Commission for avoided cost determination, individual QF prices should still reflect
19 the costs that the QF allows the Company to avoid to reflect the ratepayer indifference
20 standard.

21 **Q. Please provide an example of how the Company's proposed avoided cost**
22 **adjustments would be applied.**

1 A. Exhibit UP&L ____ (BWG-2R) provides an example of adjustments that would be
2 applied to a project with characteristics similar to the Desert Power QF project as
3 described, albeit cursorily, in its proposed QF contract filed in Docket 04-035-04.
4 When information was not available, the Company made assumptions in order to
5 complete the calculation.

6 **Q. As described by Mr. Swenson, are the proposed US Magnesium and Desert**
7 **Power QFs dispatchable?**

8 A. No. In the contracts proposed by both QFs and as described in Mr. Swenson's
9 testimony, both QFs are only offering the ability to schedule deliveries rather than
10 allowing the Company to dispatch their plants.

11 **Q. Does that conclude your testimony?**

12 A. Yes.

825 N.E. Multnomah
Portland, Or 97232
(503) 813-5000



November 1, 2002

Roger Swenson
Energy Manager
US Magnesium LLC
238 North 2200 West
Salt Lake City, Utah 84116

RE: QF Indicative Pricing Proposal

Dear Mr. Swenson:

We have received your letter dated October 23, 2002 requesting an indicative pricing for a proposed upgrade to US Magnesium's existing qualifying facility ("QF") presently under contract with PacifiCorp. In your letter you have referenced Schedule 38 sheet No. 38.2 section B. Schedule 38 has no force or effect at this point because it has not been formally approved by the Utah Public Service Commission. However, in anticipation of it being approved, PacifiCorp responds to your request for indicative pricing as follows.

As a threshold matter, Schedule 38 only obligates PacifiCorp to provide an indicative pricing proposal when the requesting party has provided a demonstration of QF status. Such demonstration may take the form of a certification or self-certification pursuant to 18 CFR part 292. Here, it is not clear if and how the various upgrades may qualify as QFs. Without this information, PacifiCorp is unable to process your request for indicative pricing.

Also, you have requested indicative pricing for ten (10) specific QF System upgrade configurations. You have also requested pricing based on both a ten-(10) and fifteen-(15) year contract for each upgrade configuration. Consistent with the preceding paragraph, PacifiCorp is only required to provide indicative pricing proposals for any proposed facility or facility upgrade that is certified as a QF. PacifiCorp is not obligated to provide unlimited price discovery for speculative proposals. However, if US Magnesium limits its request to three upgrade options, PacifiCorp will prepare indicative pricing for those options. Such indicative pricing is also contingent on US Magnesium responding in full to the attached matrix of requested information for the three options based on 38.2.B.2.

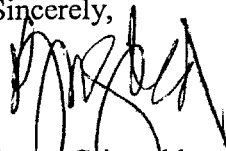
Of specific interest to PacifiCorp is the relationship between US Magnesium and Desert Power, LP. While you did not specifically mention Desert Power in your letter, PacifiCorp's review of the letter and knowledge of Desert Power's operation suggests

Roger Swenson
US MAGNESIUM LLC
November 1, 2002
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that Desert Power will be an integral part of your system upgrade options. If that is the case, PacifiCorp would like to know specifically how Desert Power's power production facility will be integrated into the US Magnesium QF and documentation to support that the integrated facility would qualify as a QF under PURPA rules and regulations. Please site the specific applicable rules and regulations.

Once PacifiCorp receives all the information for the three system upgrades, it will prepare an indicative price proposal. If you have questions or need clarification on our requests, please contact me at 503-813-5218. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Bruce Griswold", written over a circular stamp or mark.

Bruce Griswold
Director, Energy Contracts

Cc: Lee Brown, US Magnesium
Lowell Alt, Utah DPU

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Schedule 38 – Qualifying Facility Procedures

38B 2 Project Information		Additional questions and comments <i>Please provide the following information for each proposed upgrade scenario:</i>
A	Generation technology and other related technology	<i>Describe in detail the generation technology and any related technology</i>
B	Design capacity (MW), station service requirements, and net amount of power to be delivered to the Company's electric system	<i>Identify the design capacity, station service requirements, and net amount of power to be delivered.</i>
C	Quantity and timing of monthly power deliveries (including project ability to respond to dispatch orders from the Company)	<i>Provide detailed information regarding the quantity and timing of monthly deliveries, including dispatchability.</i>
D	Proposed site location and electrical interconnection point	<i>Describe in detail the site location and point of interconnection for the proposed upgrade.</i>
E	Proposed on-line date and outstanding permitting requirements	<i>Provide documentation of emission constraints for the proposed upgrades that could affect operations.</i>
F	Demonstration of QF status	<i>PacifiCorp acknowledge that the existing 36MW generation plant at the US MAG facility is QF certified as a pre-PURPA QF. Please provide additional information on how the new system upgrades will achieve QF status. Please site specific PURPA efficiency standard and how each upgrade will achieve the standard.</i>
G	Fuel type (s) and source (s)	
H	Plans for fuel and transportation agreements	
I	Proposed contract term and pricing provisions (i.e., fixed, escalating, indexed)	<i>The system upgrades will have a capacity greater than 1MW, therefore Schedule 37 prices do not apply and the price for power purchases are negotiated. We will consider your request to determine if it is the most appropriate pricing method. Please provide any alternative price structures you would consider.</i>
J	Status of interconnection arrangements	<i>Have you initiated an interconnection request with PacifiCorp's Transmission function? If so, what is the status of that request?</i>
K	Any other information requested by the Company	<i>Is Desert Power LP power production facility, also interconnected at the Rowley Substation, part of this upgrade and if so, how will it be qualified as QF?</i> <i>Please provide the specific sections in PURPA rules and regulations which US MAG cites as applicable to the</i>

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	<p><i>upgrades including how they would apply or not apply to Desert Power facilities if they are part of the upgrade?</i></p> <p><i>Please provide information on ownership structure for US MAG QF upgrade options including any proposed Desert Power involvement.</i></p> <p><i>US MAG has an existing QF contract with PacifiCorp that goes through December 2004. What is your construction schedule and will the system upgrades affect performance under the existing QF contract? The existing contract also requires detailed engineering designs, studies and other information per section 2.3. Please provide the documentation per section 2.3 of the existing QF contract between PacifiCorp and Magcorp (US MAG) for the selected options.</i></p>
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Assumptions	a		b	c	d
	Type of power delivered by QF	Operating Reserves			
Proxy Unit	Sufficiency Period - Firm Market Purchase	Sufficiency Period - Op reserves provided by Seller	Available	Sufficiency Period - 100% (3 months) based on firm market purchase	Included in proxy unit
	Deficiency Period - Unit Contingent Firm	Deficiency Period - Op Reserves provided by Company		Deficiency Period 85% Annual for Proxy Unit	
Desert Power	Unit Contingent Firm	Company provided	Available	83% Annual in first year	Forced outage increased 0.1% per year
Assumed					

Year	Avoided Firm Capacity Costs (\$/kW-yr)		Total Avoided Energy Cost (\$/MWH)		Avoided Firm Capacity Costs (\$/kW-yr)	Total Avoided Energy Cost (\$/MWH)
	Capacity	Energy	Capacity	Energy		
2004	\$16.07	\$31.20			\$13.38	\$29.02
2005	\$16.47	\$41.85			\$13.70	\$38.92
2006	\$16.88	\$39.63			\$14.03	\$36.85
2007 (1)	\$17.30	\$37.10			\$14.37	\$34.50
2007 (1)	\$86.99	\$34.30			\$84.97	\$34.30
2008	\$89.17	\$33.88			\$87.00	\$33.88
2009	\$91.40	\$33.69			\$89.08	\$33.69
2010	\$93.68	\$32.32			\$91.21	\$32.32
2011	\$96.02	\$32.35			\$93.40	\$32.35
2012	\$98.42	\$33.01			\$95.63	\$33.01
2013	\$100.89	\$33.70			\$97.92	\$33.70
2014	\$103.41	\$34.36			\$100.26	\$34.36
2015	\$105.99	\$35.20			\$102.65	\$35.20
2016	\$108.64	\$36.26			\$105.11	\$36.26
2017	\$111.36	\$37.24			\$107.62	\$37.24
2018	\$114.14	\$38.28			\$110.19	\$38.28
2019	\$117.00	\$39.34			\$112.83	\$39.34
2020	\$119.92	\$40.53			\$115.53	\$40.53
2021	\$122.92	\$41.71			\$118.29	\$41.71
2022	\$125.99	\$42.89			\$121.11	\$42.89
2023	\$129.14	\$44.07			\$124.01	\$44.07
2024	\$132.37	\$45.35			\$126.97	\$45.35
2025	\$135.68	\$46.71			\$130.01	\$46.71
2026	\$139.07	\$48.01			\$133.11	\$48.01
2027	\$142.55	\$49.35			\$136.29	\$49.35
2028	\$146.11	\$50.95			\$139.70	\$50.95

Year	Percent Adjustment		Capacity	Energy	Capacity	Energy
	Capacity	Energy				
2004						
2005		-7%				
2006		-7%				
2007 (1)		-7%				
2007 (1)						
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						
2023						
2024						
2025						
2026						
2027						
2028						

Avoided Resource

Combined Cycle

Included in c.

Assumptions
Sufficiency Period

Firm Market Purchase 100% Capacity Facto Operating reserves provided by Seller

Deficiency Period

Proxy is unit contingent firm			
Operating reserves provided by PacifiCorp	85.0%		
Desert Power	83.3%	Contract notes 45 days per year scheduled and assumed 5% forced outage rate	hours per year
	Scheduled	45 days	1,080
	Forced outage	5% outage	384
			1,464
Reliability	Desert Power forced outage rate increases by 0.1% per year		
	Year	Forced Outage	Availability
	2004		83.3%
	2005	5.1%	83.2%
	2006	5.2%	83.1%
	2007	5.3%	83.0%
	2008	5.4%	82.9%
	2009	5.5%	82.8%
	2010	5.6%	82.8%
	2011	5.7%	82.7%
	2012	5.8%	82.6%
	2013	5.9%	82.5%
	2014	6.0%	82.4%
	2015	6.1%	82.3%
	2016	6.2%	82.2%
	2017	6.3%	82.1%
	2018	6.4%	82.1%
	2019	6.5%	82.0%
	2020	6.6%	81.9%
	2021	6.7%	81.8%
	2022	6.8%	81.7%
	2023	6.9%	81.6%
	2024	7.0%	81.5%
	2025	7.1%	81.4%
	2026	7.2%	81.4%
	2027	7.3%	81.3%
	2028	7.3%	81.3%